

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a purse seiner in Prince William Sound. Hatcheries are an integral part of my business and livelihood. A decrease by 25% would have a direct impact on my income, by less revenue. It would also have a huge impact on the value of my permit boat and operation. I strongly disagree with this proposal.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover,

Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Wayne Ackerlund

A solid black rectangular box used to redact the signature of Wayne Ackerlund.

Valdez, Alaska

**Submitted by:** Alex Adams

**Community of Residence:** Wasilla

**Comment:**

Most measures proposed are by big Corp entities that will impact small businesses and communities, limiting Alaskan resident's ability to harvest their own food.

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**Submitted by:** Francis Adams

**Community of Residence:** Fairbanks

**Comment:**

I support Proposal #14 so that trawl gear cannot be dragged along the seabed to gather fish. Trawling is not sustainable nor in the best interest of the public's resource.

I also support Propopsal #51 to allow a greater opportunity to harvest inriver salmon for subsistence, personal use, and sport fishing in the Copper River.

Thank you for your attention.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

Alaska salmon hatcheries have directly benefited both my business and family for multiple generations. Providing economic opportunities and producing a high quality lean protein used globally. Proposal 78 would negatively impact my business, family, and our community as a whole.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover,



Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Matt Adams

A solid black rectangular box used to redact the signature of Matt Adams.

Cordova, Alaska

**Submitted by:** Mike Adams

**Community of Residence:** Cordova Alaska

**Comment:**

My biggest concern is taking your obvious tool off the copper river delta in May to judge strength of run ie the commercial salmon fleet of area E. It's my belief that our fleet will prove strength of run if given a chance, as we have time and time again. Although hours fished may show our fleet has plenty, we have given up area inside the barrier islands for the entire month of May and June for years, which is a huge financial loss. I am in support of a minimum of 12 hours on Monday and Thursday throughout the entire month of May and June.

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**Submitted by:** Ashley Adams

**Community of Residence:** Wasilla

**Comment:**

Most measures proposed are by big Corp entities that will impact small businesses and communities, limiting Alaskan resident's ability to harvest their own food.

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**Submitted by:** Anfisa Afonin

**Community of Residence:** Salem, Or

**Comment:**

I oppose proposals 51, 52, and 53

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**Submitted by:** Marina Afonin

**Community of Residence:** Homer

**Comment:**

I strongly oppose proposals 51, 52, and 53. Many fisherman already can't make ends meet. The State of Alaska is making programs and encouraging young fishermen to enter the field. Letting these proposals pass is a step in the wrong direction.

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**Submitted by:** Adam Agosti

**Community of Residence:** Soldotna

**Comment:**

Close the PWS walleye pollock pelagic trawl fishery – until the trawler fleet can guarantee they won't disturbed the ocean floor bed. State protection of the seabed ecosystem in Alaska waters is paramount to the future generations of Alaska fisheries.

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# Ahtna Intertribal Resource Commission

PO Box 613– Glennallen, Alaska 99588

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www.ahtnatribal.org

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
1255 W. 8th Street  
Juneau, AK 99811-5526

Dear Members of the Alaska Board of Fisheries,

## Comments on Proposals

### Introductory Comments Relevant to All Copper River Salmon Proposals

Current Copper River salmon management by the State of Alaska is failing to provide reasonable opportunities for customary and traditional uses under AS 16.05.258 and failing to provide for a meaningful federal subsistence priority for federal qualified rural residents under Title 8 of ANLICA.

In 2005, the Alaska Board of Fisheries (BOF) revised the amounts reasonably necessary for customary and traditional subsistence uses (ANS) in the Glennallen Subdistrict (GSD) of the Upper Copper River District into three separate reaches of the drainage to be assessed by reported harvests. The Board determined the ANS from the Chitina Bridge upriver to the mouth of the Tonsina River to be 25,500-39,000 salmon; from the Tonsina River upriver to the mouth of the Gakona River to be 23,500-31,000 salmon; and upriver from the Gakona River to the Slana River and including Batzulnetas to be 12,000-12,500 salmon.

While the ANS range for subsistence salmon harvests in the lowest reach of the GSD from the bridge to Tonsina has been met each year since 2006 (see Figure 1 in Proposal 51 comments), subsistence salmon harvests in the middle and upper reaches of the Copper River have not reached the lower limits of the ANS ranges since 2015, upriver of Gakona, nor since 2018, downriver of Gakona to the mouth of the Tonsina River (Figures 2 and 3 in Proposal 51 comments). Subsistence salmon harvests in the uppermost reach of the Copper River have fallen below the lower limit of the ANS of 12,000 salmon in all years since the BOF established it (effective in 2006) except in 2014 and 2015.

Last year serves as a good case study demonstrating our contention that reasonable opportunities for subsistence uses are no longer provided by the current Copper River salmon management plans. In 2023, the total reported state and federal subsistence harvest was only 2,123 salmon upriver of Gakona, 9,877 fish below the lower boundary of the ANS range of 12,000 to 12,500 salmon. The 2023 subsistence salmon harvest in this portion of the river was the lowest on record. Furthermore, the 2023 total reported state and federal subsistence salmon harvest downriver of Gakona to the mouth of the Tonsina River was only 19,564 salmon, 3,936 below

the lower boundary of the ANS range of 23,500 to 31,000 fish. In the past ten years, customary and traditional subsistence harvests exceeded the lower limit of the ANS range only in 2014-2016 and 2018 with harvests below the lower limit of the ANS range 60% of the time (2017, 2019-2023).

The failure to reach the lower limits of the ANS ranges upriver of Tonsina again in 2023 is concerning given that the 2023 Mile Lake sonar estimated season total fish passage of 991,740 salmon was 71% above management objective (Dave Sarafin, NPS Fisheries Biologist, meeting minutes of the WRST Subsistence Resource Commission, March 14-15, 2024). Where did all those salmon go in 2023 given the failure to reach even the minimum amounts reasonably necessary for subsistence uses upriver of the Tonsina River? Did lack of fishing effort or high water prevent fishing success? Were they intercepted in fisheries downriver of the Tonsina River? Did the 2023 run experience higher levels of in-river mortality thus explaining the lack of salmon in the uppermost reaches of the river?

In 2023, 370 state and federal subsistence fishing permits were fished upriver of Tonsina compared to the recent 2018-2022 five-year average of 375.6 permits fished upriver of Tonsina, so the poor subsistence salmon harvests of 2023 do not appear to be driven by lack of fishing effort.

Poor fishing conditions may be a factor, but successful harvest levels downriver from Tonsina do not suggest that water levels were a limiting factor in harvest levels. However, the later in the season subsistence users must wait to have a reasonable expectation of successful take pursuant to AS 16.05.258(f), the more challenging fishing becomes, especially if the uppermost river stocks do not arrive. Rising river levels due to increasing flows of meltwater runoff and summer rains can contribute to delayed fish passage and degrading weather conditions necessary for effective smoking and drying conditions as the summer progresses. This is why the early part of the Copper River salmon run has always been the most critical for the Ahtna people because those early run stocks customarily and traditionally traveled all the way to the uppermost reaches of the drainage upriver of the Tonsina and Gakona rivers.

Interception of uppermost-bound Copper River salmon stocks downriver in the lower reach of the Glennallen Subdistrict, the Chitina Subdistrict, and the commercial and subsistence fisheries of the lower Copper River and the Copper River District can negatively affect the ability of subsistence fishing households upriver of the Tonsina River to meet their subsistence needs. Sufficient numbers of salmon must be allowed to migrate unmolested through these intercept fisheries to ensure diverse stock escapements and to provide reasonable opportunities for subsistence uses with a reasonable expectation of successful harvest.

From 2014 to 2023, the Chitina Subdistrict Personal Use (PU) dipnet fishery exceeded the Board's allocation quota<sup>1</sup> in 7 of the past 10 years with a 10-yr average harvest of 151,895 salmon (data provided by ADF&G's Mark Somerville on April 19, 2024). The impacts of this trend to upriver priority subsistence users of Copper River Chinook and sockeye salmon must be considered given indicators suggesting that the existing Copper River salmon-related

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<sup>1</sup> 5 AAC 77.591(f) states, "The maximum harvest level for the Chitina Subdistrict personal use salmon fishery is 100,000-150,000 salmon, not including any salmon in excess of the inriver goal or salmon taken after August 31."

management plans no longer provide reasonable opportunities for customary and traditional subsistence uses upriver from the mouth of the Tonsina River.

The PU harvest in 2019, for example, was 179,795 fish, whereas the Glennallen Subdistrict and Batzulnetas subsistence salmon harvest upriver from the mouth of the Tonsina River fell below the lower limits of the amounts reasonably necessary for subsistence (ANS) combined by more than 6,500 salmon. Fish harvested downriver cannot be harvested upriver. Furthermore, if adopted at this meeting, ADF&G's Proposal 58 would further increase the allocation of salmon to the PU fishery in Chitina, which would undoubtedly further challenge reasonable opportunities for subsistence uses of salmon upriver from Tonsina.

Commercial salmon fishery interception of Upper Copper River stocks early in the season is increasingly impacting reasonable opportunities for subsistence fishing households upriver of Tonsina to have a reasonable expectation of success in harvesting salmon pursuant to AS 16.05.258.

Based upon assessments conducted by the NPS provided to the Southcentral Regional Advisory Council during their October 10-11, 2024 meeting in support of Proposal 51, management of the Copper River District commercial fishery in 5 of the 6 most recent years from 2018 to 2023 resulted in disproportionately high exploitation rates of early run Copper River salmon stocks. ADF&G commercial fisheries management actions increasingly open commercial salmon harvest opportunities prior to reaching 70% of the cumulative management in-river sonar objective. The number of commercial salmon fishery openers was an average of 2.5 during the ten-year period from 2005 to 2014. This compares to an average of 2.8 openers during the subsequent 2015-2024 ten-year period and 4.8 openers during the most recent 2020-2024 five-year period.

Results of the recent State of Alaska management regime have led to an increasing trend in early season sonar management objective deficits during statistical weeks 20-22, which is represented by the observed Miles Lake sonar passage minus the sonar passage management objective. For example, during the 2005-2014 time period the observed sonar passage was on average 49,490 salmon above management objective. However, the observed passage during the subsequent ten-year period from 2015 to 2024 was 19,475 salmon below management objective during statistical weeks 20-22. This trend worsened during the most recent five-year period between 2020 and 2024 with an average deficit of 92,377 salmon below inriver sonar management objectives (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

The current state salmon management regime is increasing the proportion of early season cumulative commercial salmon harvests of Upper Copper River stocks. The percentage of cumulative commercial sockeye salmon harvest achieved by the date upon which 70% of the cumulative sonar passage management objective was reached was an average of 20.8% during the 2005-2014 ten-year period, 25.1% during the subsequent period of 2015-2024, and increasing to 39.0% during the most recent five-year period from 2020 to 2024. This trend is even more pronounced with respect to cumulative percent of commercial Chinook salmon harvest on dates when the 70% inriver sonar management objective is reached. During the ten-year period 2005-2014, an average of 37.7% of the cumulative commercial Chinook salmon harvest occurred by the date when the 70% management objective was reached, compared to

53.2% during the 2015-2024 subsequent ten-year period, and 79.9% during the most recent five-year period from 2020 to 2024 (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

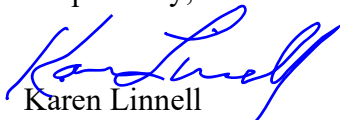
Correspondingly and unfortunately, the trend in frequency of not meeting the lower bound of the Upper Copper River Chinook salmon sustainable escapement goal has increased from 20% during the 2004-2013 period to 40% of the time not meeting escapement during the 2014-2023 and 2019-2023 time periods, respectively. It is important to reiterate that AITRC contends that escapement estimates of Chinook salmon and sockeye salmon stocks are biased high given the “sonar passage minus harvest subtraction method” rather than empirical escapement enumeration and a failure to account for annual variability in inriver salmon mortality (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

Finally, the NPS assessment of ADF&G commercial salmon management provided to the SCRAC in October 2024 demonstrated a declining trend in the total number of salmon harvested per federal subsistence fishing permit upriver of Gakona. The ten-year average total federal salmon harvest from 2004-2013 averaged 80.5 salmon per permit, declining to 64.5 salmon per federal permit during the subsequent ten-year period 2014-2023, and only an average of 45.9 salmon per permit during the 2019-2023 period. This trend also is demonstrated by an assessment of catch per unit effort, where an average of 22.5 salmon were harvested per day during the 2004-2013 time period, 19.4 salmon during the 2014-2023 period, and 14.2 salmon harvested per day fished during the most recent five-year period from 2020 to 2024 (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

These introductory comments serve to demonstrate that the current state Copper River salmon management plans, and their implementation by ADF&G, are failing to provide reasonable opportunities for subsistence under Alaska Statute 16.05.258. The current state management regime also is failing to provide for a meaningful federal subsistence priority for federal qualified rural residents under Title 8 of ANLICA.

These introductory comments also provide important context for AITRC’s positions on individual Board proposals discussed in the following pages.

Respectfully,



Karen Linnell  
Executive Director

**PROPOSAL 14****5 AAC 28.263. Prince William Sound Walleye Pollock Pelagic Trawl Fishery Management Plan.**

Close the Prince William Sound walleye pollock pelagic trawl fishery, as follows:

Add a new section to 5 AAC 28.263. PWS Walleye Pollock Pelagic Trawl Fishery Management Plan.

- x) A direct Alaska pollock Pelagic trawl fishery in PWS is prohibited unless;
  - 1) No part or attachment to the Pelagic trawl gear makes contact with the seafloor habitat.
  - 2) There is no bycatch of Chinook salmon in the PWS Pollock Pelagic trawl fishery.

**AITRC supports Proposal 14** given the ongoing challenges in meeting Copper River Chinook salmon escapement and the larger conservation concerns associated with habitat damage associated with the cod-end of pelagic trawl gear dragging on the ocean bottom. Waste of Chinook salmon through trawling bycatch is unacceptable during this period of poor Chinook salmon production and ongoing efforts to list Gulf of Alaska Chinook salmon under the Endangered Species Act.

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**PROPOSAL 15****5 AAC 28.263 Prince William Sound Walleye Pollock Pelagic Trawl Fishery Management Plan**

Modify bycatch limits in the Prince William Sound pelagic trawl fishery, as follows:

During a directed walleye pollock pelagic trawl fishery, the total bycatch weight of all species combined may not exceed an amount set by ADFG of xxx lbs [FIVE PERCENT] regardless of the total round weight of the walleye pollock harvested.

**AITRC supports the intent of Proposal 15** to establish a bycatch cap for all prohibited species catch but prefers board action that prohibits the trawl fishery from impacting Copper River Chinook salmon by eliminating Chinook salmon bycatch altogether as the Alaska Outdoor Council proposed in Proposal 14 and the Chenega Tribe proposed in Proposal 16.

With recent closures of Copper River Chinook salmon subsistence, personal use, and sport fisheries, the burden of conservation should be shared among commercial fisheries as well consistent with the board's Policy for the management of sustainable salmon fisheries that states that "the burden of conservation shall be shared among all fisheries in close proportion to each fisheries' respective use" (5 AAC 39.222(c)(4)(D)).

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**PROPOSAL 16****5 AAC 28.263 Prince William Sound Walleye Pollock Pelagic Trawl Fishery Management Plan**

Close the Prince William Sound pelagic trawl fishery, as follows:

Closure of the Prince William Sound Walleye Pollock Pelagic Trawl Fishery to preserve PWS.

**AITRC supports Proposal 16** for reasons outlined in our comments for proposals 14 and 15.

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**PROPOSAL 17****5 AAC 28.263 Prince William Sound Walleye Pollock Pelagic Trawl Fishery Management Plan**

Establish observer requirements in the Prince William Sound pelagic trawl fishery, as follows:

(h) The commissioner **shall** [MAY] require **100% onboard electronic observation and 50% physical** onboard observers on a vessel during fishing operations.

**AITRC supports Proposal 17** regarding its intent to better enumerate bycatch of non-target species, especially Chinook salmon. However, it is our understanding that the board is unable to require what this proposal is seeking such that this issue should be brought to the attention of the Alaska Legislature for action.

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**PROPOSAL 45****5 AAC 01.625. Waters closed to subsistence fishing.**

Allow subsistence fishing for salmon in the Copper River inside closure area, as follows:

We recommend opening inside closure waters to subsistence fishing by adding new subsection 5 AAC 01.648 (c):

5 AAC 01.648(c). Prince William Sound Subsistence Salmon Fisheries Management Plans

**(c) Salmon may be taken for subsistence purposes in the inside closure area described in 5 AAC 24.350(1)(B) unless all other Copper River Chinook fisheries have first been restricted.**

**AITRC supports reasonable opportunities for customary and traditional subsistence fishing; however, we oppose Proposal 45** due to ongoing conservation concerns associated with Copper River Chinook salmon and the amount of time it takes for salmon to enter the Copper River and be enumerated by Miles Lake Sonar after passing through intercept fisheries in the Copper River District.

The requested regulatory change to 5 AAC 01.648 does not appear to be appropriate when addressing subsistence fishing in the Copper River District. 5 AAC 01.647 pertains to Copper River system salmon.

The board has already addressed reasonable opportunities for subsistence fishing in the Copper River District when it adopted two amounts reasonably necessary for subsistence findings: 3,000 – 5,000 salmon in a year when there is a harvestable surplus that allows for a commercial fishery; and 19,000 – 32,000 salmon in a year when there is no commercial fishery (5 AAC 01.616(b)(2)). Subsistence fishing in the Copper River District is open for drift gillnets no longer than 50 fathoms in length with a season from May 15 to September 30. From May 15 until two days before the commercial opener is open 7 days a week. During the commercial fishing season, subsistence fishing is open during commercial openers and on Saturdays from 6:00 am to 10:00 pm. Subsistence fishing is open 7 days a week two days after the closure of the commercial season through October 31. Annual limits are 15 salmon for a household of 1, 30

salmon for a household of two, and 10 salmon for each additional person in the household with a limit of five Chinook salmon per household permit.

The conservation closure inside the barrier islands of the Copper River District was put into place to conserve Copper River Chinook salmon. Allowing unrestricted subsistence fishing within the Chinook salmon savings area may further challenge the ability to meet escapement needs for Chinook salmon upriver by increasing harvest levels beyond historical trends. Restrictions of subsistence fishing in the inside closure area being only dependent upon first restricting all inriver Chinook salmon fisheries (i.e. subsistence, personal use, and sport fishing) does not effectively share the burden of conservation among all users given that Copper River District fisheries occur prior to salmon passage enumeration past Miles Lake Sonar and subsistence fishing restrictions there may be necessary to conserve Chinook salmon before restrictions in the Upper Copper River District are put into place.

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## **PROPOSAL 46**

### **5 AAC 01.630. Subsistence fishing permits.**

Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery, as follows:

#### **5 AAC 01.6xx new section**

**Subsistence harvest from the Copper River district must be reported within 7 days of harvest.**

**AITRC supports Proposal 46.** We would like in-season reporting requirements to be consistent between proposals 46 and 47. Refer to AITRC comments for Proposal 47.

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## **PROPOSAL 47**

### **5 AAC 01.630. Subsistence fishing permits and 5 AAC 77.5XX Personal use fishing permits.**

Require in-season reporting in subsistence and personal use fisheries, as follows:

(1) subsistence fishing reports must be completed on forms provided by the department, **or using an online app or phone call** and submitted to the department office from which the permit was issued [at a time specified by the department] **within 5 days of harvest** for each particular area and fishery.

(6) personal use fishing permits must be completed on forms provided by the department, **or using an online app or phone call** and submitted to the department office from which the permit was issued [at a time specified by the department] **within 5 days of harvest** for each particular area and fishery.

While specific regulatory language proposed is unclear, **AITRC supports Proposal 47's** requirement of timely in-season catch reporting and would support alignment with Proposal 46's requirement of reporting within 7 days of harvest. Currently, management action assessment is based on sonar passage minus reported harvest at the end of the season and therefore limited to a report card on a season's management actions taken after the fact. Without enforceable in-season reporting requirements, AITRC contends that harvest is increasingly underestimated as fishing

pressure continues to increase given the dramatic salmon fishing closures across the state. While previous proposals to require in-season reporting have been noted by the department as unnecessary because it is not useful to in-season management, ADF&G and federal managers should consider how in-season harvest information could better characterize the status of a particular season's run as it progresses throughout the season to more responsibly ensure that salmon presumed to be migrating to upriver fisheries and spawning beds are actually arriving there in the numbers estimated by post-season subtraction method of escapement estimation.

Timely reporting in the Chitina Subdistrict salmon catch and harvest, for example, would provide a critical dataset on Chinook salmon catch (in addition to harvest if retention is allowed), which would help managers better understand species composition, population status, inriver mortality, catch-and-release incidental mortality, and run timing to supplement sonar passage estimates that lack species apportionment data. In-season catch and harvest reporting would help to ensure that management actions taken in the Copper River District commercial and subsistence fisheries, Lower Copper River federal subsistence fishery, Chitina Subdistrict personal use and federal subsistence fisheries, and in the lower portions of the Glennallen Subdistrict are achieving the desired management effects at Chinook salmon conservation. Chinook Salmon in the Copper River may once again fail to meet the lower end of the escapement goal for the third time in the last five years despite lowering the escapement goal during the previous board cycle.

Timely in-season reporting requirements also would inform managers when personal use allocation levels are reached in the personal use fishery to not further challenge reasonable opportunities for customary and traditional uses in the Glennallen Subdistrict upriver from the mouth of the Tonsina River. The lower limit of the ANS has not been reached from Tonsina to Gakona since 2018, nor has the ANS been reached upriver of Gakona since 2015. In-season harvest and catch reporting requirements would have the additional benefit of making annual household bag limits enforceable.

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## **PROPOSAL 48**

### **5 AAC 01.620. Lawful gear and gear specifications.**

Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict, as follows:

Remove prohibition on subsistence guide services in the Glennallen subdistrict. Allow for subsistence guide services in the Glenallen subdistrict notwithstanding the prohibition

**AITRC opposes Proposal 48** as it is inappropriate for service providers to benefit commercially from subsistence fisheries by charging fees to take a subsistence fishery permit holder fishing in the Copper River. Alaska law defines subsistence uses as customary and traditional non-commercial uses (AS 16.05.940(7) and (34)). As the board witnessed during the 2021 cycle in RC 091, when this prohibition was adopted, there was clear video evidence that demonstrated that guiding services resulted in some permit holders harvesting so many salmon that they didn't know what they would do with them all. This is contrary to customary and traditional use patterns.

The customary and traditional methods of harvesting salmon from the Copper River included a dip net from a platform in the mainstem, fish weirs and conical traps in tributaries, and spears in

clear water. Using boats for subsistence fishing is not part of the C&T pattern of use of Copper River salmon (Simeone and Kari 2002; Simeone et al. 2007) and instead is effectively a new fishery within a system where salmon are already fully allocated. Therefore, the newly established pattern of using boats for subsistence salmon fishing should be prohibited under a subsistence permit in the Glennallen subdistrict just as it is in the newly established federal subsistence salmon fishery in the Lower Copper River.

Subsistence permit holders taking more salmon than they know what to do with is especially concerning, given that the ANS has not been reached from Tonsina to Gakona since 2018, nor has the ANS been reached upriver of Gakona since 2015.

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## **PROPOSAL 49**

### **5 AAC 01.620. Lawful Gear and Gear Specifications.**

Prohibit transport services in the Glennallen Subdistrict, as follows:

#### **5 AAC 01.620(l)(1)**

(l) Subsistence fishing guide services are prohibited in the Glennallen Subdistrict. For the purposes of this subsection,

(1) "subsistence fishing guide services" means assistance, for compensation or with the intent to receive compensation, to a subsistence fisherman to take or to attempt to take fish from a vessel by accompanying or physically transporting [DIRECTING] the subsistence fisherman in subsistence fishing activities during any part of a subsistence fishing trip

**AITRC submitted and continues to support Proposal 49.** Alaska law defines subsistence uses as customary and traditional non-commercial uses (AS 16.05.940(7) and (34)). The customary and traditional methods of harvesting salmon from the Copper River included a dip net from a platform in the mainstem, fish weirs and conical traps in tributaries, and spears in clear water. Using boats for subsistence fishing is not part of the C&T pattern of use of Copper River salmon (Simeone and Kari 2002; Simeone et al. 2007) and instead is effectively a new fishery within a system where salmon are already fully allocated. Therefore, the newly established pattern of using boats for subsistence salmon fishing should be prohibited under a subsistence permit in the Glennallen subdistrict just as it is in the newly established federal subsistence salmon fishery in the Lower Copper River. As the board witnessed during the 2021 cycle in RC 091, when the prohibition of commercial guiding services was adopted, there is clear video evidence that such services resulted in permit holders harvesting so much salmon that they didn't know what they would do with them all. This is especially concerning, given that the ANS has not been reached from Tonsina to Gakona since 2018, nor has the ANS been reached upriver of Gakona since 2015.

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## **PROPOSAL 50**

### **5 AAC 1.620. Lawful gear and gear specifications. and 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Prohibit the use of chartplotters or fish finders in the Chitina and Glennallen Subdistricts, as follows:

5AAC 52.022 (a)(XX) **Electronics including chart-plotters, depth finders, fish finders, or any other device that may aid in locating fish, depth, or paths of travel while fishing may not be used to aid in the taking of fish from a boat in the Chitina and Glennallen Subdistricts.**

**AITRC supports Proposal 50.** Use of this technology for targeting salmon from boats contributes to the probability of overfishing upriver stocks during high-water events contrary to the long-term customary and traditional patterns of shore-based subsistence fishing. Long-term subsistence fishing families above the Tonsina River are not meeting their customary and traditional needs for Copper River salmon. Based upon local and traditional Indigenous Knowledge, the number of salmon migrating upriver from the mouth of the Tonsina River are consistently over-estimated by the department. The amounts reasonably necessary for subsistence uses findings established by the board have routinely not been met upstream of Tonsina River. Normally diligent subsistence fishwheel operators have not been able to have a reasonable opportunity to harvest Copper River salmon with a reasonable expectation of success in harvesting salmon and use of boats and fish-finder technologies are disproportionately impacting salmon bound for the uppermost reaches of the Copper River drainage.

Fish finders and other devices are technologies that are in no way customary and traditional to the subsistence fishery in the Glennallen Subdistrict (Simeone and Kari 2002; Simeone et al. 2007). Restricting fish-finders and other devices would most likely have little impact on experienced Copper River fishing households, who typically already know where to use dipnets and fishwheels from the shore to target salmon consistent with the customary and traditional patterns documented in the public record. Restricting the use of fish-finders would encourage inexperienced fishers to personally develop the knowledge and experience that are essential for safely fishing on a swift and dangerous river such as the Copper. Technology used to locate fish are not necessary as a safety device on the Copper River, as the river is too swift and silty for them to be effective. In fact, their use promotes more dangerous boating behaviors, as fishers who use them tend to look down at these devices when they should be actively trying to read the river.

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## **PROPOSAL 51**

### **5 AAC 24.360. Copper River District Salmon Management Plan.**

Reduce commercial salmon fishing opportunity in the Copper River District, as follows:

**(e) The department shall manage the Copper River District commercial salmon fishery to conserve and avoid disproportionate exploitation of early-run Copper River sockeye and king salmon stocks by comparing cumulative sonar passage and management objectives by date, as follows:**

**(1) After two commercial drift gillnet openings, the Copper River District shall not open to commercial drift gillnet fishing when cumulative sonar passage is less than 70 percent of the cumulative management objective for the same date.**

**AITRC supports Proposal 51.** AITRC submitted a similar regulatory change request in Proposal 52 that used daily management objectives at Miles Lake sonar rather than Proposal 51's use of 70% of the cumulative management objective. AITRC supports Proposal 51 over

proposals 52 and 53 given the detailed analysis and justifications provided by WRST NPS in developing Proposal 51.

Based upon assessments conducted by the NPS provided to the Southcentral Regional Advisory Council during their October 10-11, 2024 meeting in support of Proposal 51, management of the Copper River District commercial fishery in 5 of the 6 most recent years from 2018 to 2023 resulted in disproportionately high exploitation rates of early run Copper River salmon stocks. ADF&G commercial fisheries management actions increasingly open commercial salmon harvest opportunities prior to reaching 70% of the cumulative management in-river sonar objective. The number of commercial salmon fishery openers was an average of 2.5 during the ten-year period from 2005 to 2014. This compares to an average of 2.8 openers during the subsequent 2015-2024 ten-year period and 4.8 openers during the most recent 2020-2024 five-year period.

Results of the recent State of Alaska management regime have led to an increasing trend in early season sonar management objective deficits during statistical weeks 20-22, which is represented by the observed Miles Lake sonar passage minus the sonar passage management objective. For example, during the 2005-2014 time period the observed sonar passage was on average 49,490 salmon above management objective. However, the observed passage during the subsequent ten-year period from 2015 to 2024 was 19,475 salmon below management objective during statistical weeks 20-22. This trend worsened during the most recent five-year period between 2020 and 2024 with an average deficit of 92,377 salmon below inriver sonar management objectives (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

The current state salmon management regime is increasing the proportion of early season cumulative commercial salmon harvests of Upper Copper River stocks. The percentage of cumulative commercial sockeye salmon harvest achieved by the date upon which 70% of the cumulative sonar passage management objective was reached was an average of 20.8% during the 2005-2014 ten-year period, 25.1% during the subsequent period of 2015-2024, which increased to 39.0% during the most recent five-year period from 2020 to 2024. This trend is even more pronounced with respect to cumulative percent of commercial Chinook salmon harvest on dates when the 70% inriver sonar management objective is reached. During the ten-year period 2005-2014, an average of 37.7% of the cumulative commercial Chinook salmon harvest occurred by the date when the 70% management objective was reached, compared to 53.2% during the 2015-2024 subsequent ten-year period, and 79.9% during the most recent five-year period from 2020 to 2024 (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

Correspondingly and unfortunately, the trend in frequency of not meeting the lower bound of the Upper Copper River Chinook salmon sustainable escapement goal has increased from 20% during the 2004-2013 period to 40% of the time not meeting escapement during the 2014-2023 and 2019-2023 time periods, respectively (NPS handout supporting Proposal 51, October 2024 SCRAC meeting). It is important to reiterate that AITRC contends that escapement estimates of Chinook salmon and sockeye salmon stocks are biased high given the “sonar passage minus harvest subtraction method” rather than empirical escapement enumeration and a failure to account for annual variability in inriver salmon mortality.

Finally, the NPS assessment of ADF&G commercial salmon management provided to the SCRAC in October 2024 demonstrated a declining trend in the total number of salmon harvested per federal subsistence fishing permit upriver of Gakona. The ten-year average total federal salmon harvest from 2004-2013 averaged 80.5 salmon per permit, declining to 64.5 salmon per federal permit during the subsequent ten-year period 2014-2023, and only an average of 45.9 salmon per permit during the 2019-2023 period. This trend also is demonstrated by an assessment of catch per unit effort, where an average of 22.5 salmon were harvested per day during the 2004-2013 time period, 19.4 salmon during the 2014-2023 period, and 14.2 salmon harvested per day fished during the most recent five-year period from 2020 to 2024 (NPS handout supporting Proposal 51, October 2024 SCRAC meeting).

**AITRC supports Proposal 51** because in the earliest weeks of the commercial fishery, upriver stocks of Chinook and sockeye salmon have been demonstrated to be disproportionately impacted. Interception of salmon stocks bound for the uppermost reaches of the Copper River drainage, as well as early run components of tributary stocks in the middle river such as the Klutina River, negatively impacts the genetic stock portfolio of Copper River salmon populations. Decreased genetic diversity weakens the overall sustainability of Copper River salmon and fails to provide for climate-resilient fisheries in the future. The failure of current management practices to ensure Copper River Chinook salmon return to spawn in numbers sufficient to reach the lower end of escapement goal in 4 of the last 10 years (2014-2023), despite lower the goal in 2021, lends additional supporting evidence for the board to adopt Proposal 51.

Sufficient numbers of early season salmon must be allowed to migrate unmolested to the uppermost reaches of the watershed ensure ample and diverse stock escapements and to provide reasonable opportunities for subsistence uses with a reasonable expectation of successful harvest. Interception of uppermost-bound Copper River salmon stocks disproportionately early in the commercial fishery season in recent years is increasingly impacting reasonable opportunities for subsistence fishing households upriver of Tonsina to have a reasonable expectation of success in harvesting salmon pursuant to AS 16.05.258. While the ANS range for subsistence salmon harvests in the lowest reach of the Glennallen Subdistrict from the bridge to Tonsina has been met each year since 2006 (Figure 1), subsistence salmon harvests in the middle and upper reaches of the Copper River have not reached the lower limits of the ANS ranges since 2015, upriver of Gakona, nor since 2018, downriver of Gakona to the mouth of the Tonsina River (Figures 2 and 3). Subsistence salmon harvests in the uppermost reach of the Copper River have fallen below the lower limit of the ANS of 12,000 salmon in all years since the BOF established it (effective in 2006) except in 2014 and 2015.

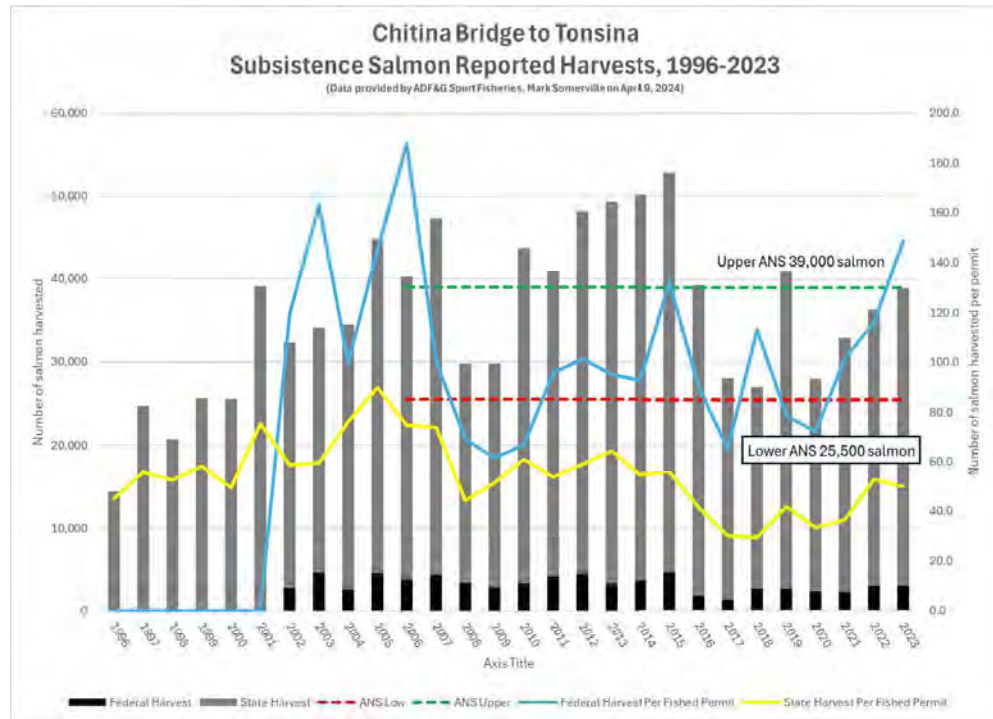


Figure 1. Amounts reasonably necessary for subsistence uses assessment on that portion of the Glennallen Subdistrict from the Chitina-McCarthy Bridge upriver to the mouth of the Tonsina River.

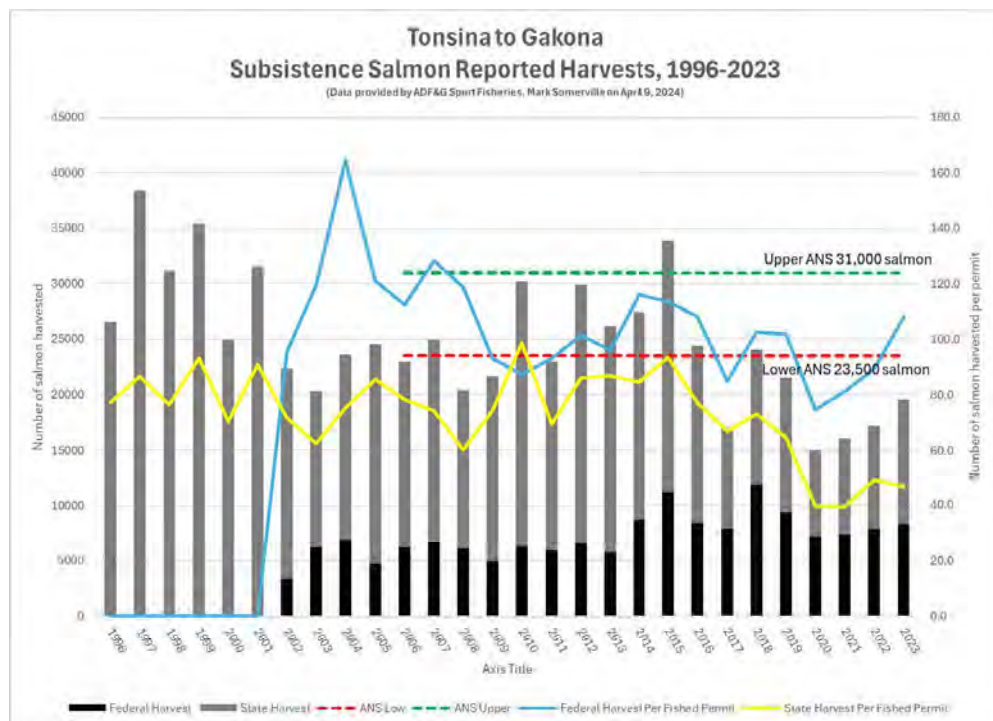


Figure 2. Amounts reasonably necessary for subsistence uses assessment on that portion of the Glennallen Subdistrict from the mouth of the Tonsina River upriver to the mouth of the Gakona River.



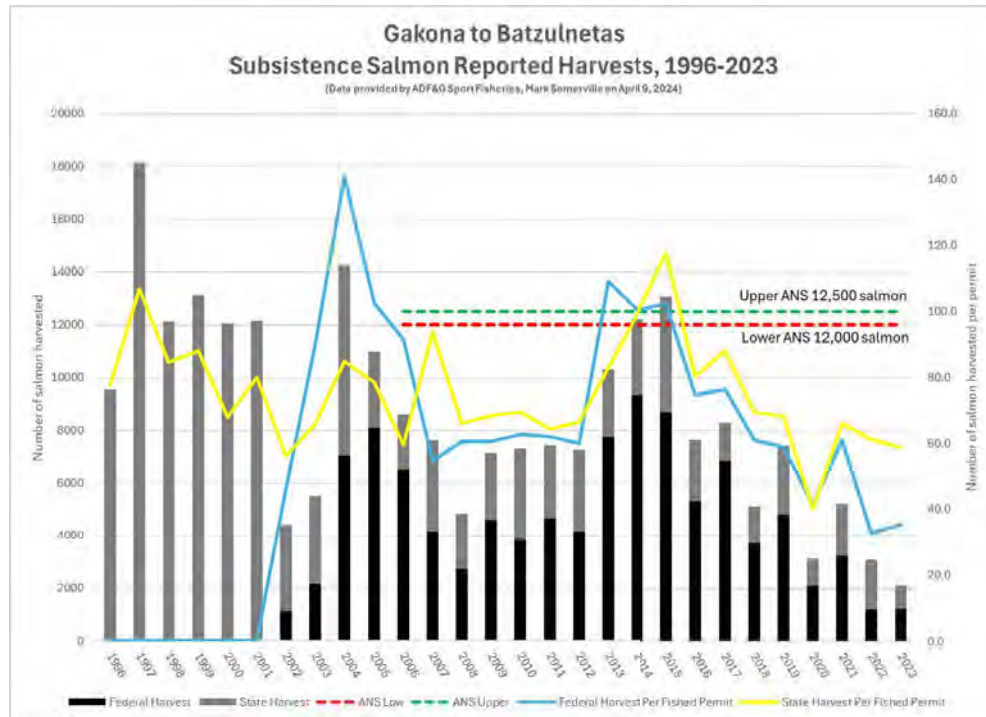


Figure 3. Amounts reasonably necessary for subsistence uses assessment on that portion of the Glennallen Subdistrict upriver from the mouth of the Gakona River, including Batzulnetas.

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## PROPOSAL 52

### 5 AAC 24.360. Copper River District Salmon Management Plan.

Reduce commercial salmon fishing opportunity in the Copper River District, as follows:

**5 AAC 24.360 (x) Allow two Copper River District commercial salmon fisheries 12-hour openers during the week of May 15th, then delay openers by two weeks or until a daily management objective for fish passage is met at the Miles Lake Sonar.**

**AITRC supports proposals 51, 52, and 53** and while we submitted Proposal 52, we recommend the board adopt Proposal 51 based upon the significant analytical justification provided by NPS and recommend the board take no action on proposals 52 and 53. See AITRC's full comments on Proposal 51.

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## PROPOSAL 53

### 5 AAC 24.360 Copper River District Management Plan.

Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met, as follows:

Allow commercial fisheries to open for the first two openers as a test fishery, then close until the Copper River cumulative management objective is met.

**AITRC supports proposals 51, 52, and 53;** however, we recommend the board adopt Proposal 51 based upon the significant analytical justification provided by NPS and recommend the board take no action on proposals 52 and 53. See AITRC's full comments on Proposal 51.

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**PROPOSAL 54****5 AAC 24.361. Copper River King Salmon Management Plan.**

Restrict use of Copper River District inside closure area during statistical weeks 20 and 21, as follows:

(b) In the commercial fishery, during the statistical weeks 20 and 21, the commissioner may not close [open] more than three [ONE] 12-hour fishing periods within the inside closure area of the Copper River District described in 5 AAC 24.350(1)(B).

**AITRC opposes Proposal 54.** The commissioner should be able to close the fishery at any time to ensure sustainability and the sharing of the burden of conservation consistent with the sustainable salmon fisheries management policy (5 AAC 39.222). Statistical weeks 20 and 21 comprise the majority of the Chinook salmon catch in the fishery. During this time of concern for the Copper River Chinook salmon, there should be no liberalization of commercial fishing in the Copper River district inside the closure area.

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**PROPOSAL 55****5 AAC 24.361. Copper River King Salmon Management Plan and**

Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted, as follows:

If the commercial fishery is closed for king conservation measures on the inside waters during the commercial season for more than two consecutive non-mandatory inside closures then the commercial guide services in the Upper Copper River drainage will be limited to at least one conservation measure listed below for a period of no less than one week.

**AITRC opposes Proposal 55.** Restriction of the commercial fishery in the Copper River District may be necessary for salmon conservation purposes, especially for Copper River Chinook salmon, and to reach the inriver goal as assessed by Miles Lake Sonar. The policy for the management of sustainable salmon fisheries requires that the burden of conservation be shared among all fisheries in close proportion to each fisheries' respective use. If the inriver goal is achieved, there should be no reason to restrict sport fishing guiding services in the Upper Copper River District.

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**PROPOSAL 58****5 AAC 24.361. Copper River King Salmon Management Plan.**

Amend the Copper River King Salmon Management Plan, as follows:

5 AAC 24.361(d) is amended to read:

...

- (d) In the Chitina Subdistrict personal use dipnet salmon fishery,  
(3) if the commissioner projects that the upper bound of the escapement goal will be exceeded, the commissioner may, by emergency order, close the Chitina Subdistrict personal use dipnet salmon fishery season and immediately reopen a season during which the king salmon annual limit per household permit is increased.

**AITRC opposes Proposal 58.** From 2014 to 2023, the Chitina Subdistrict Personal Use (PU) dipnet fishery exceeded the board’s PU allocation in 7 of the past 10 years with a 10-yr average harvest of 151,895 salmon (data provided by ADF&G’s Mark Somerville on April 19, 2024). The impacts of this trend to upriver priority subsistence users of Copper River Chinook and sockeye salmon must be considered given indicators suggesting that the existing Copper River salmon-related management plans no longer provide reasonable opportunities for customary and traditional subsistence uses upriver from the mouth of the Tonsina River.

The PU harvest in 2019, for example, was 179,795 fish, whereas the Glennallen Subdistrict and Batzulnetas subsistence salmon harvest upriver from the mouth of the Tonsina River fell below the lower limits of the amounts reasonably necessary for subsistence (ANS) combined by more than 6,500 salmon. Fish harvested downriver cannot be harvested upriver. Furthermore, if adopted at this meeting, ADF&G’s Proposal 58 would further increase the allocation of salmon to the PU fishery in Chitina, which would undoubtedly further challenge reasonable opportunities for subsistence uses of salmon upriver from Tonsina.

Despite lowering the minimum Chinook salmon escapement goal in 2021 and establishing a range of 21,000 to 31,000 Chinook salmon, escapement has not met the lower bound SEG in 4 out of the last 10 years (2014-2023). Subsistence salmon harvests in the Glennallen Subdistrict upriver of the mouth of the Tonsina River have not reached the lower limits of the ANS findings established by the board since 2018 in that portion of the river from Tonsina to the mouth of Gakona River, nor have subsistence harvests reached the lower limit of the ANS upriver of the Gakona River since 2015. Customary and traditional subsistence uses are not prioritized. When subsistence needs continue to go unmet, and especially in times of low Chinook salmon abundance where minimum escapements are not achieved, there should be no liberalization of non-subsistence fisheries.

The board established in regulation 5 AAC 77.001(B) that “it is the intent of the board that the taking of fish under 5 AAC 77.001 will be allowed when that taking does not jeopardize the sustained yield of a resource and either does not negatively impact an existing resource use or is in the broad public interest.” If Proposal 58 had been in place, the department likely would have increased the PU bag limit for Chinook salmon in six out of the last ten years given the estimated Chinook escapement reportedly exceeded the upper bound of the 31,000 Chinook salmon. It is important to recall that the current subtraction method of estimating escapement over-estimates the numbers of salmon that reach the spawning grounds based upon local and traditional knowledge of subsistence fishing households and Ahtna subject matter experts in the upper reaches of the Copper River. Further increasing the salmon harvest in the PU fishery as proposed by the department in Proposal 58, which has already experienced increased fishery participation given restrictions to other salmon fisheries across Alaska, would likely further challenge reasonable opportunities for subsistence uses and meeting the lower bound of the Chinook salmon escapement goal.

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**PROPOSAL 59****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan, as follows:

5 AAC 77.591(e) is amended to read:

...

- (e) The total annual limit for each personal use salmon fishing permit is **as follows:**  
**(1) 25 salmon for the head of household and 10 salmon for each dependent of the permit holder, except that only one king salmon may be retained per household[.];**  
**(2) if the commissioner projects that the upper bound of the Copper River drainage sockeye salmon sustainable escapement goal will be exceeded, the commissioner may, by emergency order, close the Chitina Subdistrict personal use dip net salmon fishery season and immediately reopen a season during which the annual limit for the head of household is increased by XX sockeye salmon with no increase in the king salmon annual limit established in 5 AAC 77.591(e)(1), or an increase in the king salmon annual limit by conditions specified in 5 AAC 24.361(d).**

**AITRC opposes Proposal 59.** From 2014 to 2023, the Chitina Subdistrict Personal Use (PU) dipnet fishery exceeded the board's PU allocation in 7 of the past 10 years with a 10-yr average harvest of 151,895 salmon (data provided by ADF&G's Mark Somerville on April 19, 2024). The impacts of this trend to upriver priority subsistence users of Copper River salmon must be considered given indicators suggesting that the existing Copper River salmon-related management plans no longer provide reasonable opportunities for customary and traditional subsistence uses upriver from the mouth of the Tonsina River.

The PU harvest in 2019, for example, was 179,795 fish, whereas the Glennallen Subdistrict and Batzulnetas subsistence salmon harvest upriver from the mouth of the Tonsina River fell below the lower limits of the amounts reasonably necessary for subsistence (ANS) combined by more than 6,500 salmon. Fish harvested downriver cannot be harvested upriver. Furthermore, if adopted at this meeting, ADF&G's Proposal 59 would further increase the allocation of salmon to the PU fishery in Chitina, which would undoubtedly further challenge reasonable opportunities for subsistence uses of salmon upriver from Tonsina.

Subsistence salmon harvests in the Glennallen Subdistrict upriver of the mouth of the Tonsina River have not reached the lower limits of the ANS findings established by the board since 2018 in that portion of the river from Tonsina to the mouth of Gakona River, nor have subsistence harvests reached the lower limit of the ANS upriver of the Gakona River since 2015. Customary and traditional subsistence uses are not prioritized.

The board established in regulation 5 AAC 77.001(B) that "it is the intent of the board that the taking of fish under 5 AAC 77.001 will be allowed when that taking does not jeopardize the sustained yield of a resource and either does not negatively impact an existing resource use or is in the broad public interest." When subsistence needs continue to go unmet, there should be no liberalization of non-subsistence fisheries. It is important to recall that the current subtraction method of estimating escapement over-estimates the numbers of salmon that reach the spawning

grounds based upon local and traditional knowledge of subsistence fishing households and Ahtna subject matter experts in the upper reaches of the Copper River. Further increasing the salmon harvest in the PU fishery as proposed by the department in Proposal 59, which has already experienced increased fishery participation given restrictions to other salmon fisheries across Alaska, would likely further challenge reasonable opportunities for subsistence uses.

Additional fishing opportunities in the Chitina PU fishery by increasing the bag limit of sockeye or Chinook salmon could further harm Chinook salmon, even if retention is not allowed. Additional sockeye fishing in the CSD will inevitably result in the incidental catch of Chinook salmon. AITRC staff has witnessed many unsuccessful attempts to release Chinook salmon in the Chitina Subdistrict due to the inherently dangerous style of dipnet fishing. AITRC contends that many Chinook that are released die due to incidental mortality associated with poor fish handling and during catch and release efforts.

AITRC is also opposed to Proposal 59's authority to increase the PU bag limit for Chinook salmon as detailed in our comments for Proposal 58.

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## **PROPOSAL 60**

### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Modify the annual limit for the Chitina Subdistrict, as follows:

Section 5 AAC 77.591(e) The total annual limit for each personal use salmon fishing permit is 20[25] salmon for the head of household and 5 [10] salmon for each dependent of the permit holder, except that only one king salmon may be retained per household.

**AITRC supports 60.** From 2014 to 2023, the Chitina Subdistrict Personal Use (PU) dipnet fishery exceeded the board's PU allocation in 7 of the past 10 years with a 10-yr average harvest of 151,895 salmon (data provided by ADF&G's Mark Somerville on April 19, 2024). The impacts of this trend to upriver priority subsistence users of Copper River salmon must be considered given indicators suggesting that the existing Copper River salmon-related management plans no longer provide reasonable opportunities for customary and traditional subsistence uses upriver from the mouth of the Tonsina River.

Partially due to fisheries closures around the state, Chitina Subdistrict personal use fishery participation has been growing. As one of Alaskans' last strongholds of salmon, management should account for this increased pressure and not continue with current bag limits. Salmon harvested in the Chitina Subdistrict cannot be harvested upriver in priority subsistence fisheries. This negatively impacts upriver subsistence fishing, which should be a priority for management given ANS determinations upriver of the Tonsina River in the Glennallen Subdistrict are routinely not being met.

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## **PROPOSAL 61**

### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict, as follows:

5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan

(e) The total annual limit for each personal use salmon fishing permit is [25] **15** salmon for the head of household and 10 salmon for each dependent of the permit holder, except that only one king salmon may be retained per household. **Supplemental permits for an additional 10 salmon for head of household will be allotted by EO authority if the in-river goal has a harvestable surplus.**

**AITRC supports Proposal 61** but recommends the board instead adopt Proposal 60. See AITRC comments for Proposal 60.

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### **PROPOSAL 63**

#### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Amend the opening date of the Chitina Subdistrict personal use fishery, as follows:

5 AAC 77.591 (b) Salmon may be taken from June **21** [7] or **2 weeks after a daily management of fish passage is met at Miles Lake sonar** through September 30. The commissioner shall establish a preseason schedule, including fishing times, for the period June **21** [7] through August 31 based on daily projected sonar counts at the sonar counter located near Miles Lake. This abundance-based preseason schedule will distribute the harvest throughout the season. The commissioner **must** [MAY] close, by an emergency order effective June **21** [7], the Chitina Subdistrict personal use salmon fishing season and shall reopen the season, by emergency order, on or before June **21** [15] depending on the run strength and timing of the sockeye salmon run. Adjustments shall be made to the preseason schedule based on actual sonar counts compared to projected counts. If the actual sonar count at Miles Lake is more than the projected sonar count, the commissioner shall close, by emergency order, the season and immediately reopen it during which additional fishing times will be allowed. If the actual sonar count at Miles Lake is less than the projected sonar count, the commissioner shall close, by emergency order, the season and immediately reopen it during which fishing times will be reduced by a corresponding amount of time.

**AITRC supports Proposal 63** for reasons provided within the proposal justification. Local and traditional knowledge and western science have confirmed a delayed shift in run-timing in recent years. This proposal would allow more early run fish to escape fisheries and help protect genetic diversity of those early season stocks (and species) disproportionately impacted under the current regime.

Subsistence salmon harvests in the Glennallen Subdistrict upriver of the mouth of the Tonsina River have not reached the lower limits of the ANS findings established by the board since 2018 in that portion of the river from Tonsina to the mouth of Gakona River, nor have subsistence harvests reached the lower limit of the ANS upriver of the Gakona River since 2015. Customary and traditional subsistence uses are not prioritized. Delaying the opening of the Chitina Subdistrict Personal Use fishery is an appropriate management measure to ensure reasonable opportunities for customary and traditional uses upriver in the Glennallen Subdistrict.

If Proposal 51 (to more conservatively manage commercial early season fisheries) were to be adopted, the Personal Use fishery may be able to open earlier than the historical June 7th – 15th start date as daily management objectives at the Miles Lake sonar will most likely be met earlier.

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#### **PROPOSAL 64**

##### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year, as follows:

##### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan**

(a) Salmon may be taken in the Chitina Subdistrict only under the authority of a Chitina Subdistrict personal use salmon fishing permit. Only one Chitina Subdistrict personal use salmon fishing permit may be issued to a household per calendar year. A household may not be issued both a Copper River subsistence salmon fishing permit and a Chitina Subdistrict personal use salmon fishing permit. **A household may not be issued a Chitina Subdistrict personal use salmon fishing permit if the household has been issued an Upper Cook Inlet personal use salmon fishing permit in the same calendar year.**

**AITRC supports Proposal 64.** With no in-season reporting requirements, and ability to obtain multiple permits, current regulation's bag limits are not enforceable. This proposed change would help to ensure that fishermen aren't "double-dipping" in the state's Personal Use Fisheries, and potential underestimation of harvest by managers. ADF&G data demonstrate that approximately 900 to more than 1,000 households participate in both Upper Cook Inlet and Chitina personal use fisheries and essentially have a double household bag limit is concerning given that upriver subsistence salmon harvests in the Glennallen Subdistrict above the mouth of the Tonsina River have not been meeting the lower limits of the ANS since 2018 upriver from Tonsina to the mouth of the Gakona River and since 2015 above Gakona.

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#### **PROPOSAL 65**

##### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Require a weekly permit and in-season reporting in the Chitina Subdistrict, as follows: 5 AAC 77.591 **(x)**

**A participant must purchase a one-week Personal Use dipnet permit from Alaska Department of Fish & Game. Reporting is required within one week of the expiration of the permit. If harvest bag limit is not reached, additional permits may be obtained upon satisfying reporting requirements.**

**AITRC supports Proposal 65.** The proposal would provide more accurate in-season data for management use. Managers should strive to have more available "tools in the toolbox" to help refine methods to ensure sustainable escapement. This proposal would not only provide managers with an in-season reporting tool, it would also make bag limits easily enforceable and (as written) could potentially provide ADF&G income to help with said management and enforcement.

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**PROPOSAL 66****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal, as follows:

5 AAC 77.591 Add subsection (i) as written

**(i) The department, in consultation with the hatchery operator, shall manage the Chitina Subdistrict Personal Use salmon fishing through restricting time and area by emergency order to achieve the Gulkana Brood Stock escapement goal.**

AITRC is neutral on Proposal 66 due to the impracticability of managing the personal use fishery using otolith collection to identify the hatchery component of the run. AITRC also understands that the Native Village of Eyak and ADF&G telemetry studies only identify Gulkana salmon stock but does not distinguish between hatchery and wild Gulkana salmon stocks. This proposal also appears to be impracticable because hatchery broodstock collection takes place six weeks after the fish were in the Chitina Subdistrict.

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**PROPOSAL 67****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict, as follows:

Add 5 AAC 77.591 (c) **(1)**

(c) Salmon may be taken only with dip nets.

**(1) King salmon intended or required to be released may not be removed from the water.**

AITRC supports Proposal 67. AITRC contends that catch and release of Chinook salmon is largely unsuccessful in Chitina Dipnet Fishery based upon observations of AITRC staff. Incidental mortality associated with catch and release also is unaccounted for in Copper River salmon management. There are many accounts of dozens of Chinook being caught by individuals in a day (or hours) and releasing them unsuccessfully. The difficulty of releasing large Chinook is apparent, but smaller fish are potentially even more susceptible as they gill themselves in the mesh of dipnets. There is not really a good solution for successfully releasing Chinook salmon from dipnets, other than not catching them in the first place, or potentially limiting mesh size or the material from which nets are made, as proposed during the last regulatory cycle. While these changes may reduce gilling of released salmon, with increased surface area they may increase the difficulty in fishing for stationary, shore-based fishermen in swift waters of the canyon. As a result, AITRC supports this proposal to conserve Copper River Chinook salmon in the growing personal use fishery, reduce incidental catch inriver mortality, and ensure successful Chinook salmon passage upriver for spawning and priority subsistence uses.

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**PROPOSAL 68****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Prohibit dipnetting from a boat in the Chitina Subdistrict, as follows:

5 AAC 77.591 (c) Salmon may be taken only with dip nets **while not in a boat.**

**AITRC supports Proposal 68.** Dip-netting from a boat is more efficient than from shore as it is a viable method for targeting salmon seeking refuge in times of high water, specifically Chinook, in inaccessible eddies from shore. The already crowded Chitina personal use fishery is growing in participation due to closures elsewhere around the state. The number of fish caught in this fishery must be limited by some means to allow fish to pass upriver for subsistence fishermen's access and to spawn. Upriver ANS findings established by the board to assess whether reasonable opportunities for subsistence uses have routinely not been met upriver of the Tonsina River. Prohibiting dip-netting from a boat in the Chitina Subdistrict would allow more fish upriver to provide more reasonable opportunities for subsistence fishing households to have a reasonable expectation of success in harvesting Copper River salmon.

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**PROPOSAL 69****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Establish restrictions when dipnetting from a boat in the Chitina Subdistrict, as follows:

(C) Salmon may be taken only with dip nets. **Salmon taken with a dipnet from a powerboat will be subject to more time and area restrictions to allow fish passage to return to a pattern that more closely resembles past practices in the fishery.**

**AITRC supports Proposal 69** for reasons outlined in AITRC comments for Proposal 68, which we prefer.

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**PROPOSAL 70****5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Extend the lower boundary of the Chitina Subdistrict, as follows:

The Chitina Dipnetters Assn. is requesting the BOF extend the lower boundary of the Chitina Personal Use Dipnet Fishery with new language in 5AAC 77.591(h) as defined below.

For the purpose of this section, the Chitina Subdistrict consists of all waters of the mainstream Copper River from the downstream edge of the Chitina-McCarthy Bridge downstream **to a line crossing the Copper River from a point just upstream of Canyon Creek on the east (lat. 61 deg 24'36.00"N – lon. 144 deg. 28'25.34"W) angling across the Copper River to the existing lower limit sign at Haley Creek** [to an east west line crossing the Copper River approximately 200 yds. Upstream of Haley Creek]

**AITRC opposes Proposal 70.** Proposed in 2017, 2021, and now again in 2024 by the Chitina Dipnetters' Association (CDA), this regulatory change would extend the Personal Use fishery downriver to Canyon Creek. Proposal 70 correctly points out that "drift dipnetting from both personal and guided boats has substantially increased as a method of harvesting salmon in the CPUDF." The proposal attributes this increase to the fact that there is a limited number of

suitable sites for shore-based dipnetting, and similarly points out that personal use fishing households who dipnet from boats are constrained to very small “productive areas”—primarily between the mouth of Wood Canyon and the regulatory marker at Hailey Creek.

All of these assertions highlight the fact that there is crowding at personal use dipnet sites on shore, one indicator of the immense pressure on the resource resulting from this expanding fishery, which continues to increase as salmon fisheries in others areas of the state are severely restricted or closed. While extending the regulatory boundary nearly a half mile downriver on the East bank may provide some temporary relief from this congestion, AITRC contends that fishing pressure will continue to build; however, the Copper River cannot feed the entire state. AITRC is concerned that further expanding the personal use fishery by increasing the size of the fishing area to accommodate an increasing number of users would set a dangerous precedent that would further challenge the ability of subsistence fishing households in the Glennallen Subdistrict to have reasonable opportunity for customary and traditional subsistence uses.

Previous efforts by the proponent to expand the PU fishery included Proposal 17 during the 2017 board regulatory cycle would have extended the PU fishery area downriver to the mouth of the Ulanatina River, and then again in 2021 with Proposal 18. Proposal 70 proposes expanding the PU fishery to an area smaller than during the last regulatory cycle; however, AITRC remains opposed to any expansion of the Chitina dipnet fishery due to the lack of reasonable opportunities for priority subsistence uses of salmon upriver of the Tonsina River in the Glennallen Subdistrict.

Copper River Chinook salmon are in a period of low abundance. Despite lowering the escapement goal at the previous board cycle in 2021, Chinook have failed to meet the lower bound of the SEG 4 out of the last 10 years (2014-2023). Every effort should be taken to conserve Chinook stocks and prevent them from further declining and failing to meet escapement goals. Although total annual Chinook retention reported in the personal-use fishery has been relatively small (generally in the range of 1,000 – 3,000 per year, according to information on the ADF&G website), incidental mortality resulting from dipnet catch-and-release is poorly understood and not accounted for by managers. Because this proposal is likely to increase fishing effort in an area where Chinook salmon migrate, it is likely to increase inriver Chinook mortality. Because Copper River salmon management primarily focuses on sockeye, it may not be as responsive to further signs of trouble in Chinook salmon.

Changes in access to the Chitina PU fishery are likely to further strain the resource. The Alaska Department of Transportation recently improved the road from O’Brien Creek to Haley Creek. This will make motorized access by dipnetters far more efficient along this reach of river. Despite the limited number of onshore sites pointed out in this proposal, we expect that the improved road will already significantly increase fishing effort during the fishing season.

The area below the current lower boundary of the personal-use fishery is one of the most dangerous parts of the Copper River, particularly during high water. There is a large whirlpool immediately below the current regulatory boundary that presents a significant hazard for boaters, especially those with smaller boats and motors.

Finally, and most importantly, Haley Creek is the lower boundary of the upper Copper River District. It is possible that extending the boundary downriver, below the current regulatory marker, would effectively create another new fishery in the Lower Copper River District. This would potentially open the floodgates to further expansion of the personal-use fishery into lower reaches of the river - a serious conservation concern given the current state of salmon stocks and the lack of reasonable opportunities for subsistence upriver of Tonsina.

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## **PROPOSAL 71**

### **5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Prohibit guiding in the Chitina Subdistrict, as follows:

#### **5 AAC 01.620(x) Fishing guide services are prohibited in the Copper River Chitina Subdistrict Personal Use Fishery.**

**(x) "fishing guide services" means assistance, for compensation or with the intent to receive compensation, to a Personal Use Fishery participant to take or to attempt to take fish from a vessel by accompanying or physically directing the Personal Use Fishery participant in fishing activities during any part of a fishing trip.**

**AITRC supports Proposal 71.** The personal use fishery has grown in popularity due to closures around the state. This fishery is allotted 150,000 salmon which may be exceeded in times of excess inriver abundance. The estimate of salmon that are reaching the spawning grounds are not reflective of these “times of excess.” Participation and harvest in the Chitina Subdistrict are increasing despite the subsistence harvest consistently falling below the lower limits of the board-determined ANS ranges upstream of Tonsina River. Prohibiting commercial guide services would likely decrease the amount of harvest in the personal use fishery and allow more fish upriver to provide reasonable opportunity for subsistence uses. We ask the Board to consider the video shown to them during the 2021 cycle showing a guided fisherman in the CSD who expressed his uncertainty with what he was going to do with all the salmon he harvested (RC 091 by Dennis Zadra for 2021 Proposal 7). To further demonstrate excessive take in this fishery, we regularly witness “marketplace” postings on social media in the spring of Personal Use fishers giving away last year’s catch before throwing it out to resume taking more. It is the intent of the board that the taking of fish under 5AAC 77.001(b) will be allowed when that taking does not jeopardize the sustained yield of a resource and either does not negatively impact an existing resource use or is in the broad public interest. Reasonable opportunities for subsistence fishing households to have a reasonable expectation of successfully harvesting salmon consistent with AS 16.05.258(f) must be prioritized.

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## **PROPOSAL 72**

### **5 AAC 52.023. Special provisions for seasons, bag, possession, and size limits, and methods and means for the Upper Copper River and Upper Susitna River Area.**

Close sport fishing for salmon based on water temperature in the Gulkana River, as follows:

**5AAC 52.023 (9)(x) Close Gulkana River to fishing for Chinook and sockeye salmon by emergency order when water temperature at the Sourdough station exceeds 18 degrees Celsius (C) at any time during a 24-hour period for 3 consecutive days or exceeds 20**

**degrees C. Fishing may resume when stream temperature recedes and does not reach 18 degrees C at any time for 2 consecutive days.**

**AITRC supports Proposal 72 with amended language to read “before July 19th”** as this is the closure date for fishing for Chinook salmon. This clarification of language would help to protect Chinook salmon, while allowing for harvesting of sockeye salmon and release of incidentally caught Chinook after July 19. The chart below describes the closures that would have occurred since 2018 if this rule with amended language was in effect.

Based on radio telemetry, the Gulkana River between 2019 and 2021 accounted for approximately 25% of returning Copper River Chinook which is three times higher than the next highest contributing stock at 8%. Of the 4,500 to 6,500 Chinook returning to the Gulkana system, it is estimated that 60% spawn above the Gulkana counting tower and 40% spawn below. Sport fishing for Chinook largely targets the reach from Sourdough upstream to the counting tower and is primarily accessed via jet boat. This part of the river is relatively slow moving with deep pools, riffles, and runs. Chinook can be observed spawning in shallow tail-outs and seeking refuge in deeper pools, especially upstream of the confluence of the West Fork where the water is very clear due to it being uniquely (to the Copper River Basin) a precipitation driven, non-glacial system.

The Gulkana River is one of the last good clearwater sport fisheries for Chinook salmon in the state. Due to low abundance and closures in other systems, many Alaskans and non-residents utilize this fishery. We have seen an increase in fishing pressure and expect the trend to continue with increased pressure from guides from around the state. The idea of this proposal is to have a (mandatory) tool on hand to ensure fish that make the long journey back to river can be protected to time of spawn during times of unfavorable environmental conditions. The Gulkana River is relatively easily accessible from the road system, and we want to discourage the disturbance of spawning salmon by fisherman including fish handling incidental mortality associated with catch and release when environmental factors are unfavorable and amplify effects of heat stress.

The reason the daily maximum temperature at the USGS Sourdough station was chosen instead of the daily mean temperature is strictly for ease of monitoring and enforcement. At research stations, such as the Andreafsky weir, handling of fish is suspended above a mean daily temperature of 17 degrees Celsius. This proposal is written with the generally accepted threshold of a daily maximum of 18 degrees, and 20 degrees Celsius (von Biela et al. 2020). Diurnal fluctuation in this system is approximately up to 2 degrees resulting of a mean temperature right around the established 17 degrees. Even though there are deep pools where temperatures are cooler, this only leads to targeting fishing efforts to only areas of refuge during these hotter conditions. This is partially the rational for fisheries around the United States regulating efforts above temperature thresholds, ie. “hoot owl fisheries” only opened at night. Keep in mind diurnal fluctuations in the lower 48 are typically more variable given shorter daylight hours during fishing seasons, so this isn’t really an option on the Gulkana River.

Chinook are in a period of low abundance (2024 escapement). Of the fish that make the long journey upriver to spawn, we want to see every measure possible taken to responsibly manage for future replacement. Large female Chinook, the most important individuals for successful

spawner-recruit, are approximately two times as susceptible to prespawn mortality due to heat stress (Hinch et al. 2021).

AITRC is part of the statewide temperature monitoring program. We have approximately 125 remote sensing temperature loggers deployed in the Gulkana system alone, and more around the Copper River basin. Witnessing 2019's extraordinarily high temperatures, mass prespawn mortality, and failing to see evidence of that brood year's (5-year old component) return in this year's inriver abundance led us to develop this proposal. We are entering a time in the Copper River watershed when we have more data collection and analysis than ever before, and it is irresponsible to not use what we have for better management.

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## **PROPOSAL 78**

### **5 AAC 24.370. Prince William Sound Management and Salmon Enhancement Allocation Plan.**

Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%, as follows:

The solution is very simple. Reduce the permitted egg intake of each Prince William Sound Hatchery that produces pink and chum salmon by 25%. Then do an evaluation within five years.

**AITRC supports Proposal 78.** Sockeye salmon are decreasing in size with increased hatchery pink competition in the ocean (Rand and Ruggerone 2024, Ohlberger et al. 2023). This has been evident to Ahtna elders for years, and now it has been "validated" by western science. Smaller individual fish leads to less pounds harvested, egg capacity for replacement, and overall fitness. The "subtraction" method of assessing escapement does not account for decreased body size, egg quantity and quality, and energetics, or fitness to reach spawning grounds, nor are they considering increased inriver mortality, compounded by changing environmental conditions.

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## **PROPOSAL 89**

### **5 AAC 52.023. Special provisions for seasons, bag, possession, and size limits, and methods and means for the Upper Copper River and Upper Susitna River Area.**

Increase the bag and possession limit for burbot in Lake Louise, as follows:

5 AAC 52.023(13)(C) is amended to read:

(A) the bag and possession limit for burbot is two [ONE] fish, with no size limit;

**AITRC supports Proposal 89.** This will simplify regulations by aligning with the rest of the drainage.

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## **PROPOSAL 90**

### **5 AAC 52.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the Upper Copper River and Upper Susitna River Area.**

Modify bag and possession limits of burbot in Crosswind Lake, as follows:

To mimic the Tyone River Drainage regulations, which has a bag/possession limit of 2 burbot per person per day.

**AITRC opposes Proposal 90.** There is no biological concern or current data to warrant this change.

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## **PROPOSAL 91**

### **5 AAC 52.023. Special provisions for seasons, bag, possession, and size limits, and methods and means for the Upper Copper River and Upper Susitna River Area.**

Modify seasons, bag, possession, and size limits for Arctic grayling in Mendeltna Creek, Moose Lake, and Our Creek, as follows:

5 AAC 52.023 (14), (15), and (17) are amended to read:

...

(14) in Mendeltna Creek drainage,

(A) in all flowing waters, including all waters within one-quarter mile of Mendeltna Creek's confluence with Tazlina Lake,

(i) Sport fishing for salmon is closed; salmon may not be taken or possessed;

(ii) **repealed** [ARCTIC GRAYLING MAY BE TAKEN ONLY FROM JUNE 1 – MARCH 31, WITH A BAG AND POSSESSION LIMIT OF TWO FISH, WHICH MUST BE GREATER THAN 12 INCHES IN LENGTH];

(15) in Moose Lake,

(C) **repealed** [ARCTIC GRAYLING MAY BE TAKEN ONLY FROM JUNE 1 – MARCH 31, WITH A BAG AND POSSESSION LIMIT OF TWO FISH];

(17) in Our Creek,

(A) **repealed** [ARCTIC GRAYLING MAY BE TAKEN ONLY FROM JUNE 1 – MARCH 31, WITH A BAG AND POSSESSION LIMIT OF TWO FISH];

**AITRC supports Proposal 91.** There appears to be no biological reason for these fisheries restrictions to remain in place.

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*Our Culture Unites us; Our Land Sustains us; Our People are Prosperous*

November 26, 2024

To members of the Alaska Board of Fisheries:

On behalf of the shareholders of Ahtna, Incorporated ("Ahtna"), we are submitting the following comments on select proposals in the Board of Fisheries 2024/2025 Meeting Cycle Proposal Book.

**PROPOSAL 48 – 5 AAC 01.620. Lawful gear and gear specifications.**

Ahtna opposes this proposal. This proposal does not provide clear justification as to why the Board would overturn its decision in 2021 to adopt regulations banning permit holders from fishing from a guided boat. Further, "Subsistence uses means' the noncommercial, customary and traditional uses of wild, renewable resources...." AS 16.05.940(36). We believe that using commercial guiding services in a subsistence fishery is a direct violation of Title 16. Finally, we are concerned that this will cause competition for other subsistence users in the Glennallen Subdistrict subsistence ("GSD") fishery and other upstream users. We are also concerned this will have a negative impact on escapement.

**PROPOSAL 49 – 5 AAC 01.620. Lawful gear and gear specifications.**

Ahtna opposes this proposal. "Subsistence uses means' the noncommercial, customary and traditional uses of wild, renewable resources...." AS 16.05.940(36). We believe that using commercial transportation services in a subsistence fishery is a direct violation of Title 16.

**PROPOSALS 51, 52, and 53 – 5 AAC 24.360. Copper River District Management Plan.**

Ahtna supports these proposals. We agree that the management of the Copper River District commercial fishery by the Alaska Department of Fish and Game ("Department") has resulted in disproportionately high harvest rates for early run Copper River salmon. Without intervention from the Board to address this issue, we will likely see a reduced overall population diversity of Copper River sockeye and king salmon. Finally, we are very concerned about the disproportionate impact that these management decisions have had on our users fishing upstream of the Gulkana River in the upper portion of the GSD.

**PROPOSAL 54 – 5 AAC 24.361. Copper River King Salmon Management Plan.**

Ahtna opposes this proposal. We agree with the Department that Inside-waters closures are a key tool to conserve Copper River king salmon. Limiting these closures will have a detrimental impact on the Copper River king salmon population.



**PROPOSAL 58 – 5 AAC 24.361. Copper River King Salmon Management Plan.**

Ahtna opposes this proposal. We are concerned that the liberalized management of the Copper River king salmon based on escapement projections could have a significant negative impact of the overall escapement of Copper River king salmon. We are also concerned about the impact to upriver subsistence users.

**PROPOSAL 59 – 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Ahtna opposes this proposal. We are concerned that the liberalized management of the Copper River sockeye salmon based on escapement projections could have a significant negative impact of the overall escapement of Copper River sockeye salmon. We are also concerned about the impact to upriver subsistence users.

**PROPOSAL 63 – 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Ahtna supports this proposal. We agree that this will increase the number of salmon passing through the Chitina Subdistrict and provide additional fish for the upriver fisheries. We also agree that this will increase spawning escapement.

**PROPOSAL 68 – 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Ahtna supports this proposal. We feel that this will increase the number of salmon passing through the Chitina Subdistrict and provide additional fish for the upriver fisheries. We also feel that this will increase spawning escapement.

**PROPOSAL 70 – 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Ahtna opposes this proposal. We do not feel that increasing the Chitina Subdistrict is necessary for the continued success of the Copper River Personal Use Dip Net Salmon Fishery. In addition, we agree with the Department that this will make enforcement of the boundaries more difficult and lead to confusion with the differing downstream boundaries between the state and federal fisheries.

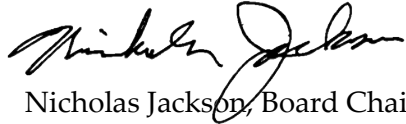
**PROPOSAL 71 – 5 AAC 77.591. Copper River Personal Use Dip Net Salmon Fishery Management Plan.**

Ahtna supports this proposal. We agree that guided fishing from a boat allows targeting of holding areas that are not accessible from shore and enhances ability to catch king salmon and sockeye salmon. We feel that this will increase the number of salmon passing through the Chitina Subdistrict and provide additional fish for the upriver fisheries and increase spawning escapement.

Alaska Board of Fisheries  
November 26, 2024  
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If you have any questions, please do not hesitate to contact us.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Nicholas Jackson". The signature is fluid and cursive, with the first name "Nicholas" and last name "Jackson" clearly distinguishable.

Nicholas Jackson, Board Chair  
Ahtna, Incorporated

Alaska Board of Fisheries  
 Alaska Department of Fish and Game  
 P.O. Box 115526  
 Juneau, AK 99811-5526

November 26, 2024

Re: Proposals 14, 15, 16, and 17 - PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

Alaska Groundfish Data Bank (AGDB) is a member organization that includes all shorebased processors located in Kodiak and catcher vessels home ported in Kodiak. Our members participate in the Prince William Sound (PWS) Pelagic Pollock Trawl fishery annually and the Kodiak processors and vessels have long term dependency in the state managed fishery; not only did they pioneer the fishery, but they have also participated since the inception in 1995. All three of AGDB's staff are also Kodiak residents; I've lived here for 40 years, raised my family here, and my employees have planted roots here as well. Kodiak is one of the last truly fishery dependent, year round commercial fishing towns in Alaska. AGDB mission is maintaining sustainable GOA fisheries now and into the future and keeping Kodiak as a community whole.

**Our members strongly oppose proposals 14, 15, 16 and 17.**

**Background**

The Kodiak trawl fleet are primarily family owned businesses with some third and fourth generation families that now operate the vessels. Data available from the National Oceanic and Atmospheric Administration, Alaska Fishery Science Center, show that more than 50% of the revenue generated in the Gulf of Alaska (GOA) pollock fishery is harvested by vessels that are Alaskan owned<sup>1</sup>. The majority of crew members on these vessels are also Alaskan residents. The PWS pollock fishery is a catcher vessel only fishery; most vessels are between 80 to 90 feet in length. All vessels that participate in the State pollock fishery are federally licensed and also participate in the GOA federal pollock fishery which only allows catcher vessels.

Kodiak has more shorebased processors than any other community in Alaska. The trawl sector delivers groundfish 10 to 11 months a year which allows for year round processing within our community. Our year round processing sector supports the highest percentage of local resident processing workers of any major seafood production area in Alaska.

According to an economic report commissioned by the Kodiak Island Borough (KIB), "the seafood industry is the most significant sector in terms of earnings and employment in the borough. The analysis of fisheries and other data indicates the seafood industry generated 3,200 jobs and \$200 million in labor income in 2019. Nonetheless, Kodiak is experiencing a long-term decline in fisheries participation and income, including both wage jobs (most notably seafood processing jobs) and self employment (fishermen)."<sup>2</sup> The KIB levies a severance tax, the city levies a sales tax, and both governments benefit from the State of Alaska Fishery Business Tax. Tax revenue data for 2023 shows fish severance tax revenue for all fish landings in the KIB generated \$1.5 million and State Fishery Business Tax generated

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<sup>1</sup> Alaska Fishery Science Economic Staff (Nov 2024), Stock Assessment and Fishery Evaluation Report for the Groundfish Fisheries of the Gulf of Alaska and Bering Sea/Aleutian Islands Area: Economic Status of the Groundfish Fisheries off Alaska, 2023, page 45.

<sup>2</sup> McDowell Group (2021). Kodiak Economic Profile and Pandemic Impact Analysis. Prepared for Kodiak Island Borough.

\$1.35 million<sup>3</sup>. These revenues directly benefit borough services. Similar tax amounts from the State Fishery Business Tax and sales tax are available to support city services.

Alaska's seafood industry continues to be in crisis statewide and Kodiak's fisheries are no exception. The industry continues to be under extreme stress which began during the Covid pandemic due to tariffs, rising fuel costs, supply chain issues, processing labor costs and currency exchange rates. The situation dramatically worsened in August 2023 with the collapse of global seafood markets across all species. Russia has declared economic war on US Seafood and continues to put large volumes of cheap salmon and whitefish on the global markets to fund their war in Ukraine. The glut of Russian seafood is expected to continue into 2025, as Russia has already announced an increase in their pollock quotas for next year, against their own scientific advice. All of these negative pressures have resulted in low ex-vessel and wholesale prices across virtually all seafood species. We are seeing changes in the Kodiak waterfront as a result and are concerned about both processor and vessel consolidation as the industry struggles through these unprecedented times.

#### PWS Pollock Fishery Management

The Alaska Department of Fish and Game (ADF&G or Department) has done a thorough job describing the management of the PWS pollock fishery in their staff report. As they point out, the fishery is heavily regulated and managed. The fleet and processors have developed strong collaboration to create effective real time communication between the Department and the industry. The fleet must check in and out of the fishery, report harvest including bycatch species to the department daily and typically only 6 - 8 vessels are allowed to fish in the Sound at any one time. Besides the 5% bycatch limit divided across the different species/ species groups and the pollock guideline harvest level (GHL), there is also a 60% limit for each bycatch species or species group and pollock harvest for each section. Table 1 below shows the more refined bycatch caps for the 2023 fishery and actual catch as an example.

**Table 1. 2023 PWS Fishery Summary (all units are round lbs, including salmon)**

<b>Mgmt Section Totals</b>	<b>Pollock</b>	<b>Rockfish</b>	<b>Salmon</b>	<b>Shark</b>	<b>Squid</b>	<b>Other</b>	<b>Total Bycatch</b>	<b>Vessels</b>
Hinchinbrook	4,287,979	11,248	392	599	47,489	1,242	60,970	15
Port Bainbridge	1,806,754	1,975	1,698	793	4,088	2,109	10,663	6
Knight Island	940,585	684	383	3	1,085	1,210	3,365	3
<b>Total Harvest (lb)</b>	<b>7,035,318</b>	<b>13,907</b>	<b>2,473</b>	<b>1,395</b>	<b>52,662</b>	<b>4,561</b>	<b>74,998</b>	<b>19</b>
<b>Annual GHL/Cap</b>	7,309,316	36,547	2,924	70,169	219,279	36,547	365,466	
<b>Lbs Remaining</b>	273,998	22,640	451	68,774	166,617	31,986	290,468	
<b>% caught</b>	96.25%	61.95%	84.58%	1.99%	24.02%	12.48%	20.52%	

The vessels are also required to retain all pollock, rockfish and salmon. All proceeds for pollock in excess of the 300,000 pound trip limit and rockfish above the incidental catch limit of 0.5% must be surrendered to the State. The salmon retained can not be sold but can be donated to Food Banks. For rockfishes taken as bycatch, the trawl fleet's catch is predominantly shorttraker rockfish and some roughey rockfish, not yelloweye rockfish

#### Vessel Operations

*Ability to Discard Catch:* Vessels haul back their net and dump their catches directly into their refrigerated sea water (RSW) tanks. One haul can be between 50,000 to 150,000 pounds of pollock catch. The staff comments indicate that on average between 759 individual rockfish and 888 individual salmon were caught annually between 2021 and 2023. This compares to an average pollock catch over the same time

<sup>3</sup> Kodiak Island Borough 2023 Comprehensive Annual Financial Report.

frame of approximately 6 million pounds (or 3.4 million individual pollock assuming 1.75 pound average per fish). When comparing the number of individual rockfish or individual salmon to the number of individual pollock, the catch is just 0.012% rockfish and 0.026% salmon. Sorting through all those pollock to remove the few individual fishes of bycatch is not practical. This is why all the accounting of the catch is done at the processing plants at time of offload.

*Bottom Contact:* A pelagic net and all the components run from \$150,000 to \$250,000. The Sound is very deep ranging in depth from 150 to 250 fathoms. Acoustic back scatter for the vessel's electronics do not provide the details to "see" the bottom with enough confidence to touch the sea floor with their net. The bottom type in PWS is rocky gullies and trenches. Losing a net at the beginning of the fishing season would be disastrous for the vessel and its crew. The pollock fleet does not fish their pelagic nets on the bottom in PWS.

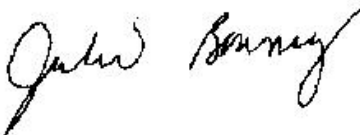
*Monitoring:* The majority of the Kodiak pollock fleet have electronic monitoring equipment on their vessels. They also carry at-sea observers when required within the federal fisheries. Developing a cost effective State observer/monitoring program for an average of 23 pollock trips annually would be difficult. As the Department suggests they have the authority to deploy onboard observers but do not have the authority to require electronic monitoring.

#### Unintended Consequences

Pollock are predators in the PWS Ecosystem. There have been several studies that show juvenile pink salmon survival is linked to the amount of adult pollock in the ecosystem within the Sound. Reducing pollock harvests will affect pink salmon survival which will in turn affect commercial salmon fisheries in the Sound. See Attachment 1 for a summary of research papers that show pollock consumption on pink salmon in PWS.

Not only are the actions described in Proposals 14, 15, 16, and 17 unwarranted, but they would cause real harm to Alaskans, including harvesters, processors and the community of Kodiak. We trust Department staff to continue managing the fishery as they have been and we concur with them that all four proposals should be rejected. Thank you for the opportunity to comment.

Sincerely,



Julie Bonney  
Executive Director  
Alaska Groundfish Data Bank

## ATTACHMENT 1 - POLLOCK PREDATION OF JUVENILE PINK SALMON

### *Research papers*

#### **“Ecological processes influencing mortality of juvenile pink salmon (*Oncorhynchus gorbuscha*) in Prince William Sound, Alaska”**

Willette, T. M., Cooney, R. T., Patrick, V., Mason, D. M., Thomas, G. L., & Scheel, D. (2001). Ecological processes influencing mortality of juvenile pink salmon (*Oncorhynchus gorbuscha*) in Prince William Sound, Alaska. *Fisheries Oceanography*, 10, 14-41.

- Two facultative planktivorous fishes, Pacific herring, and walleye pollock, probably consumed the most juvenile pink salmon each year, although other gadids were also important
- Nine taxonomic groups of fishes and several seabird species consumed about 546 million juvenile salmon during the first 45 days of their life in PWS. These predation losses represented about 75% of the approximately 736 million juveniles that entered PWS from bordering streams each year and thus were within the range for survivals estimated during this life stage.
- The dominance of adult pollock in the system produces a state in which salmon may be more vulnerable to a population crash.
- The salmon enhancement industry in PWS has adopted the predator-swamping strategy. Our model simulations indicated that this strategy can fail if salmon densities decline to the satiation threshold when zooplankton densities are insufficient to shelter juveniles from predation. This is what occurred at WHN Hatchery in 1994 causing high mortality among high-density aggregations of salmon.
- Predation on fry by herring and pollock was apparently greatest from April through early June.
- Predation increased on years with low zooplankton biomass, triggering pollock and herring to find alternate food sources, such as salmon fry.

#### **“Walleye Pollock as Predator and Prey in the Prince William Sound Ecosystem”**

Thorne, R. E. (2006). Walleye pollock as predator and prey in the Prince William Sound ecosystem. *GADID STOCKS to FISHING And CLIMATE CHANGE*, 289.

- Prince William Sound Science Center conducted winter-period surveys of adult pollock from 1995-2003. Pollock biomass in PWS ranged from 22,000-43,000 mt. The pink salmon predator monitoring studies assessed pelagic fish abundance and distribution synoptic with spring-period zooplankton surveys from 2000-2006. Both pollock and herring showed progressive migrations during the spring that were consistent with predation on inshore fishes including pink salmon fry.

#### **“Foraging behaviour of juvenile pink salmon (*Oncorhynchus gorbuscha*) and size-dependent predation risk”**

Willette, T. M. (2001). Foraging behaviour of juvenile pink salmon (*Oncorhynchus gorbuscha*) and size-dependent predation risk. *Fisheries Oceanography*, 10, 110-131.

- All fish groups examined in the PWS fed to some extent on juvenile salmon. Trout and gadids consumed the greatest numbers of juvenile salmon per day on average.

#### **“Acoustic monitoring of juvenile pink salmon food supply and predators in Prince William Sound, Alaska”**

Thorne, R. E., & Thomas, G. L. (2007, September). Acoustic monitoring of the juvenile pink salmon food supply and predators in Prince William Sound, Alaska. In *OCEANS 2007* (pp. 1-7). IEEE.

- Several hatcheries annually release hundreds of millions of juvenile pink salmon into the water of PWS. Previous research has documented two critical factors in the juvenile salmon survival 1) the availability of large-bodied calanoid copepods, and 2) the abundance of walleye pollock.
- When *Neocalanus* abundance is low, pollock become piscivorous and are the dominant pelagic predator of pink salmon fry.
- Most pink salmon fry rearing in PWS are consumed by predators during their initial 60 days of early marine residence.

Proposal #5. Support. Commercial fishing different gear types in specific areas of PWS to conserve both pelagic and nonpelagic rockfish during times of concern whether current harvest levels are sustainable is consistent with Article 8, Section 4. Interestingly the Department had the authority in regulation 5AAC 28.089 Guiding principles for groundfish fishery regulations before the BOF voted in 2008 to exempt PWS. In 2013 the entire regulation 5 AAC 28.089 was repealed.

Proposal #6. Support. Commercial fishing gear types that allow the implementation of Deepwater Release Mechanisms (DRM) should be codified in the PWS Rockfish Management Plan.

Proposal #14. Support. Sun events beyond the regulatory authority of the AK Board of Fisheries (BOF) may have caused a warming period in the North Pacific. The BOF can't do anything about that. The board can take actions to reduce the current strain on Alaska's coastal ecosystem out to 3 nautical miles offshore. Enforcing limits to gear types capable of coming into contact with the seafloor tough. All of PWS Inner District seafloor is critical habitat for the foods our membership gather annually. Every near shore returning chinook salmon, no matter how small, needs a chance to mate these days.

Proposal #16. Support. Rockfish bycatch on a trawler would most likely not benefit from DRMs onboard.

Proposal #27. Support. Department data has determined yelloweye rockfish harvest is unstable and closing the January -June season would reduce sport harvest enough to keep rockfish harvest at a stable level fine reduce Alaskan residents harvest along with nonresident anglers.

Proposal #29. Oppose. Passage of this Department proposal would delegate the authority of the BOF to allocate fishery resources under AS 16.05.251(a)(15). Regulating resident or non-resident sport fisherman as needed for the conservation, development and utilization of fishery resources over to the Department. AOC would rather the Department present a plan for reduction in yelloweye rockfish harvest in PWS among all users before the BOF.

Proposal #48. Support Strongly. This is a state subsistence fishery, AS 16.05.258, you have to be an Alaskan resident to participate. Whether you are a new resident wanting to participate in gathering your own fish harvest or an elder Alaskan who can't safely launch his own boat anymore a guide serves increases your safety and well as your changes to take home fish to eat.

Proposal #49 and #50. Oppose. Minimizing your risk of water travel and increasing your odds of going home with fish to eat need not be compromised on salmon stocks managed for abundance.

Proposal #51. Support. Reallocating salmon stocks in the Copper River is the prerogative of the board. More salmon for inriver folks to harvest during these historically low salmon returns on the Yukon is consistent with Article 8, Section 4 of the Alaska State Constitution. It is the preference among a bunch of beneficial users in the Interior and South Central to harvest some salmon.

Proposal #63. Oppose. Folks who choose to not live on the wildlife habitat and river drainages where they go to harvest their fish in state waters still want to get their winters supply of Copper River salmon home in early summer. The BOF allows these folks an opportunity to harvest salmon consistent with Art. 8, Sec. 3 Common use of the AK Const. There is no justification for reducing their traditional time of harvesting salmon in Personal Use fishery on the Copper River.

Proposal #64 and #65. Oppose.

Proposal #78. Support. AS 16.05.251(a)(9) says the BOF can regulate salmon egg releases. There is ample evidence that “overgrazing by hatchery released salmon” is more than likely one of the causes for declines in salmon weight in Alaska waters. The proposer asks for a 5 year evaluation. Let’s see if it makes a difference in returning salmon weights in PWS runs.





## Alaska Whitefish Trawlers Association

PO Box 991 | Kodiak, Alaska 99615  
Ph: (907) 654-9888 | <http://www.alaskawhitefishtrawlers.org>

November 26, 2024

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Anchorage, Alaska 99811-5526

*Submitted via online portal*

Re: Oppose Proposals 14, 15, 16, and 17 – Prince William Sound Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members:

Alaska Whitefish Trawlers Association (AWTA) opposes Proposals 14, 15, 16, and 17.

Alaska Whitefish Trawlers Association is a Kodiak-based trade association of independent family-owned fishing businesses operating in the Gulf of Alaska, Bering Sea, and West Coast groundfish fisheries. Our owners, captains and crew live in Kodiak and have a vested interest in the continuing vitality of the community. Trawl is the backbone of commercial fisheries in Kodiak, delivering approximately 60% of all Kodiak landings each year and allowing processing plants to remain open nearly year-round. Kodiak is arguably the most diverse fishing port in Alaska and consistently ranks within the top 10 ports in the nation for volume and value of fish landed.

Kodiak is not immune to the significant challenges currently facing the seafood industry, including high operating costs, trade barriers, and competition from land-based proteins. The Alaska Legislature formed the Alaska Seafood Task Force earlier this year to explore how the State can support the seafood industry, and a common theme from testifiers has been stability. Our coastal communities and fishing businesses need stability right now as they try to weather the storm and make it through these challenging times. AWTA members rely on the PWS pollock fishery and we ask the Board to support our operations and not take actions that needlessly hurt our fishery and community.

AWTA members rely on the Prince William Sound (PWS) pollock fishery as the first fishery of the year, which occurs as pollock aggregate in PWS in January. The PWS pollock fishery originally began in 1995 with all pollock delivered to Cordova; with changes in processor operations and ownership over time deliveries are now made primarily to Kodiak plants.

**Proposal 14** seeks to prohibit trawling in PWS unless trawl gear does not contact the bottom and there is zero chinook bycatch during the fishery. This proposal would shut down our fishery because it is not possible to completely eliminate bycatch, and in fact every fishery operating in Alaska has bycatch. The PWS pollock fishery is actively managed with strict bycatch limits, and ADFG closely monitors trawl activity so that if a limit is exceeded the fishery can be swiftly shut down. The fishery exceeded its chinook cap twice in the last 15 years, by 189 pounds in 2020 and by 297 pounds in 2021, which resulted in section closures in each of those years. PWS pollock trawl operators are not fishing their pelagic nets on the bottom. First, the trawl gear costs upwards of \$200,000 and fishermen do not have an incentive to risk damaging or losing their gear in PWS.

## AWTA Comments on PWS Pollock Fishery Proposals

November 26, 2024

Page 2 of 2

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Secondly, the seafloor in PWS is rocky and would rip up a pelagic net if the net contacted the bottom. Further, most of PWS has not been surveyed since the 1964 earthquake, and current charts include a statement that the depths on the charts may be inaccurate due to shifts in the seafloor as a result of the earthquake. Operators are not going to chance ripping up their net by allowing the net to get too close to the bottom. The Department opposes this proposal and we agree with staff comments.

**Proposal 15** seeks to change from an overall bycatch limit calculated as a percentage of the pollock GHJ to a static bycatch limit expressed in pounds. The Department opposes this proposal. AWTA agrees with staff comments and does not believe Proposal 15 would improve management of the fishery. Under current management the Department only allows 6-8 vessels to fish in PWS at once; vessels are required to notify the Department when they leave Kodiak and then again before they enter PWS. Vessels must report catch on a tow-by-tow basis, and chinook and rockfish are each managed under a separate limit. When a limit is reached then the fishery is shut down. Given rapidly changing ocean conditions it does not make sense to change to a static cap and limit the Department's ability to dynamically manage the fishery by EO.

**Proposal 16** seeks to close the PWS pollock fishery. AWTA strongly opposes this proposal because closing the fishery will harm our Kodiak fishing businesses, shore-based processors, and the community of Kodiak. The Department opposes this proposal and AWTA agrees with staff comments. Closing the fishery would result in a \$1,000,000 loss of annual revenue from directed pollock landings. Bycatch would be reduced – by about 12,000 pounds for rockfish and 2,400 pounds for king salmon - but note that the Department states there is no conservation concern in this fishery. If the pollock fishery is closed there are concerns that predation by pollock on juvenile pink salmon would increase (because there would be more pollock present in PWS). This unintended consequence would negatively impact salmon fisheries and hatchery operations in PWS.

**Proposal 17** seeks to require 100% Electronic Monitoring (EM) and 50% physical onboard observers on trawl pollock vessels. In regards to EM the BOF and Department currently lack authority to require EM on any fishing boat. There is authority to require onboard observers but it would be very costly. The Department opposes this proposal and states, “[establishing an onboard observer program] would result in considerable costs to the department and industry to implement.” The Department already closely manages the PWS pollock fishery and does not have conservation concerns. Our industry is already grappling with significantly increased operating costs and the benefits of this proposal do not justify the cost it will add to our businesses.

Thank you,



Patrick O'Donnell, Board President  
Alaska Whitefish Trawlers Association

November 20, 2024

Board of Fisheries  
Prince William Sound Finfish Meeting  
December 10 – 16, 2024  
Cordova, Alaska

**Proposal 78, 5 AAC 24.370 Prince William Sound Management and Salmon Enhancement Allocation Plan and,**

**Proposal 156, 5 AAC 33.364 Southeastern Alaska Area Enhanced Salmon Allocation Management Plan**

Dear Chair Carlson-Van Dort and Board Members:

We would like to express our opposition to Proposal 78 and Proposal 156. These are nearly identical proposals to Proposal 43 heard less than nine months ago at the Upper Cook Inlet (UCI) meeting in Anchorage, a proposal that failed on a 1:6 vote. The lack of new information or new evidence to support proposal 43's premise that hatchery produced pink and chum salmon cause deleterious effects on Bering Sea salmon stocks (i.e., Yukon and Kuskokwim), further underscores the wisdom of maintaining the Board's previous decision. The exhaustive record from the most recent UCI and Lower Cook Inlet (LCI) meetings remains relevant and should continue to guide your deliberations for your upcoming meetings. Research published after the UCI meeting by Sovmov et.al. (2024)<sup>1</sup> provides additional evidence that temperature and climate show a positive correlation among pink, sockeye, and chum biomass, rising and falling together. Research by Yasumiishi et.al. (2024)<sup>2</sup> in an empirical marine study finds a positive correlation with juvenile sockeye and juvenile pink salmon during their first year in the Eastern Bering Sea.

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<sup>1</sup> Sovmov, A., et.al. 2024 Comparison of Juvenile Pacific Salmon abundance, distribution, and body condition between Western and Eastern Bering Sea using spatiotemporal models. Fisheries Research Journal

<sup>2</sup> Yasumiishi, E. 2024 Biological and environmental covariates of juvenile sockeye salmon distribution and abundance in the southeastern Bering Sea, 2002–2018. Ecology and Evolution

These above papers will be summarized and added to an updated Critique of Synthesis Papers, originally submitted as PC 4 at the UCI meeting.<sup>3</sup>

When considering these proposals, it is important to acknowledge the limitations of the Board's authority as framed by **AS 16.10.440(b)**<sup>4</sup> which the proposer points out in his opening statements<sup>5</sup>. Hatchery egg permitting authority resides with the commissioner of Fish and Game, a fact emphasized by numerous stakeholders over the past two decades, including the Ashburn & Mason opinion<sup>6</sup>, fishermen groups, PNP operators and at least one legislative attorney present at the original drafting of this administrative code. It appears the author of proposals 78 & 156 struggles to find a relevant regulation to cite for his proposal, settling on **5 AAC 24.370** for Prince William Sound (PWS)<sup>7</sup>, and **5 AAC 33.364** for Southeast<sup>8</sup>, regulations that do not include or even pertain to Valdez Fishery Development Association (VFDA) referenced in proposal 78. Furthermore, these regulations lack any reference to permitted salmon egg capacity. The cited regulations delineate the allocation of enhanced salmon among fishing gear types in Special Harvest (SHA) and Terminal Harvest Areas (THA). These enhanced salmon regulations codify 'fair' harvest proportionality that was vetted by Board of Fish directed committee work and endorsed by PNP boards of directors prior to Board of Fish adoption in the 1990s.

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<sup>3</sup> PC 4 Upper Cook Inlet meeting, Anchorage Feb 23 – March 5, 2024. Critique of Synthesis Papers, pg. 13 – pg. 36.

<sup>4</sup> Alaska Statute 16.10.440(b) The board of fisheries may not adopt any regulations or take any action regarding the issuance or denial of any permits required in AS 16.10.400.

<sup>5</sup> Proposals 78 & 156 paragraph five

<sup>6</sup> Ashburn & Mason letter to the Board June 9, 2018

<sup>7</sup> Private Nonprofit Salmon Hatcheries, Chapter 24 PWS Management and Salmon Allocation Plan Article 3 Salmon Fishery

<sup>8</sup> Private Nonprofit Salmon Hatcheries, Chapter 33 SE Alaska area, Article 3 Salmon Fishery

The Board of Fish was fully immersed in regulation **5 AAC 24.370** encompassing Prince William Sound Aquaculture Corporation (PWSAC) enhanced salmon, a multiple years-long process, debated and agreed upon by gear groups, the PWSAC board of directors and then adopted by the Board of Fish as the Prince William Sound Management and Salmon Enhancement Allocation Plan, which begins:

“5 AAC 24.370 (a) The purpose of the management and allocation plan contained in this section is to provide a fair and reasonable allocation of the harvest of enhanced salmon among the drift gillnet, seine, and set gillnet commercial fisheries, and to reduce conflicts between these user groups. It is the intent of the Board of Fisheries (board) to allocate enhanced salmon stocks in the Prince William Sound Area to maintain the long-term historic balance between competing commercial users that has existed since statehood, while acknowledging developments in the fisheries that have occurred since this plan went into effect in 1991.”

**5 AAC 33.364** for Southeast went through a similar process with the Board of Fish in the early 1990s; the Board adopted **Finding #94-02-FB** consisting of eight pages in the Private Nonprofit Salmon Hatcheries regulation book. The first of the fourteen findings of the task force was “1 The primary goal of the Southeast Alaska salmon enhancement program is to provide additional fishing opportunities and revenue to traditional common property fisheries.” The remaining thirteen findings and rationales do not refer to permitted eggs, although when attempting to rectify allocation imbalances one of the tools in Finding 13. (2) is to add “new enhanced salmon production”.

To reiterate, the allocation plans for PWSAC and Southeast are *regulations* adopted by the Board of Fish, the permitting of eggs resides within the *administrative code* under the commissioner of Fish and Game.

Proposals 78 & 156 incorrectly state there are no other venues to address hatchery issues. However, it is important to recognize that there are numerous platforms open to public involvement beyond the Board's proceedings, which by anyone's standard has been voluminous. However, these additional public forums include Regional Planning Team meetings in every region of Alaska, updates to the Salmon Management Plan which entail several years of public meetings, the Alaska Hatchery-Wild Interaction research meetings and website<sup>9</sup>, all PNP board meetings, and the Board of Fish's own Hatchery Committee<sup>10</sup>, all of which is to emphasize the commitment to a broader public dialogue on this topic. It must be pointed out that other than the Board of Fish, the author of the proposal has not advantaged himself of these opportunities.

Proposals 78 & 156 in paragraph 6 of each *provide* the answer to the board for which he *asks*:

“For several years, different groups have been submitting proposals for hatchery egg take reduction. All those proposals **have been refused on the basis of lack of conclusive evidence** (*emphasis added*) that there is a correlative relationship to detrimental impacts of hatchery production in wild stocks through competition for forage food and straying.”

The evidence which the author states in his words is “*correlative*”, and not cause and effect or empirical. At the March 2024 UCI meeting extensive scientific evidence published

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<sup>9</sup> [https://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesResearch.current\\_research](https://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesResearch.current_research)

<sup>10</sup> <https://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.meetinginfo&date=10-14-2023&meeting=anchorage>

by NOAA scientists, International Year of the Salmon Japanese, Russian, Korean, and North American scientists, ADF&G's own Salmon Ocean Ecology Program scientists, and independent researchers was presented. These primarily empirical studies pointed to why Yukon River chum experienced declining survival in ocean years 2016 to 2019. These extreme warm ocean years in the Bering Sea and North Pacific Ocean affected marine survival as demonstrated by poor Yukon River adult returns in 2020 and 2021. As the board well knows, this is only a tiny sample of what was presented at the UCI meeting in March 2024.

The claims made by proposals 78 & 156 regarding the integrity and rigor of the scientific literature presented to the Board are misguided. Peer-reviewed research has been shared, presenting a dual view—supporting and refuting the proposer's position. However, what is critical is that our attention must remain on empirical findings that establish clear links between cause and effect rather than speculative correlations which can and have been misleading.

To provide some context on this issue, at the UCI meeting the proposer of 78 and 156 testified fifteen minutes to his proposal 43,<sup>11</sup> exclaiming his pique for the loss of his chum salmon roe markets on the Yukon River thirty years ago. In his final minutes he got around to the recent speculative research papers. These synthesis papers were addressed in two

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<sup>11</sup>UCI Board of Fish meeting testimony February 26, 2024, 11:01 a.m. to 11:25 a.m.  
<https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/swf/2023-2024/uci-2/index.html?mediaBasePath=/Meeting%2002-26-24%20%282%29%20%28Feb-26-24%204-25-18%20PM%29>

documents: PC 4<sup>12</sup> and PC 174<sup>13</sup> at the UCI meeting and will be re-submitted for the Cordova and Ketchikan meetings.

### **What a 25% reduction in chum and pink salmon permitted egg production would mean**

The financial foundation of the PNP hatchery system is built on pink and chum production, primarily chum salmon in Southeast hatcheries and pinks and chum in the South Central and Kodiak regions. Pinks and chum have short-term hatchery freshwater residence and are relatively easy to raise compared to coho, chinook, and sockeye, and spend most of their lifecycle in the ocean. Like most salmon, ninety-six percent of the fry and rearing fish are consumed by ocean predators, the majority of the mortality within the first forty-five days of ocean life<sup>14</sup>. The one to four percent that survive to the adult stage provide for important local fisheries, cost recovery harvest revenue, and broodstock to perpetuate the program.

Income for the PNP programs flow from two major sources, a 2% or 3% enhancement tax (SET tax) that fishermen pay on wild and enhanced salmon, and the sale of salmon harvested in the terminal areas adjacent to the hatchery facility. Approximately twenty percent of the revenue derives from the SET tax, while most of the revenue (~75%) is from the sale of pinks and chum. Smaller revenue streams from the other three salmon species,

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<sup>12</sup> Critique of Synthesis Papers

<https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/uci/pc1-50.pdf>

<sup>13</sup>High Ocean Biomass <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/uci/pc151-200.pdf>

<sup>14</sup> Parker, R.R. 1968. Marine mortality schedules of pink salmon of the Bella Coola River, Central British Columbia



grants, and Pacific Salmon Treaty projects make up the remainder. Each organization is unique, so these figures and proportions are approximations.

Enhancement programs that benefit sport charter, personal use, subsistence, and local communities usually consist of coho, chinook, or sockeye, and are paid for by revenue derived from chum and pink salmon cost recovery. Capital improvements and loan repayments to the State of Alaska are also primarily from the sale of pink and chum salmon to processors.

Cutting production of pink and chum salmon would significantly reduce these revenue streams making it difficult, if not impossible, to meet State of Alaska Fisheries Enhancement Revolving Loan Program repayment obligations, particularly in years when pink and chum prices bottom out. In 2023 and 2024, prices were so low that some hatchery programs failed to make corporate cost recovery goals. Reduction of revenue would also necessitate reducing chinook, sockeye and coho programs due to their significantly lower return on investment, due to their high dependence of funding from pink and chum cost recovery revenues. In addition to diminishing the ability to repay State of Alaska loans, PNPs in Southeast may have difficulty meeting their production obligations to fishermen; programs where capital improvements were covered by Pacific Salmon Treaty monies, and finally, to be realistic some PNPs will likely decline into bankruptcy.

Economically, a 25% reduction would be devastating to communities from Ketchikan to Cordova to Kodiak. Coastal communities are dependent on local fisheries and fish

processing plants for fisheries related tax revenues, jobs, and local support businesses. The speculative benefits that the proposer hopes for is a gamble for an outcome that empirical science suggests will not bear out. To that point, PNP operators submitted a paper on High Ocean Biomass<sup>15</sup> PC 174 at the UCI meeting that states that all salmon are estimated to make up 4-7% of the nekton biomass (all swimming animals and fishes). All pink salmon which the vast majority if wild would thus compose 1-2% of this biomass, and hatchery pink salmon < 0.5%., a proportion that has not been shown to affect local or broad trophic conditions in the Bering Sea or North Pacific Ocean.

### **No new hatchery permitted pink and chum egg production, 2019**

The perception that Alaska hatchery chum and pink production continues to increase is simply not true. The Fairbanks AC raised this issue at the UCI meeting and therefore needs explanation and clarification. The PNP hatchery operators met with the commissioner of the Department of Fish and Game in 2019 to discuss limiting the number of pink and chum salmon eggs to existing permitted capacities approved by the department. The operators agreed at the meeting in 2019 that no new increases to hatchery operating permits for pink and/or chum salmon eggs would be applied for or granted by the department. The commissioner was clear at that time that no additional requests for increased pink and/or chum permitted capacity would be approved until further research on the effects of hatchery production were concluded. Since 2019, actual chum eggs taken at hatcheries in Southeast have remained at, or below permitted capacity approved by the commissioner. At times broodstock shortages can lead to

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<sup>15</sup> Wertheimer et.al. 2018 High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate, PC174

missing the egg goal. Between 2019 and 2024 brood stock shortages prevented operators from achieving their permitted capacity, explaining the appearance of an increase after the agreement with the commissioner. Most importantly, there has been no new pink or chum egg permitted capacity requested or approved for hatchery production since the agreement in 2019.<sup>16</sup> PNP hatcheries may not exceed their permitted capacity (see graph below).

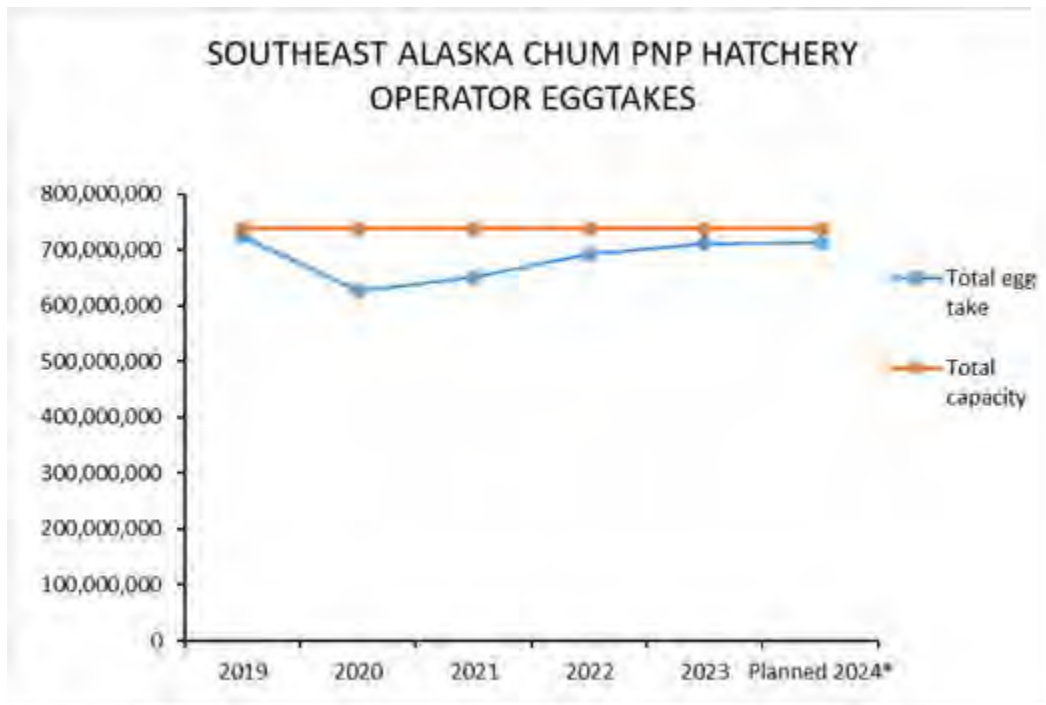


Figure 1. Southeast Alaska all hatchery facilities aggregated permitted chum egg capacity from 2019 to 2024, except Annette Island Indian Reservation (Tamgas Creek Hatchery). Note stability in permitted capacity (dotted orange line at top) since 2019 and egg take numbers (dotted blue line) which are consistently below the maximum permit number.

<sup>16</sup> Alaska salmon fisheries enhancement annual report, 2023.  
<https://www.adfg.alaska.gov/FedAidPDFs/RIR.5J.2024.05.pdf>

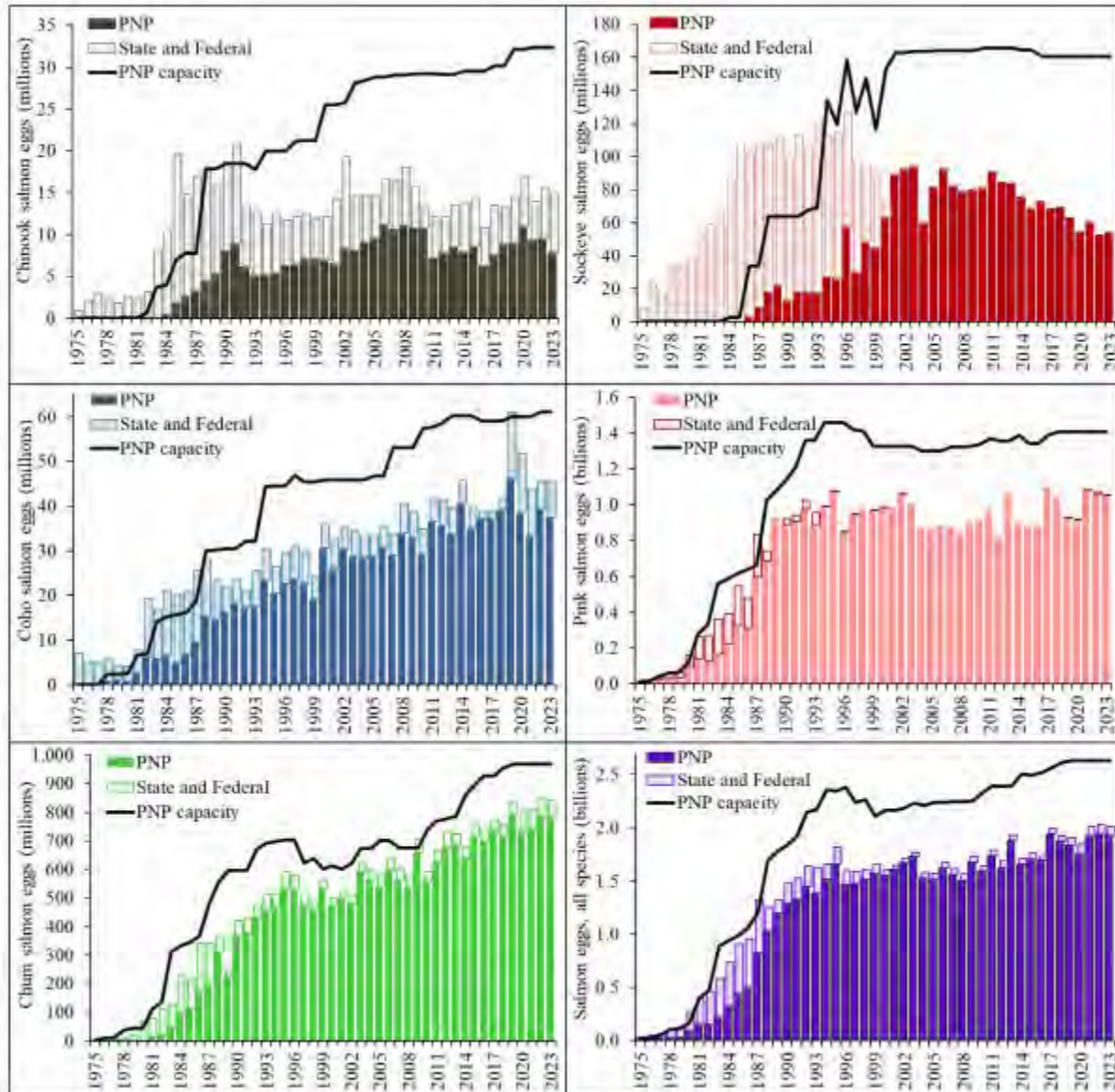


Figure 2. Graphic from Alaska salmon fisheries enhancement annual report, 2023 (pg. 24 figure 8). Bars denote hatchery salmon eggs collected by PNP, state, and federal hatcheries, and PNP hatchery permitted capacity (black line) by species and total, 1975–2023. Difference between bars and capacities is due to several factors: egg survival is less than 100% and IHNV incidence requires destroying sockeye eggs (primary causes), and broodstock availability,

Thank you for your consideration of our concerns regarding proposals 78 and 156. We believe it is essential to uphold the scientific rigor and integrity that underpin responsible management of our salmon resources. We look forward to speaking further with the Board during the upcoming meetings.

Sincerely

### **Alaska's PNP Salmon Hatchery Operators**

Kodiak Regional Aquaculture Association  
Tina Fairbanks, Executive Director

Valdez Fisheries Development Association  
Mike Wells, Executive Director

Cook Inlet Aquaculture Association  
Dean Day, Executive Director

Northern Southeast Regional Aquaculture Association  
Scott Wagner, General Manager

Prince William Sound Aquaculture Co.  
Geoff Clark, General Manager/CEO

Southern Southeast Regional Aquaculture Association  
Susan Doherty, General Manager

Douglas Island Pink & Chum  
Katie Harms, Executive Director

November 20, 2024

Board of Fisheries  
 Prince William Sound Finfish Meeting  
 December 10 – 16, 2024 Cordova, Alaska  
 January 28 – February 9, 2025 Ketchikan, Alaska

## **Update to PNP Critique of Synthesis Journal Papers regarding Proposals 78 & 156**

Dear Chair Carlson-Van Dort and Board Members:

Alaska's PNP operators submitted PC 4 pertaining to proposal 43 at the UCI in February 2024 (attached to this update). Proposals 78 and 156 are nearly identical to Proposal 43, and therefore PC 4 remains timely and relevant. We submit additional research published since the conclusion of the UCI meeting, these empirical studies bolster and add to our position. The three papers portray a complex mosaic of ecological factors, some of which show positive relationships between pink/chum salmon and sockeye in the Eastern Bering Sea. What follows is a summary of three recent journal papers.

**Yasumiishi, E., et.al.** *Biological and environmental covariates of juvenile sockeye salmon distribution and abundance in the southeastern Bering Sea, 2002–2018*<sup>1</sup>

This study was funded by the North Pacific Research Board (NPRB) and NOAA Arctic-Yukon-Kuskokwim Sustainable Salmon grants and focused on the eastern Bering Sea to understand ecological influences on juvenile sockeye. The study had four hypotheses: 1. Nonlinear effect of temperature on juvenile sockeye, 2. Positive effects of *Calanus* copepods on juvenile sockeye, 3. Positive effects of age-0 pollock on

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<sup>1</sup> Yasumiishi E., Cunningham C., Farley E., Eisner L., Strasburger W., Dimond J., & Irvin P. Ecology and Evolution, March 2024.

juvenile sockeye, and 4. Negative effects of juvenile pink salmon on juvenile sockeye.

Not surprisingly, sea temperature was found to influence juvenile sockeye biomass (hypothesis 1), but *Calanus* copepod abundance did not explain variation in annual biomass and distribution of juvenile sockeye (hypothesis 2).

Most important to this discussion is the study's Hypothesis 4 finding quoted here from the paper:

“Contrary to our hypothesis, a positive rather than negative association occurred between the annual biomass of juvenile sockeye salmon and juvenile pink salmon.”

In other words, Yasumiishi et.al. found when environmental conditions favored pink salmon they favored sockeye juveniles, rather than pink salmon abundance being detrimental to sockeye. During the period studied from 2002 to 2018 high abundance of juvenile pink salmon in the eastern Bering Sea did not negatively affect juvenile sockeye in their first ocean year. Furthermore, the paper emphasizes the lack of competition:

“Similarly, a positive effect of juvenile pink salmon on the spatio- temporally varying densities of juvenile sockeye salmon suggests ***no significant competition for food*** (emphasis added) or niche partitioning between these species. Intense interspecific competition can restrict or displace a niche and lead to habitat partitioning (Cox, 1968).”

As the oceans warm, empirical studies of this nature are critical to our understanding of rearing salmon distribution and abundance. It is well known that juvenile salmon are

moving further north to feed as the winter ice diminishes, melts earlier, and adult salmon are pushing north due to newly available spawning habitat.

**Somov A. et.al.**, *Comparison of Juvenile Pacific Salmon abundance, distribution, and body condition between Western and Eastern Bering Sea using spatiotemporal modes*<sup>2</sup>

Unfortunately, climate change affects regions differently; in the short term at least some are winners and some salmon stocks do less well as presented in the Somov et.al., paper. The eastern Bering Sea (Alaska) has shown reduced productivity while the western Bering Sea (Russia) has experienced increased productivity especially with pinks and chum salmon at the juvenile and adult life stages. This empirical study used marine surveys across the Bering Sea. Research focused on pink, chum, and sockeye salmon using marine survey data from 2002 to 2022. There were clear distinctions between western Bering Sea (WBS) and eastern Bering Sea (EBS) such that the WBS juvenile salmon were larger in size with higher condition factors (health) compared to EBS in even years. The EBS experienced greater temperature variation resulting in declines in abundance and body condition in warm years. These findings line up with Oke K. et.al.<sup>3</sup>, and Howard K. et.al.<sup>4</sup> which demonstrated that the severe warm years 2016 to 2019 resulted in emaciated juveniles and sub adults when sampled in the Bering and North Pacific during those years. At the same time on the other side of the

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<sup>2</sup> Somov A., Farley E., Yasumiishi E., and McPhee M. Comparison of Juvenile Pacific Salmon abundance, distribution, and body condition between Western and Eastern Bering Sea using spatiotemporal modes. Fisheries Research 2024

<sup>3</sup> Oke K., et.al. 2020 Recent declines in salmon body size impact ecosystems and fisheries

<sup>4</sup> Howard K., Alaska Department of Fish and Game, October 2023 *Overview of Scientific Understanding of Salmon Competition at Sea and an Update on Research*. Presentation to Board of Fish



Bearing, Russia has experienced inordinate pink salmon production and marine survival.<sup>5</sup>

Somov et.al., findings show concurrence with Yasumiishi et.al. Somov et.al. in their conclusion section (second paragraph) states:

“The first marine year for salmon (pink, chum, and sockeye) in the WBS and EBS differ in several ways. First, pink salmon dominate the WBS, accounting on average for 93% of abundance, while in the EBS, sockeye salmon (48% of the juveniles) is a dominant species. The relative and total juvenile salmon abundance in the WBS and EBS are approximately equal, with the WBS abundance twice as high as in the EBS in even-numbered years and five times lower in odd-numbered years. In the WBS, all species considered were characterized by a two-year cycle with higher abundance in even-numbered years due to the intensifying influence of (Russian) pink salmon. In the EBS, where pink salmon is not the dominant species, juvenile chum and sockeye salmon did not show such biennial fluctuations.”

**Fedder M., et.al.** *Body size and early marine conditions drive changes in Chinook salmon productivity across northern latitude ecosystems*<sup>6</sup>

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<sup>5</sup> North Pacific Anadromous Fish Commission report

<sup>6</sup> Fedder, M., Shaftel R., Schoen E., Cunningham C., Connors B., Staton B., Finster A., Liller Z., Biela V., Howard K. 2024. Global Change Biology

Yukon River chinook like many chinook stocks in Alaska have declined in productivity, with much of the research directed toward marine studies and ocean survival. Feddern et.al. attempt to investigate both freshwater and ocean life to assign which drivers may have the greater importance. Decreased productivity has been linked with increasing ocean and freshwater temperatures, streamflow, body size, and competition for prey. Predation is not considered in this work.

Feddern et.al. looked at 26 chinook populations in the Yukon-Kuskokwim region, estimating productivity effects of marine and freshwater environmental indicators, body size, and competition. In this paper productivity is defined by return per spawner. Quoting from the abstract Feddern et.al. note:

“Across most populations, productivity declined with smaller spawner body size and sea surface temperatures that were colder in the winter and warmer in the summer during the first year at sea. Decreased productivity was also associated with above average fall maximum daily streamflow, increased sea ice cover prior to juvenile outmigration, and abundance of marine competitors, but the strength of these effects varied among populations” and they conclude, “These results demonstrate for the first time that well- documented declines in body size of YK Chinook salmon were associated with declining population productivity, while taking climate into account.”

Delving into the Yukon-Kuskokwim freshwater component of chinook productivity decline the authors write:

“Evidence of heat stress during freshwater spawning migrations and reduced productivity in years of warm freshwater migrations have emerged as important stressors in recent years for high latitude Pacific salmon populations. River temperatures that exceed 18°C induce heat stress in spawning Yukon River Chinook salmon that is more prevalent in warm years. Howard and von Biela (2023)<sup>7</sup> estimated *that 45% of the variability in production of juvenile Chinook salmon per adult spawner can be attributed to conditions that adults* (emphasis added) experienced during the spawning migration.”

Fedder's, conclusion that 45% of chinook productivity variation is tethered to a few months of the spawning migration is profound. It is well documented that interior Alaska is warming at two to three times the rate of the Lower 48<sup>8</sup> and therefore it does not seem unexpected that freshwater habitats in Alaska are breaching the lethal threshold for chinook salmon. Even temperatures below but near the lethal 18°C have deleterious effects.

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<sup>7</sup> Howard, K. G., & von Biela, V. (2023). Adult spawners: A critical period for subarctic Chinook salmon in a changing climate. *Global Change Biology*, 29(7), 1759–1773. <https://doi.org/10.1111/gcb.16610>

<sup>8</sup> Alaska Salmon Research Task Force Report NOAA 2024

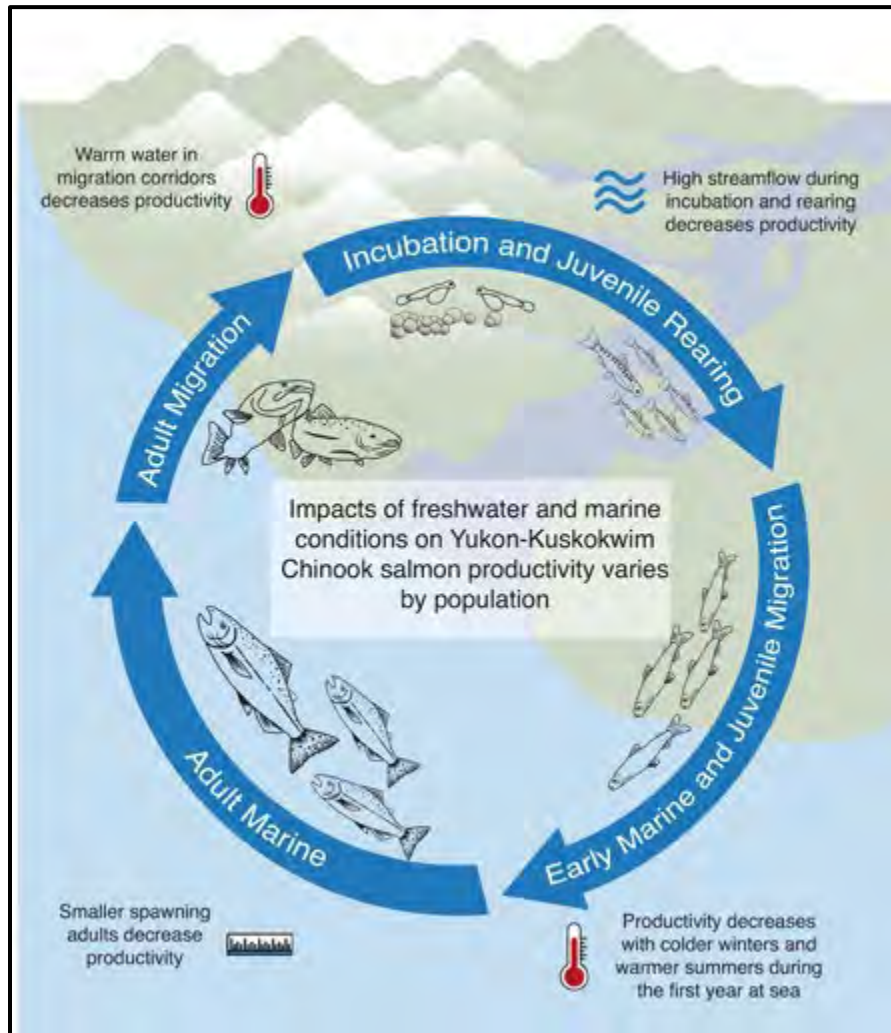


Figure 7. from **Feddern et.al.** 2024 journal article: *Body size and early marine conditions drive changes in Chinook salmon productivity across northern latitude ecosystems*

The three journal articles presented here are to demonstrate good faith response to proposals 78 and 156 which lack a factual basis and make unsupported statements. The PNP operators have provided several documents with numerous empirical studies, including the above addendum, High Ocean Biomass of Salmon and Trends in Alaska

Salmon in a Changing Climate, and PC 4 Critique of Synthesis Papers from the UCI meeting, among other documents.

This addendum is a small piece of the Critiques of Synthesis (attached). However, all the documents referenced herein are to be considered in aggregate. Our intention is to highlight the newest information upfront, rather than update the paper with this addendum buried within.

Alaska's hatchery program was developed using empirical and applied science. ADF&G and the PNPs continue to rely on the fundamental principles of science to improve hatchery programs and to understand any significant impacts. We look forward to working with you at the upcoming Cordova and Ketchikan meetings.

Sincerely,

**Alaska's PNP Salmon Hatchery Operators**

Kodiak Regional Aquaculture Association  
Tina Fairbanks, Executive Director

Valdez Fisheries Development Association  
Mike Wells, Executive Director

Cook Inlet Aquaculture Association  
Dean Day, Executive Director

Northern Southeast Regional Aquaculture Association  
Scott Wagner, General Manager

Prince William Sound Aquaculture Corporation  
Geoff Clark, General Manager/CEO

Southern Southeast Regional Aquaculture Association  
Susan Doherty, General Manager

Douglas Island Pink & Chum  
Katie Harms, Executive Director

Addendum PC 4 Upper Cook Inlet Meeting

**To: Alaska Board of Fisheries**

February 8, 2024

UCI Meeting February 23 – March 6, 2024

From: PNP Alaska Hatchery Group

**Re: Proposal 43 5 AAC 40.820 Basic Management Plans & Response to Synthesis Research**

**Dear Chair Wood and Board Members:**

At the Alaska Hatchery committee meeting October 14, 2023, RC 002 and RC 003 Ruggerone and McMillan synthesis papers were submitted to the Board, but there was little chance for discussion and context. We appreciate the opportunity to comment here. These are lengthy synthesis papers and therefore they deserve a proper substantive response. Nonetheless, we intend to maintain concision and clarity. In this paper we will present informative studies/research on the topics of pink salmon abundance, salmon enhancement, and mechanisms for salmon declines regionally while recognizing there are also significant increases in salmon productivity in other regions of the North Pacific Ocean.

## **I. Introduction**

The two research papers for consideration are *From Diatoms to Killer Whales; impacts of pink salmon on North Pacific ecosystems*, Ruggerone et.al., and *Global Synthesis of peer-reviewed research on the effects of hatchery salmonids on wild salmonids*, McMillan et.al. These papers are dense with historical data and hypothesize negative correlations that suggest pink salmon impacts on other species, and specifically hatchery produced salmon impacts on wild salmonids, mammals, avians, and other life forms. However, they do not demonstrate a mechanistic linkage. We will show contrary research that reveals mechanistic linkages for increases in Alaska salmon productivity (both wild and enhanced) ushered in by the post 1977 regime shift (Pacific Decadal Oscillation or PDO), as well as other research that demonstrates small effects of ocean rearing juvenile salmon to regional zooplankton densities.

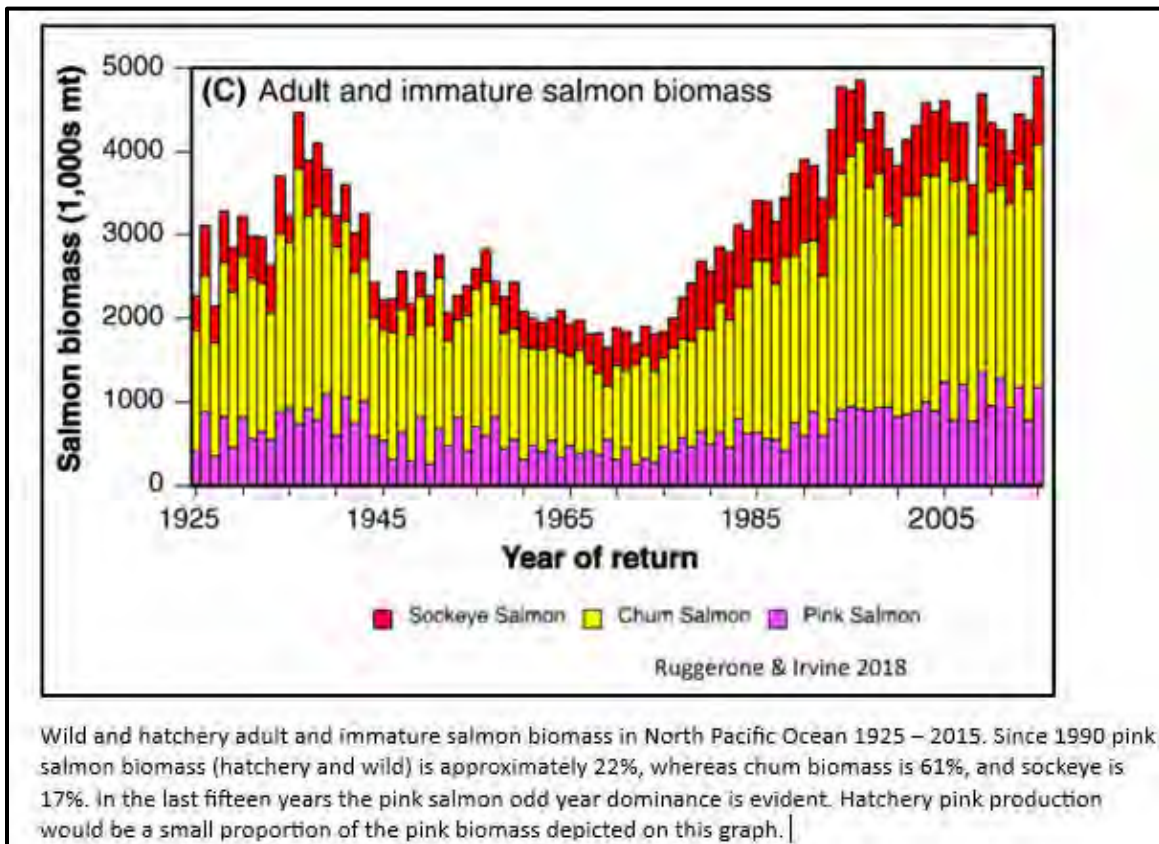
The debate about ocean carrying capacity has been ongoing in Alaska since the inception of the Ocean Ranching program in the mid-1970s. We do not contend that hatcheries have no effects. There are potentially negative ones, relative reproductive success (RRS) for example. However, there are benefits such as Pacific Salmon Treaty offsets and more king salmon for sport fisheries as well as reducing harvest impacts on natural stocks by all user groups. The best counterargument to the Ruggerone and McMillan papers is the Wertheimer et.al. document presented to the board of fisheries in 2018.<sup>1</sup> We will separately resubmit and update: *High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate* with an on-time public comment. However, the most salient points that challenge the Ruggerone and McMillan papers will be presented in this document, including pertinent references to the Wertheimer et.al. paper. Prior to discussing research, we feel it is critical to establish baseline information and nomenclature to lend context to the discussion of Alaska hatchery production of pink and chum salmon which is often missing in scientific journals and opinion pieces.

### **Abundance vs Biomass**

Definitions are necessary, to sort out the “apples versus the oranges” so we can keep the differences straight. There is understandable confusion with the terms abundance or numbers of salmon in the ocean versus biomass of salmon in the ocean (see graph below & graph page 3). This is particularly true when ascertaining which is the dominant driver or drivers of top-down effects. Pink salmon represent the greatest number or abundance of salmonids in the ocean in any given year, but not in biomass. Pink salmon have the smallest body size (two to four pounds) and migrate to the ocean in one year and return to their natal stream the following year, whereas chum (five to fourteen pounds) and sockeye (four to eight pounds) are far larger and spend two to four years in the ocean prior to returning to their natal stream.

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<sup>1</sup> Wertheimer & Heard 2018. High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate.



Therefore, pink salmon peak in abundance in the spring as fry. However, as biomass chum and sockeye salmon surpass pink biomass in any single year. Mortality is a significant factor in the first thirty to forty-five days of ocean life for pink and chum when mortality on average is between 50% to 90%.<sup>2</sup>

### Wild Pink vs Hatchery Pinks

The vast majority of pink salmon in the North Pacific and Bering Sea are from wild populations, estimated at approximately 25 billion fry annually throughout the Pacific Rim for all salmonids. An additional 5 billion fry are hatchery pink and chum fry from Russia, Japan, and Alaska. The hatchery proportion in terms of abundance of **all pinks is about 15%.**<sup>3</sup> **The biomass of hatchery pinks** is an even smaller proportion, perhaps **less than 5%** (refer to the biomass graph above). These hatchery proportions, whether in abundance or biomass, significantly differ from

<sup>2</sup> Parker, R.R. 1968. Marine mortality schedules of pink salmon of the Bella Coola River, Central British Columbia.

<sup>3</sup> Wertheimer & Heard 2018. High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate.



depictions elsewhere. Aggregate samples for abundance of juvenile pinks from the 2022 International Year of the Salmon research vessels align with the proportions above, 8.2% for Alaska hatchery pink salmon (although data is hampered by small sample size N=58). Chum salmon sample size was more robust (N=536), showing a hatchery portion of 15.3% for Pacific Rim countries while Alaska hatchery percentage is 5.4%, Japan 4.7%, Canada 0.6% and Russia 0.6%.<sup>4</sup>

Based on data from the Ruggerone paper here is the actual data that gets misquoted which we delineated in the High Ocean Biomass paper:

Approximately 39% of all North Pacific pink salmon, 22% of chum salmon, and 69% of sockeye salmon are produced in Alaska (combining wild and hatchery) production while most of the remaining quantities are produced by Japan and Russia. Approximately 60% of chum salmon, 15% of pink salmon, and 4% of sockeye salmon during 1990–2015 were of hatchery origin (all countries). In particular, Alaska generated 68% and 95% of hatchery pink salmon and sockeye salmon, respectively, while Japan produced 75% of hatchery chum salmon. Large areas of Alaska (PWS and Southeast Alaska), Russia (Sakhalin and Kuril islands), Japan, and South Korea possess salmon abundance that is predominantly from hatchery production. During 1990–2015, hatchery salmon (Japan, Korea, Russia, and Alaska) constituted approximately 40% of the total biomass of adult and immature salmon in the ocean.

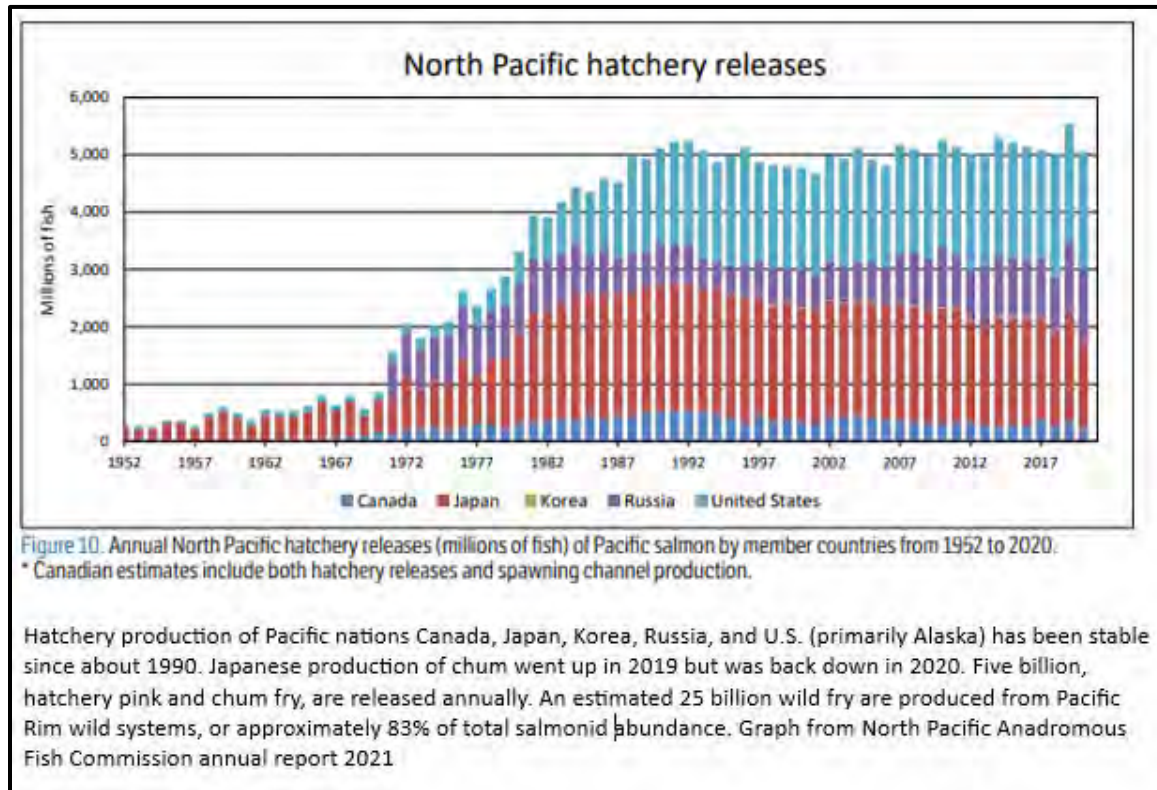
The misquote arises from the 40% value. It is correct to say that “of the total wild and hatchery adult and immature salmon biomass in the North Pacific, 40% is hatchery origin”. However, it is **incorrect** to state that 40% of pink, or pink and chum **are Alaska's hatchery-originated** salmon. Alaska’s hatchery component of that 40% is closer to 20%, with Japan and Russia contributing the remainder. Specifically, Japan produces 70% of the hatchery chum, while Alaska almost equals it with pink salmon hatchery production at 68% of North Pacific pink releases. These proportions seem large but to reiterate they are percentages of just the hatchery component which is about 15% of the total abundance of wild and hatchery salmonids.

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<sup>4</sup> Unpublished data from IYS. Source NOAA fisheries and ADF&G 2024.

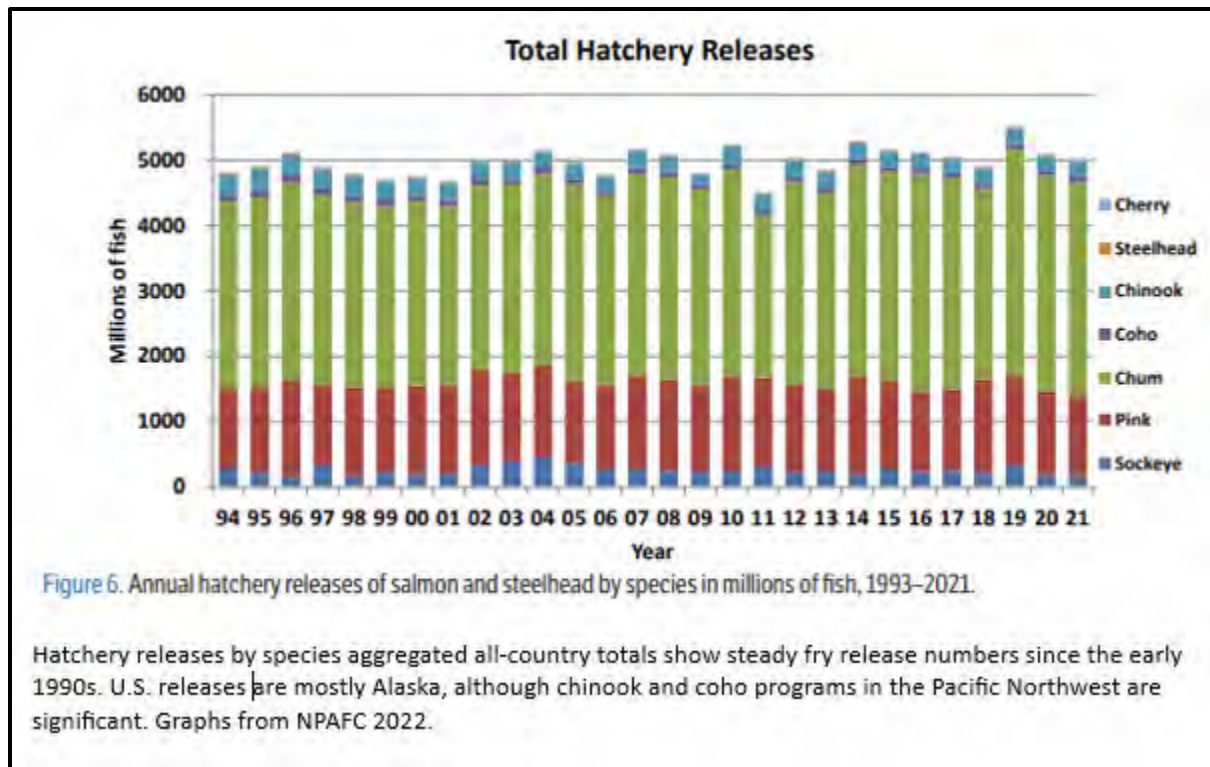
### Hatchery Production by Country of Origin

Of the five billion hatchery salmon released into the Pacific each year, Russia (pink & chum) and Japan (chum) release about three billion salmon fry while Alaska releases approximately two billion fry (pink & chum). The annual assessment by the North Pacific Anadromous Fish Commission (NPAFC) shows that production has been nearly constant since 1990.



According to the North Pacific Anadromous Fish Commission, hatchery production varies by species, as illustrated in the figure below. Sockeye hatchery production is primarily concentrated in PWS and Canada, while the greatest production of chum salmon is in Japan (two billion) and Southeast Alaska. The highest level of pink salmon production is found in PWS and Russia.<sup>5</sup>

<sup>5</sup> <https://www.npafc.org/>



## II. Review/Discussion

**Ruggerone et.al.** *From Diatoms to Killer Whales; impacts of pink salmon on North Pacific ecosystems*, Ruggerone et.al.<sup>6</sup>

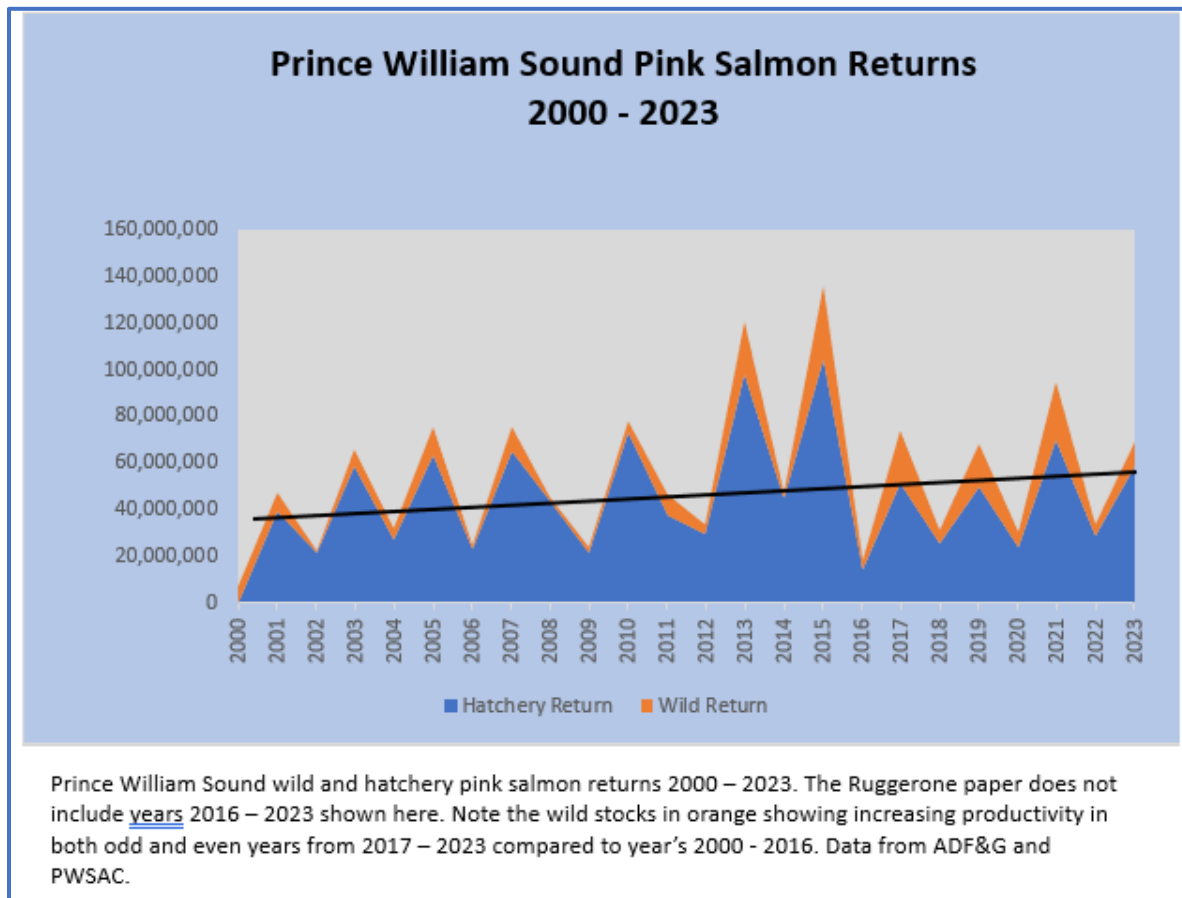
The scientific method relies on systematic, testable, repeatable methodology, and common data sets, especially when referring to historical data, for two reasons.<sup>7</sup> First, the data set can be tested and repeated as in the original research. Second, the data set can be added to, replacing forecasted data (e.g., 2018 to 2023) with actual measured values. At the time of this writing, we were unable to obtain the data set Ruggerone cited to repeat the analysis -- a fundamental aspect of the scientific method. Furthermore, the biomass of immature and adult salmon cited in the abstract and picked up by casual observers "...hatchery production (~40% of the total adult and immature salmon biomass)" does not align with NPAFC data used in the paper cited previously. From 1990 to 2015, pink salmon's immature and mature biomass (hatchery and wild) was around 800,000 metric tons, or 22% of total biomass. The total abundance of wild

<sup>6</sup> Ruggerone et.al. 2023. From diatoms to killer whales: impacts of pink salmon on North Pacific ecosystems

<sup>7</sup> Lackey R., 2020. Darwin Was Right: A Scientist Needs a Heart of Stone

pink salmon fry in the North Pacific is proportionally 85%, with hatchery pink salmon making up the remaining 15%.<sup>8</sup> Therefore the biomass of hatchery pinks is some fraction of the 22% pink salmon immature and mature biomass, certainly not 40%. Unfortunately, this fact seems to be misrepresented, or ignored when the original study is discussed in the press and public forums.

Regardless, major data sets, such as the one presented by Ruggerone, provide valuable insights. The paper does not argue a negative causal relationship between hatchery salmonids and wild salmonids, but rather synthesizes existing data sets to identify patterns and processes that may reveal how hatchery salmonids can potentially affect wild salmonids. To counter this notion, let's consider the actual data for Prince William Sound pink salmon. If we add Ruggerone's study to the five intervening years, wild pink salmon show an increasing productivity trend.



The authors acknowledge that the studies included in their synthesis did not necessarily imply causation, and therefore their work is speculative, as is true of similar past papers. Events may

<sup>8</sup> High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate. Wertheimer & Heard

occur in tandem, but it does not necessarily mean that one directly causes the other. In scientific studies or data analysis, it is vital to differentiate between correlation (events happening together) and causation (one event directly influencing the other). Correlation may hint at a relationship between two things, but correlations can be misleading. In contrast, cause and effect is more akin to a sturdy bridge, supported by solid pillars of evidence and logical connections. This metaphorical bridge guides us with confidence from one understanding to another, unveiling the true nature of the world. Science, not advocacy, should be our guiding principle.

To explore an example from the Ruggerone paper, let's examine the predicted negative effects on herring stocks, where they specifically mention Sitka Sound herring. Contrary to their prediction, in the past five years, the large herring stocks in most of Alaska – Togiak, Kodiak, PWS, Craig, and Sitka Sound have increased significantly. For 2024, the Sitka Sound herring stock biomass is estimated by the ADF&G to be 406,228 tons of mature biomass, eclipsing any former biomass in Sitka Sound and exceeding that of Togiak. In 2023, the biomass in Sitka Sound was 292,669, a record until the 2024 estimate.<sup>9</sup> The PWS herring, decimated by the 1989 oil spill, has been down for two decades but is now forecasted to have a harvestable surplus in 2024. Kodiak experienced the largest herring harvest of the past two decades in 2023.

The ocean is complex, and the forecasting model presented by Ruggerone, et.al. misses the mark. Similarly, killer whales and humpback whales have increased by multiples of two to three times in the past three decades.<sup>10</sup> The model data may have been tailored for a particular outcome or simply overlooked the Alaskan killer whale population, rather they focused on Southern Resident killer whales, to suggest that pink salmon are the driver of their downfall. Yet, pink salmon production in the Salish Sea is minimal when compared to wild and hatchery pinks in Alaska where Killer Whales are thriving. There is a bit of anti-commercial fishing bias going on here. As an example, sport fishing groups – which funded some of the McMillan paper

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<sup>9</sup> <https://www.adfg.alaska.gov/static/applications/dcfnewsrelease/1552946314.pdf>

<sup>10</sup> High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate. Wertheimer & Heard

- signed on to the Wild Fish Conservancy's lawsuit<sup>11</sup> against the State of Alaska aimed at halting commercial trolling, but not sport fishing on the very same Pacific Northwest king salmon stocks.

Contrary to large data set modelling, comprehensive research has been conducted in the Bering Sea and North Pacific Ocean by fishery science teams from the United States, Russia, Korea, Japan. This includes International Year of the Salmon (IYS) ocean studies spanning 2018-2022, that aimed to fill significant information gaps in our understanding of salmon migration, productivity, and the effects of marine heat waves. The NPAFC, an international body that compiles and reports on salmon status and research over the past 30 years, is another organization intimately engaged in this research. The latest IYS report for 2023 is currently in press but reports from 2022 and earlier are available. We will delve into a selection of these studies and others, presenting a more mechanistic perspective on 'From Diatoms to Killer Whales'.<sup>12,13</sup> ADF&G scientists have played a crucial role in these endeavors, including the recently formed Salmon Ocean Ecology Program.<sup>14</sup>

Without a doubt, pink salmon are the most prolific salmon species, possessing remarkable reproductive abilities and extensive range capabilities in the Northern Hemisphere. Wild pink salmon have extended their range into the Arctic and around to Scotland and Sweden. Evolutionarily, pink salmon are the most successful salmon species yet the least intra-genetically distinct, defined by their short residence in freshwater (where prey are more limited) and their ability to spawn in a trickle of water to large rivers, or intertidal estuaries. Reports suggest their genetic plasticity benefits them in a warming ocean, with the odd-year component faring better than the even-year brood line. One might argue that pink salmon are the most resilient of the salmonids.

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<sup>11</sup> <https://www.fisheries.noaa.gov/agency-statement/noaa-fisheries-recent-actions-wild-fish-conservancy-v-quan>

<sup>12</sup> <https://www.npafc.org/>

<sup>13</sup> Technical Report 22 Report of the Final Workshop (November 1–2, 2023) Describing Observations Made During Winter Surveys of the International Year of the Salmon Expeditions to the Gulf of Alaska.

<https://www.npafc.org/technical-report/>

<sup>14</sup> <https://www.adfg.alaska.gov/index.cfm?adfg=salmonoceanecology.main>

The Ruggerone paper sets out their basis for production and biomass, which is summarized in Wertheimer as follows: During 1990–2015, pink salmon dominated adult abundance (67% of total) and biomass (48%), followed by chum salmon (20% abundance, 35% biomass) and sockeye salmon (13% abundance, 17% biomass).<sup>15</sup> Together the biomass of chum and sockeye salmon amounts to 52%. The total pink salmon biomass is 48%, of which approximately 85% of the 48% would be wild pink biomass. This equates to 41% wild pink biomass, **7% hatchery pink biomass** (all Pacific Rim countries), 35% chum biomass, and 17% sockeye biomass. The remainder of 4% biomass is coho and Chinook.

For additional context of salmonid biomass within total North Pacific nektonic biomass Shuntov et.al.<sup>16</sup> and Wertheimer provide the following insights:

In the western North Pacific, Shuntov et al. (2017) estimated the nekton biomass was 81.3 million t (from 50 to 100 million t in different years). Pacific salmon accounted for 1–2% of this biomass in the 1980s. Since then, biomass of salmon has increased current levels of 4-5 million tons, representing 4-8% of total nektonic biomass during period of high abundance.

In terms of total ocean nektonic biomass, salmon represents a small proportion. Prince William Sound hatcheries release about 800 million pink salmon fry or 3% of total pink salmon numbers in Pacific Rim. Extrapolation of PWS pink salmon biomass as a proportion of total nektonic biomass would be a tiny fraction of one percent.

**McMillan J., et.al.** *A global synthesis of peer-reviewed research on the effects of hatchery salmonids on wild salmonids*<sup>17</sup>

This study synthesized findings from 206 peer-reviewed publications worldwide to examine the impact hatcheries have on wild salmonids. While the effects have been reported to range from adverse to beneficial, a substantial 70% of these studies reported adverse effects, whereas 13% recorded minimally adverse effects. These articles discuss various species across North America, Europe, and Asia, offering useful context and discussion points from 50 reviewed publications.

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<sup>15</sup> High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate. Wertheimer & Heard

<sup>16</sup> Shuntov, V. P., Temnykh O., and Ivanov O. 2017. On the persistence of stereotypes concerning the marine ecology of Pacific salmon (*Oncorhynchus spp.*). Russian Journal of Marine Biology 43:1–28.

<sup>17</sup> McMillan J., et.al. *A global synthesis of peer-reviewed research on the effects of hatchery salmonids on wild salmonids*

The synthesis, originally composed of 11,000 research papers, was boiled down to a scorecard segregating the papers into categories - adverse, middling, and favorable. However, only a handful of these papers apply to Alaska, rendering percentage-based evaluation a rather peculiar methodology to gauge research validity. Most salmon research funding is directed towards the Pacific Northwest, known to yield negative outcomes due to the strategies employed aiming to rehabilitate wild salmon in the Columbia River Basin in particular. The forthcoming evaluation will largely encompass aggregated critiques of the Ruggerone and McMillan papers.

### III. Alternative Research and Perspectives

**Wertheimer A. & Heard B.** 2018 *High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate*

As mentioned, the 2018 Wertheimer paper will be resubmitted as a separate public comment, although updated with a cover memorandum that highlights additional information which further supports our contentions contained herein. The most significant event that has changed since 2018 is the Marine Heat Wave (MHW) that encompassed 2016 – 2019 and significantly affected adult chum and to a lesser extent pink salmon returns and survival in 2020 – 2022. During this period there were four years in which there were five federal fishery disaster designations in Alaska.<sup>18</sup>

- S.E. Alaska, Norton Sound, Yukon River, Chignik, Kuskokwim salmon fisheries, 2020 & 2021
- Copper River and PWS salmon fisheries, 2018 & 2020
- Gulf of Alaska pink salmon fisheries in PWS, Kodiak, Chignik, Lower Cook Inlet, S.E. Alaska & Yakutat, 2016

Research by International Year of the Salmon (IYS) demonstrates a strong linkage between the MHW years and return years for chum salmon. These research results will be covered in a

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<sup>18</sup> <https://www.adfg.alaska.gov/index.cfm?adfg=hottopics.fisherydisasters>



section to follow. Significantly, it's worth noting that salmon productivity varies regionally and locally in Alaska and across the Pacific Rim; an issue we will delve into in this document.

#### IV. Review of Research Papers and Possible Mechanistic Effects for Salmon Dynamics

**Howard K.,** October 2023 *Overview of Scientific Understanding of Salmon Competition at Sea and an Update on Research*. A presentation to Board of Fisheries.<sup>19</sup> and International Year of the Salmon<sup>20</sup>

In her presentation to the Board of Fisheries in October 2023, Dr. Howard provided a balanced assessment of the latest studies regarding salmon abundance, winter range, and oceanic sampling conducted by the International Year of the Salmon (IYS) researcher group. She also reviewed significant findings reported by the Northern Hemisphere Pink Salmon (Expert Group), an international body former by NPAFC. Both the IYS and the Expert Group are recent initiatives by the NPAFC aimed at addressing data gaps in our understanding of salmonids. Particularly noteworthy is the significant gap regarding the winter range and location of salmonids in the North Pacific, a point that was encapsulated in Howard's oral report.

The prevailing scientific consensus is that diet overlap exists among salmonids and nektonic fishes and avians. This overlap correlates to variations in species growth patterns and abundance. High survival rates of one species can coincide with a decline in another. Likewise, when one species thrives in abundance, the growth of another may decrease. For instance, high abundance of odd-year pink salmon can affect the growth rate of sockeye salmon in their third year at sea. While this does not necessarily affect survival, it does impact growth and hence reproduction rates. Such abundance associations also seem to affect salmon age at maturity; when one species is abundant, another's age of maturity may increase. As shown in Oke, et.al.<sup>21</sup>

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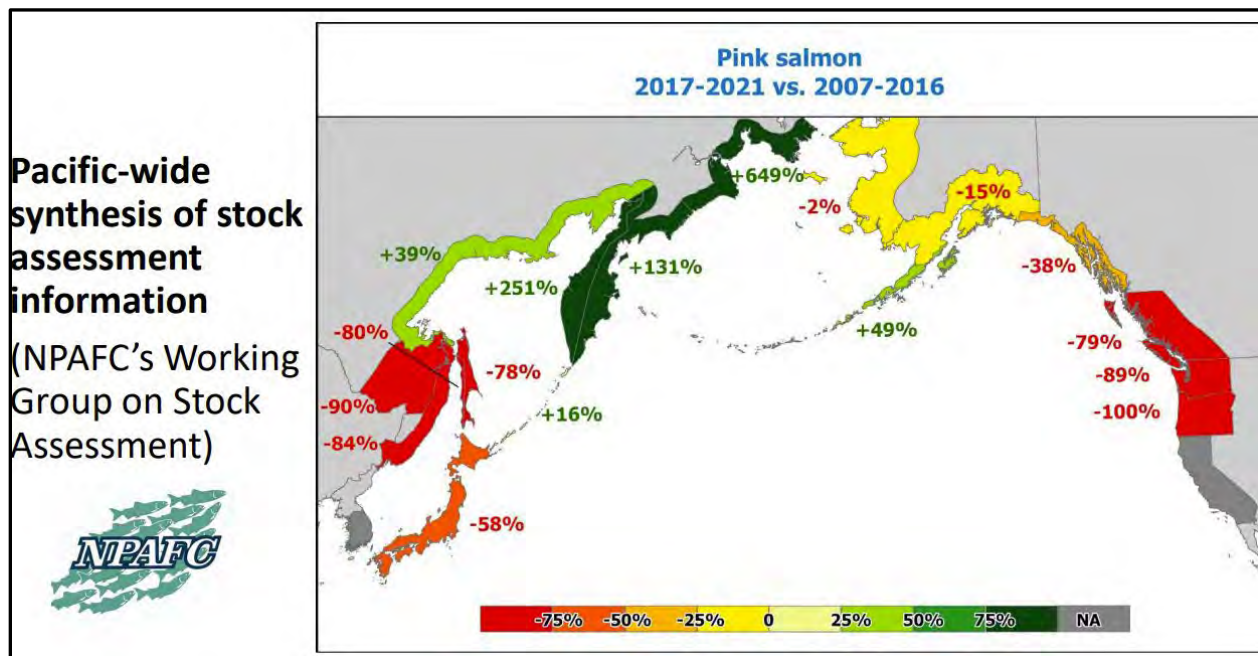
<sup>19</sup> Howard K., Alaska Department of Fish and Game, October 2023 *Overview of Scientific Understanding of Salmon Competition at Sea and an Update on Research*. Presentation to Board of Fish

<sup>20</sup> <https://yearofthesalmon.org/resources/>

<sup>21</sup> Oke K., et.al. 2020 Recent declines in salmon body size impact ecosystems and fisheries

research, Alaska's pink and chum salmon may competitively impact coho salmon, irrespective of climate factors.

However, not all researchers agree on these findings. The Ruggerone paper and its proponents, predominantly based in the United States, argue that correlations between wild and hatchery pink salmon and the decline of other species present a problem. In contrast, the broader international research community remains unconvinced of these negative associations. To establish causality, mechanistic or direct evidence is crucial. Yet, the drive for funding and publication all too often leads to what is called by researchers as publication bias. Additionally, publication bias often results in nonnegative-relationships or null results not being published. The following discussion provides some perspective on the contrast between the proponent's arguments of corollary associations versus the body of research that points to drivers and/or mechanisms linked to empirical evidence.

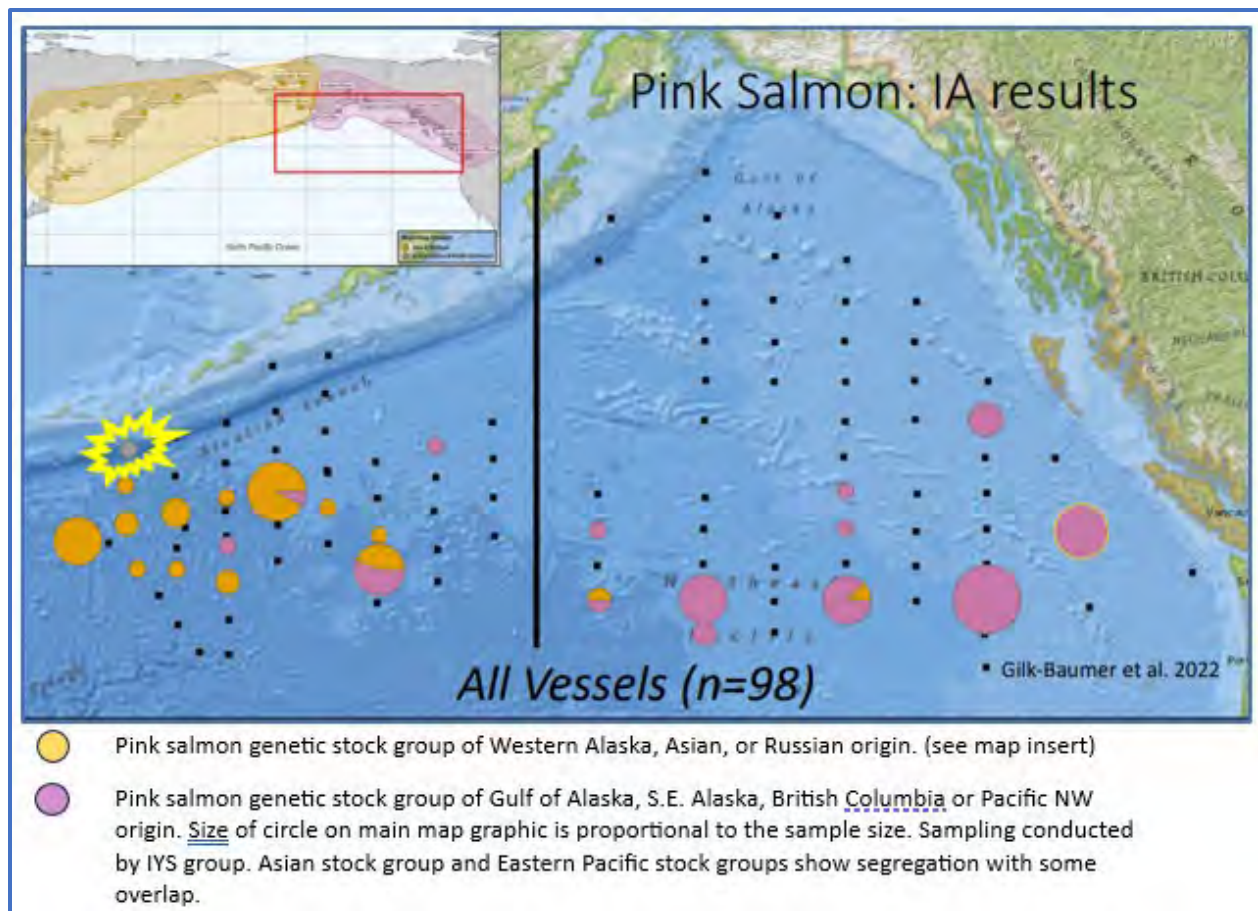


The Pacific Ocean, a vast expanse, is not uniform in terms of productivity, climate, temperature, and biological parameters. Evidence from the study of the Pacific Decadal Oscillation (PDO)<sup>22</sup>

<sup>22</sup> Mantua, N. et.al. 2001. The Pacific Decadal Oscillation

suggests significant shifts in productivity in the eastern Pacific, alternating between favoring the northeastern Pacific and the eastern Pacific south of British Columbia over different decades. The NPAFC's working group on pink salmon stock assessment observed significant shifts in pink salmon productivity across the Pacific Rim when comparing the period of 2017–2021 with that of 2007–2016. The accompanying map above illustrates these dramatic differences. Productivity of pink salmon in Russia increased two to six-fold, while in the Pacific Northwest (PNW), productivity declined by half. Most of Alaska also experienced a decline, albeit more modestly. It is worth noting again that during this period of decline, Alaska requested at least five federal disasters.

The International Year of the Salmon, which conducted research from 2018–2022, provided valuable information on salmonids' winter distribution across the Pacific from East to West. Genetic stock identification of salmon tissue samples taken across the Pacific revealed the country of origin, both wild and hatchery. This research sheds light on one of the mysteries of



the recent Yukon and Kuskokwim chum salmon decline. The Coastal Western Alaska Kodiak (CWAK) chum stock group (which includes Yukon, Kuskokwim, Bristol Bay, Norton Sound) were found to be unhealthy, with low fat content and empty stomachs for not just one winter, but two consecutive winters. These samples were taken during the Marine Heat Wave (MHW) years, which presaged the disastrous returns to the Yukon and Kuskokwim in 2020–2022.

Another crucial finding from the International Year of the Salmon (IYS) winter ocean studies is discernible from the map graphic presented above. The graphic clearly shows that pink salmon from Russia and Asia were primarily located in the western Pacific, while their Alaskan and Pacific Northwest (PNW) counterparts were predominantly in the eastern Pacific. There was some overlap, but it was minimal during the sampled years. **Shuntov et. al. observed that prey abundance for salmon was not a limiting factor.** It's worth noting that this period coincided with the all-time high of Russian and Central Asian pink salmon, as illustrated in the graphic on the preceding page. These geographical distribution patterns hold significant implications for understanding inter-species dynamics and potential competition for resources and underline the complex interplay of factors contributing to salmon performance across the Pacific.

### **North Pacific Anadromous Fish Commission Technical Report No. 21, 2023, Pink Salmon Expert Group.<sup>23</sup>**

In a section on *Competition and Interactions Between Pink Salmon and Other Species* from the report it states: “.....the ocean remains highly productive and pink salmon only consume a small fraction of the resources compared to more abundant species (e.g., walleye pollock). Pink salmon are also flexible foragers, eating a variety of prey and finding preferred feeding areas best suited to their traits. Indeed, the foraging areas and feeding habits among Pacific salmon species often indicate complimentary, rather than competitive, interactions.”<sup>24</sup> This section included references that competition for prey can negatively affect other species at times.

<sup>23</sup> <https://www.npafc.org/wp-content/uploads/technical-reports/Technical-Report-21.pdf>. North Pacific Anadromous Fish Commission Technical Report No. 21, 2023, Pink Salmon Expert Group

<sup>24</sup> <https://www.npafc.org/wp-content/uploads/technical-reports/Technical-Report-21.pdf>. North Pacific Anadromous Fish Commission Technical Report No. 21, 2023, Pink Salmon Expert Group

**Baumann, et.al 2014**, *Diatom control of the autotrophic community and particle export in the eastern Bering Sea during the recent cold years (2008–2010)*<sup>25</sup>

A body of research conducted in the Bering Sea challenges assertions of pink salmon exercising top-down control, instead suggesting a cold-water control mechanism at work. This research focuses on examining mechanistic linkages to explain nutrient transportation during periods of cold water, offering potential explanations for the cause-and-effect dynamics. Its significance lies in potentially shedding light on why nutrient availability dwindles during warm, ice-free years.

The study's main finding suggests that during cold years, diatoms emerge as dominant primary producers and particle exporters in the eastern Bering Sea. Zooplankton fecal pellets also played a crucial role in the particle export dynamic. These diatoms, which constitute a minimum of 70% of the vertical flux of total Chlorophyll a (TChl a), are the primary algal class to be exported from the light-exposed upper layers of the ocean, or 'photic zone', regardless of the TChl a and Particulate Organic Carbon (POC) flux.

The extent of particle flux from early spring to late spring and early summer may be largely dictated by zooplankton grazing. Early summer particle export is likely associated with the sinking phenomenon, typically observed in spring, and the Marginal Ice Zone (MIZ) primary production.

**Daly, et.al.** *Potential for resource competition between juvenile groundfishes and salmon in the eastern Gulf of Alaska, 2019* <sup>26</sup>

Evidence suggests that juvenile salmon, including pink salmon, were not causing a 'top-down' zooplankton resource bottleneck in the Gulf of Alaska. Based on the available zooplankton

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<sup>25</sup> Matthew S. Baumann, S. Bradley Moran, Michael W. Lomas, Roger P. Kelly, Douglas W. Bell, and Jeffrey W. Krause Diatom control of the autotrophic community and particle export in the eastern Bering Sea during the recent cold years (2008–2010)

<sup>26</sup> Elizabeth A. Dalya, Jamal H. Moss, Emily Fergusson, Richard D. Brodeur Potential for resource competition between juvenile groundfishes and salmon in the eastern Gulf of Alaska. 2019

biomass, there appeared to be no reduction in the prey population due to excessive grazing by planktivorous (plankton-eating) juvenile fish where these prey were most abundant.

Interestingly, the years 2010-2012 saw a significant increase in juvenile groundfish when the numbers of young, carnivorous salmon were lower. This raises questions about potential predation.

The paper explores these complex dynamics between juvenile groundfish and salmon in the Gulf of Alaska. It suggests that competition for prey (zooplankton) resources may be underway, potentially impacting the early marine growth and survival of these fish species, but the effect is not top-down control.

From the abstract of the paper

“Neither the abundance nor stomach fullness of the juvenile planktivorous ground fishes or salmon correlated with station-level zooplankton biomass in 2012–13, **suggesting a lack of a resource bottleneck** (emphasis added) for these planktivores in these 2 years.” and “Overall, during years when juvenile ground fishes survival was high, juvenile salmon survival was also high, suggesting sufficient food resources in the GOA”.

**Hunt and Stabeno**, *Climate change and the control of energy flow in the southeastern Bering Sea*. 2002<sup>27</sup>

The Oscillating Control Hypothesis presented in this paper anticipates that the abundance of forage fish will be determined by a mix of bottom-up processes, (affected by the availability of zooplankton prey), and top-down processes, (influenced by predation by large fish-eating fish).

The shift of Bering Sea ice in spring dictates the occurrence of either an early ice-associated bloom in cold water or a late-spring open water bloom in relatively warmer water. Copepods, small crustaceans that serve as critical feed for young pollock, are sensitive to the water temperature in which they are developing. Consequently, copepod reproduction and the number of generations produced are notably higher in years with warm water spring bloom compared to cold water bloom years. This variation can significantly influence the growth and production of zooplankton, as well as the growth and survival rate of young fish.

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<sup>27</sup> Hunt G., and Stabeno P. Climate Change and the control of energy flow in the southeastern Bering Sea 2002.

This study lends further evidence to the Ocean Climate Hypothesis, which envisages that the system should predominantly be **constrained by bottom-up fish recruitment** limitation during repeated cold springs associated with ice-formed blooms. Examining the environmental variability from the 1990s, the paper validates that attributes such as average depth temperatures are crucial for zooplankton and pollock. The study also notes a correlation between the biomass of adult pollock on the shelf and the productivity of Pribilof Island-nesting black-legged kittiwakes, a sea bird species whose presence often indicates a healthy fish population.

**Arimitsu, et.al.** *Heatwave-induced synchrony within forage fish portfolio disrupts energy flow to top pelagic predators.* 2021<sup>28</sup>

Contrary to expectations, during the recent anomalously warm conditions, which are thought to have resulted in top-down pressures controlling forage fish abundance in the northern Gulf of Alaska, **salmon were not the primary predators.**

This research paper delved into the impacts of the 2014-2016 Pacific marine heatwave on forage fish in the Gulf of Alaska. The researchers discovered that the measure of covariance among species within a community, a concept referred to as the 'portfolio effects' of forage fish species, could serve as an analytical framework for understanding the stability of ecosystem dynamics over time. They also found that the heatwave-induced extreme mortality of common murre was mitigated by the flexible foraging behavior of avian predators.

One critical finding underscores the vulnerability of fishes' demographic structure, which changes in response to size-selective removal processes, whether through predation, disease, or fishing. This change weakens the population's ability to buffer environmental variability, leading to poor recruitment and subsequently, low survival rates. It can also impact spawning dynamics as smaller, younger individuals, which produce fewer eggs, rise in population. The quantity of produced eggs, or fecundity, is strongly related to size.

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<sup>28</sup> Arimitsu M., et.al. Heatwave-induced synchrony within forage fish portfolio disrupts energy flow to top pelagic predators 2021,

**Sturdevant, M. et.al. 2011.** *Lack of trophic competition among wild and hatchery juvenile chum salmon during early marine residence in Taku Inlet, Southeast Alaska* <sup>29</sup>

A research paper conducted a comparative analysis of the diets of wild and hatchery chum salmon in the littoral habitat of outer Taku Inlet, near Juneau, Alaska. Findings from the study revealed significant variances. The diet of wild chum salmon consisted of more insects, larvaceans, barnacle and euphausiid larvae, gammarids, large and small calanoids, and fish compared to their hatchery counterparts. Hatchery fry consumed similar prey but in different quantities, the first-year diet containing more gammarids and hyperiids than the wild fry, while in the second year consuming a higher proportion of calanoid copepods. The study also concluded that the diet composition of both wild and hatchery chum salmon showed more similarity within the same year than across different years. Further, the diets of these fish in the inner-middle locations of Taku Inlet showed more similarity than those in the outer area.

The research also observed an interesting trend in the condition of hatchery chum salmon. Upon release, these **hatchery fish were larger and had a higher energy density than the wild salmon**. However, in the early weeks post-release, as they adapted to a diet constituted by wild prey, they exhibited a **drop in their condition. Approximately forty days later, their energy densities had not only recovered but had also aligned with those of the wild salmon**. Importantly, they showed higher energy densities as compared to the time of release in Taku Inlet. This research provides insights that could inform methods to improve the adaptability and survival rate of hatchery chum salmon post-release.

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<sup>29</sup> Lack of trophic competition among wild and hatchery juvenile chum salmon during early marine residence in Taku Inlet, Southeast Alaska 2011. Sturdevant M., Fergusson E., Hillgruber N., Reese C., Orsi J., Focht R., Wertheimer A., & Smoker B.



**Batten S., 2022. *Responses of Gulf of Alaska plankton communities to a marine heat wave*.<sup>30</sup>**

The Batten paper published in 2022 postulates possible mechanisms causing lower productivity brought on by the marine heat wave (MHW) in the North Pacific Gulf of Alaska. The abstract lays out their findings:

Time series of phytoplankton and zooplankton collected from the shelf and oceanic northern Gulf of Alaska from 2000 to 2018 are examined to describe changes in abundance and composition that occurred during the 2014–2016 marine heat wave (MHW). Zooplankton abundances were very high on the shelf during the MHW, particularly copepods and pteropods, while large diatoms were very low. Community Temperature Indices (CTI) were derived and showed significant, positive correlations with temperature for both trophic levels on the shelf and in the deep ocean. While no common taxa disappeared from the communities, there were changes in relative abundance that contributed to the increase in CTI. Additionally, some rarer taxa were not found during or after the MHW, and fewer new taxa appeared with its onset. There is thus evidence for a change in ecosystem functioning in the lower trophic levels with the northeast Pacific MHW bringing; lower plankton taxonomic richness, a bias towards species that prefer warm conditions, increased effects down the food chain, likely exerted by changes in forage fish, and uncertainty in data from 2017 to 2018 as to whether plankton metrics had, or would, return to pre-MHW values.

**Orsi J., 2005. *Juvenile chum salmon consumption of zooplankton in marine waters of southeastern Alaska: a bioenergetics approach to implications of hatchery stock interactions*<sup>31</sup>**

The study estimated the total abundance of hatchery and wild chum salmon in northern southeast Alaska region. The total prey consumption varied depending on mortality rate assumptions, but the salient point is **only a small percentage of available zooplankton was consumed by juvenile chum salmon**. The study noted the need for additional research to determine physiological input parameters and improve abundance and mortality estimates. The abstract details the scope of work, findings and possible limitations:

Bioenergetics modeling was used to estimate zooplankton prey consumption of hatchery and unmarked stocks of juvenile chum salmon (*Oncorhynchus keta*) migrating seaward in littoral (nearshore) and neritic (epipelagic offshore) marine habitats of southeastern Alaska. A series of model runs were completed using biophysical data collected in Icy

<sup>30</sup> Batten S., Ostle C., Helaouet P., Walne A. 2022. Responses of Gulf of Alaska plankton communities to a marine heat wave.

<sup>31</sup> Orsi J., Wertheimer A., Sturdevant M., Fergusson E., Mortensen D., & Wing B. 2005. Juvenile chum salmon consumption of zooplankton in marine waters of southeastern Alaska: a bioenergetics approach to implications of hatchery stock interactions

Strait, a regional salmon migration corridor, in May, June, July, August, and September of 2001. These data included a temperature (1-m surface versus surface to 20-m average), zooplankton standing crop (surface to 20-m depth versus entire water column), chum salmon diet (percent weight of prey type consumed), energy densities, and weight. Known numbers of hatchery releases were used in a cohort reconstruction model to estimate total abundance of hatchery and wild chum salmon in the northern region of southeastern Alaska, given average survival to adults and for two different (low and high) early marine littoral mortality rate assumptions. **Total prey consumption was relatively insensitive** to temperature differences associated with the depths potentially utilized by juvenile chum salmon. However, the magnitudes and temporal patterns of total prey consumed differed dramatically between the low and high mortality rate assumptions. Daily consumption rates from the bioenergetics model and CPUE abundance from sampling in Icy Strait were used to estimate amount and percentage of zooplankton standing crop consumed by mixed stocks of chum salmon. We estimated that only **a small percentage of the available zooplankton was consumed by juvenile chum salmon**, even during peak abundances of marked hatchery and unmarked mixed stocks in July. Total daily consumption of zooplankton by all stock groups of juvenile chum salmon was estimated to be between 330 and 1764 g/km<sup>2</sup>d<sup>1</sup> from June to September in the neritic habitat of Icy Strait. As with any modeling exercise, model outputs can be misleading if input parameters and underlying assumptions are not valid; therefore, additional studies are warranted, especially to determine physiological input parameters, and to improve abundance and mortality estimates specific to juvenile chum salmon. Future bioenergetics modeling is also needed to evaluate consumption by the highly abundant, vertically migrating planktivores that co-occurred in our study; we suggest that these fishes have a greater impact on the zooplankton standing crop in Icy Strait than do hatchery stock groups of juvenile chum salmon.

**Shuntov, V.** 2017. *On the persistence of stereotypes concerning the marine ecology of Pacific salmon (Oncorhynchus spp.).*<sup>32</sup>

Shuntov et.al. discusses marine ecology of Pacific salmon, including their interaction with sea surface temperatures, food shortages, competition, effect on other species, and habitat restrictions. These Western-centric ideas and syntheses of data are contrary to the research findings from the Pacific Research Fisheries Center (TINRO Russia). Pacific salmon have a wide range of habitats and can adapt to various temperatures. They can migrate vertically and have a diverse diet. These salmon are dispersed and can satisfy their dietary needs across large areas with low prey concentrations. **“The total biomass of all the Pacific salmon species** in the North Pacific is not greater than 4–5 million t (including 1.5–2.0 million t in Russian waters). In stark

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<sup>32</sup> Shuntov, V. P., Temnykh O., and Ivanov O. 2017. *On the persistence of stereotypes concerning the marine ecology of Pacific salmon (Oncorhynchus spp.).* Russian Journal of Marine Biology 43:1–28.

contrast, the biomass of other common nekton species is estimated at a few hundred million tons. **Salmon account for 1.0–5.0% of the total amount of food consumed by nekton** in the epipelagic layer of the western Bering Sea. In summary, they play a moderate role in the food webs of subarctic waters based on their research delineated in the abstract:

Some of the views on the marine ecology of Pacific salmon (*Oncorhynchus* spp.) that were popular in the second half of the 20th century are discussed critically: the absolutization of the influence of sea surface temperature on distribution of salmon and strength of their year classes, as well as the conclusions on the shortage of food (particularly in winter) and the fierce competition for food, the “suppression” of other salmon species and one adjacent broodline by pink salmon, the limited carrying capacity of the pelagic zone of subarctic ocean waters for salmon, the distortion of the structure of epipelagic communities in ecosystems of the North Pacific due to the large-scale stock enhancement of chum salmon, etc. Most of these ideas have not been confirmed by the data of long-term monitoring conducted in the form of complex marine expeditions by the Pacific Research Fisheries Center (TINRO Center) in the Far-Eastern Seas and adjacent North Pacific waters since the 1980s. The data show that Pacific salmon are ecologically very flexible species with a wider temperature range of habitat than was previously believed. Salmon are able to make considerable vertical migrations, easily crossing zones of sharp temperature gradient and different water masses. Having the wide feeding spectra and being dispersed (as non-schooling fish) when feeding in the sea and ocean, they successfully satisfy their dietary needs in vast areas even with relatively low concentrations of prey organisms (macroplankton and small nekton). The total biomass of all the Pacific salmon species in the North Pacific is not greater than 4–5 million t (including 1.5–2.0 million t in Russian waters), whereas the biomass of other common species of nekton is a few hundreds of millions of tons. Salmon account for 1.0–5.0% of the total amount of food consumed by nekton in the epipelagic layer of the western Bering Sea, 0.5–1.0% in the Sea of Okhotsk, **less than 1% in the ocean waters off the Kuril Islands, and 5.0–15.0% in the ocean waters off East Kamchatka**. Thus, the role of Pacific salmon in the trophic webs of subarctic waters is rather moderate. Therefore, neither pink nor chum salmon can be considered as the species responsible for the large reorganization in ecosystems and the population fluctuations in other common nekton species.

## **V. Precautionary approach**

The State of Alaska statutes, alongside Alaska Department of Fish and Game regulations, has adopted a precautionary approach to salmon enhancement. Concurrently, the PNP associations have cooperated closely with the department to develop programs that minimize interactions with wild stocks.

The State captured concerns about the possible local effects of introgression – gene flow from hatchery fish to wild fish - in its 1985 genetics policy.<sup>33</sup> In 2011, in response to the request from the PNPs to the Commissioner of Fish and Game, a science panel was established to investigate the introgression caused by hatchery strays into wild stock streams. After twelve years of consistent study and monetary investment of over \$20 million, this science panel has been actively sharing its findings with the Board and the wider public. Discussions are currently underway between the ADF&G and PNP operators about the next phase of research.

## **VI. Concluding Remarks**

Over the past 25 years, Alaska salmon have demonstrated remarkable abundance (except for Chinook) which has raised concerns about possible exceedances of the ocean's carrying capacity. The high abundance and variability of these salmon populations appear to be largely due to oceanic survival conditions rather than density-dependent interactions. Over the last quarter-century, Alaska's salmon harvest has maintained consistently high yields from wild stocks, supplemented by substantial contributions from hatchery fish. While density-dependent interactions have been observed at various salmon life stages and in different habitats, these interactions have not inhibited the salmon population's recovery from its 1970's low levels.

However, fluctuating climate patterns and oceanic events, such as marine heatwaves in the Gulf of Alaska, potentially have wide-reaching implications for salmon populations. These events underscore the unpredictable nature of ocean conditions that influence salmon at both local and regional scales.

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<sup>33</sup> [https://www.adfg.alaska.gov/static/fishing/PDFs/research/genetics\\_finfish\\_policy.pdf](https://www.adfg.alaska.gov/static/fishing/PDFs/research/genetics_finfish_policy.pdf)

Empirical support in favor of hatchery fish comes from the enhancement programs in Prince William Sound (PWS) and Southeast Alaska. Despite variable productivity over the past few years, both wild and hatchery pink salmon have closely tracked the odd-even brood line patterns in PWS in the past six years, the average even-year return for wild pinks in PWS has exceeded five million, a considerable increase from the two-million average wild return twenty years ago. By targeting hatchery fish, wild escapement goals are being met, resulting in new record highs for the harvest and production of both hatchery and wild pink salmon. This suggests that the large-scale release and return of hatchery pink salmon have not undermined the production potential of wild stocks, irrespective of their high or low abundance. A similar story holds true for southeast Alaska wild and hatchery chum salmon.

Thank you for your time, your interest, and most importantly, your dedication to ensuring an enduring legacy for future generations of salmon and the people of Alaska. We appreciate your commitment to understanding the complex dynamics of our freshwater and marine ecosystems and look forward to continuing an exchange of knowledge and perspectives.

Sincerely,

**Alaska's PNP Salmon Hatchery Operators**

Kodiak Regional Aquaculture Association  
Tina Fairbanks, Executive Director

Valdez Fisheries Development Association  
Mike Wells, Executive Director

Cook Inlet Aquaculture Association  
Dean Day, Executive Director

Northern Southeast Regional Aquaculture Association  
Scott Wagner, General Manager

Prince William Sound Aquaculture Corporation  
Geoff Clark, General Manager/CEO

Southern Southeast Regional Aquaculture Association  
Susan Doherty, General Manager

Douglas Island Pink & Chum  
Katie Harms, Executive Director

## **Board of Fisheries**

October 15-16, 2018

Work Session Anchorage, Alaska

Dear Chairman Jensen and Board of Fish Members:

In the interest of understanding the complex topic of Ocean Carrying Capacity (OCC) this document written by two career fisheries research scientists is presented.

## **High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate**

**Alex Wertheimer, NOAA Fisheries Research Biologist (retired)<sup>1</sup>**  
**Fishheads Technical Services**

**William Heard, NOAA Fisheries Research Biologist (retired)<sup>2</sup>**

### **EXECUTIVE SUMMARY**

The abundance and biomass of wild and hatchery pink, sockeye, and chum salmon in the North Pacific Ocean has been higher in the past 2.5 decades (1990-2015) than at any time in the 90-year time series. The high biomass has been remarkably consistent from 1990-2015. There has been higher variability in numbers of salmon than in biomass due to the variability in pink salmon abundance. The high sustained abundance and biomass is driven in no small part by historically high abundance of Alaska salmon, and corresponds with the renaissance of Alaska salmon fisheries from their nadir in the 1970s. Statewide commercial catches of salmon were just 22 million fish in 1973; for 1990-2015, statewide catches have averaged 177 million salmon, an eight-fold increase.

This remarkable recovery and historically high abundance of Alaska salmon can be attributed to five major factors: (1) large expanses of relatively pristine and undeveloped habitats; (2) salmon management policies that have evolved since statehood; (3) the elimination of high seas drift-net fisheries; (4) production from large-scale hatchery programs designed and managed to supplement natural production; and (5) favorable environmental conditions associated with the 1977 “regime shift” affecting the ecosystem dynamics of the North Pacific Ocean. Habitat, management, and enhancement set and maintain the productive capacity that responds to marine environmental conditions: ocean “carrying capacity”.

Carrying capacity has been defined as the ability of an ecosystem to sustain reproduction and normal functioning of a set of organisms. Ocean carrying capacity for Pacific salmon is not a fixed productivity limit, and the considerable regional and temporal variability in salmon stocks is a response to non-homogeneous ocean conditions. Over the past few decades, conditions in the North Pacific Ocean have

been generally favorable to Pacific salmon as reflected by the sustained high abundances and catches. However, extremes in survival and production have occurred both temporally and geographically. Survival and year-class strength of salmon is the result of responses to local, regional, and basin scale conditions. Marine conditions vary geographically and temporally within a given year, interannually, and in the context of oceanographic regimes favorable or unfavorable to salmon production.

There are concerns that the high abundance in the North Pacific Ocean, coupled with high variability in stock performances, indicate that carrying capacity is being exceeded, and that competitive interactions are negatively affecting growth and survival. These concerns have been raised for over 20 years. Rather than indicate that carrying capacity has been exceeded, the trend of the past three decades show that the North Pacific Ocean has had the capacity for the recovery and sustained production of wild stocks while supporting the expansion of large-scale enhancement production from Japan (chum salmon) and Alaska (chum and pink salmon).

A proposed mechanism for negative impacts of high abundance of salmon in the ocean is that their feeding capacity alters the biomass of oceanic zooplankton, and in turn the phytoplankton biomass. In this scenario, this “trophic cascade” and alteration of food webs then negatively impacts other species, including coho and Chinook salmon. The record numbers and abundance of Pacific salmon can appear to be an imposing load on the North Pacific Ocean ecosystem. However, assessments of nektonic trophic structure in the Gulf of Alaska and the western North Pacific Ocean indicate that salmon have low to moderate impacts on oceanic food webs, and they respond to, rather than control, changes in ocean productivity.

Pink salmon have been identified as a keystone predator restructuring oceanic food webs to the detriment of other species. Four lines of evidence call this conclusion into question. First, Russian researchers report that in extensive ocean research programs, they have found typically no significant correlations occur among pink salmon growth rate, stock abundance, or zooplankton standing crop. Second, high numbers of pink salmon in the North Pacific Ocean have been associated with record run sizes and continued sustained biomass of salmon, rather than a reversal in these trends when pink salmon abundance increased. Third, pink salmon have shown the greatest variation in abundance among Alaska salmon, especially in response to anomalous ocean conditions. Thus rather than restructuring the food webs, they appear to be the most sensitive to changes in marine conditions. Finally, the high predation pressure of pink salmon in the context of epipelagic food webs is justified because other species, especially chum and sockeye salmon, switch to other, poorer quality prey items when pink salmon are abundant. However, the obvious implication is that these other species will “switch back” to the prey with higher nutritional value when pink salmon are at lower levels of abundance. Because chum and sockeye salmon comprise almost 80% of the oceanic biomass of salmon, salmon predation pressure on the “high value” prey remains relatively constant.

Effects of pink salmon abundance are often used as a proxy for deleterious effects of large-scale enhancement in general. In fact, while pink salmon are the most numerous of the salmon species in the North Pacific Ocean, wild stocks of pink salmon contribute some 85% of the overall abundance.

Density dependent interactions have been identified within and between species of salmon. These interactions have been observed during both periods of low and high abundance. Changes in size, survival and age at maturity have been attributed to these interactions. Despite the existence of

competitive interactions in the marine environment, high productivity of Alaska salmon has persisted during this period of high abundance. In general, size declines of pink and chum salmon occurred prior to the 1977 regime shift, and thus are associated with poorer ocean conditions rather than ocean abundance of salmon, and sockeye salmon size has been stable over the past 60+ years.

There is also concern that the high ocean abundance of the big three (pink, chum, and sockeye salmon) negatively impact coho and Chinook salmon in Alaska. For coho salmon, size declines in Southeast Alaska have been linked to pink salmon abundance in the Gulf of Alaska, while in Canada recent size increases in coho salmon have been positively associated with the combined biomass of pinks, chums, and sockeye salmon. The high correlation of run strength between coho and pink salmon in Southeast Alaska is strong evidence that their abundance is driven by similar overall response to shared marine conditions. Density-dependent mechanism other than competition may also play a role in pink salmon/coho salmon dynamics. These include such as predator sheltering of coho salmon juveniles by the more abundant pink salmon juveniles (decreasing predation on coho juveniles), predator aggregation (increasing predation on coho juveniles), and direct predation of coho juveniles and adults on pink salmon juveniles.

Chinook salmon stocks in Alaska have been depressed in recent years due to reduced marine survival, and have declined in size at age for older fish, and age at maturity. These changes are not likely driven by the high abundance of salmon in oceanic habitats. Chinook salmon, by their propensity to utilize deeper depth strata and distribute more broadly on shelf and slope areas during marine residency, are segregated to a large degree from other salmon in their use of ocean habitats with correspondingly different temperatures, prey fields, and predator complexes. Size of Chinook salmon at ocean age 2 has not declined, indicating no density-dependent effect on growth through the first two years at sea. Size declines at older ages are more consistent with selective removal of older, larger fish.

Survival declines of Chinook salmon occurred well into the period of high ocean biomass. There is substantial evidence that much of the variation in Chinook salmon marine survival is due to conditions in the first summer and winter at sea. Changes in the North Pacific ecosystem, such as increased killer whale predation, could introduce more mortality at older ages, and further depress realized survival during periods of poorer environmental conditions for Chinook salmon.

Favorable ocean conditions rather than density-dependent interactions seem to be driving both the high abundance at the basin-scale and the high variability in salmon populations at local and regional scales. Recent climatic and oceanographic events such as the marine heat waves of 2004/2005 and 2014/2015 in the Gulf of Alaska are demonstrative of the intrinsic variability of ocean conditions affecting salmon at local and regional scales. Will density-dependent interactions become increasingly important if and when ocean conditions become less favorable to salmon, with large releases of hatchery fish putting wild stocks in more jeopardy? Or will hatchery fish provide a buffer to sustain fisheries when wild stock productivity is low in response to varying environmental conditions? We conclude the latter, because there is empirical evidence that large releases and returns of hatchery pink salmon in years of both low and high wild stock abundance did not limit the production potential of the wild stocks.



## Introduction

The Alaska Board of Fisheries (BOF) was recently petitioned to hold an emergency meeting asking the BOF to amend actions taken in Permit Alteration Requests (PARs) made by the Prince William Sound (PWS) Regional Planning Team and deny the increase in the number of pink salmon eggs taken in 2018 by 20 million eggs. One of the rationales the petitioners used for rescinding the PAR was "... great concern over the biological impacts associated with continued release of very large numbers of hatchery salmon into the North Pacific Ocean, including the Bering Sea and the Gulf of Alaska." To support this concern, the petitioners provided references to record high abundance and biomass of salmon in the North Pacific, as well as possible density-dependent effects of pink salmon on the trophic structure in the North Pacific Ocean and intra-specific and interspecific competition of pink salmon with other species of salmon and seabirds.

The BOF held the emergency meeting on July 17, 2018, and denied the request for rescinding the PAR. The BOF determined there was no need for such an emergency action, and deferred further consideration to the review of the State's salmon enhancement program scheduled for the October 2018 work session. The intention of that review is for members of the BOF to educate themselves about the program and understand the science the enhancement program is predicated on and the current scientific evaluation.

This paper provides a brief, broad overview of the issue of record abundance and biomass of Pacific salmon and the implications for the status of Alaska salmon. We present this overview in six sections. The first is a review of the recent information on abundance of salmon in the North Pacific. The second is an examination of trends in harvest of Alaska salmon, including enhanced production. The third is a discussion of oceanographic conditions and the concept of "carrying capacity" for salmon in the North Pacific. The fourth is a perspective on the relative role of salmon as a component of the North Pacific ecosystem. The fifth looks at intra- and interspecific competition and density dependence among salmon species, and its possible impacts on growth and abundance. The sixth section summarizes our conclusions from this overview.

### I. High Abundance and Biomass of Salmon in the North Pacific Ocean

In a recent paper, Ruggerone and Irvine (2018) published an excellent compendium of the available data on numbers and biomass of pink, chum, and sockeye salmon in the North Pacific Ocean over the time period 1925 through 2015. The authors have compiled diverse data sources of harvest, harvest rates, and escapement. They have used reasonable approaches to estimating total salmon escapements by species by region, and to estimate hatchery and wild origins.

They found that the abundance and biomass of pink, sockeye, and chum salmon has been higher in the past 2.5 decades (1990-2015) than at any time in the 90-year time series, averaging 665 million adult salmon each year ( $1.32 \times$  million metric tons) during 1990–2015 (Figure 1). During 1990–2015, pink salmon dominated adult abundance (67% of total) and biomass (48%), followed by chum salmon (20%, 35%) and sockeye salmon (13%, 17%). When immature salmon biomass was included in the biomass estimates, biomass was dominated by chum salmon (60% of the combined biomass of all three species),

followed by pink salmon (22%) and sockeye salmon (18%).

The high biomass has been remarkably consistent over the 1990-2015 time period. There has been higher variability in numbers of salmon than in biomass due to the variability in pink salmon abundance.

Alaska produced approximately 39% of all pink salmon, 22% of chum Salmon, and 69% of sockeye salmon, while Japan and Russia produced most of the remainder. Approximately 60% of chum salmon, 15% of pink salmon, and 4% of sockeye salmon during 1990–2015 were of hatchery origin. Alaska generated 68% and 95% of hatchery pink salmon and sockeye salmon, respectively, while Japan produced 75% of hatchery chum salmon. Salmon abundance in large areas of Alaska (PWS and Southeast Alaska), Russia (Sakhalin and Kuril islands), Japan, and South Korea are dominated by hatchery salmon. During 1990–2015, hatchery salmon represented approximately 40% of the total biomass of adult and immature salmon in the ocean.

In the context of concern for the impacts of hatchery fish on wild salmon and the North Pacific ecosystem, we reiterate three facts about pink salmon noted above. Pink salmon are the most abundant of the species, have the greatest temporal variability in abundance, and are mostly (85%) wild origin (Ruggerone and Irvine 2018). As we will discuss below, the high variability of pink salmon and differences in abundance between odd-year and even-year lines is often used to examine competitive interactions and ecosystem level impacts of salmon in the North Pacific. At the basin-scale, to the extent that such effects may occur, effects of pink salmon are predominately from wild-stock populations rather than from enhanced fish.

## II. Trends in Harvest of Alaska Salmon

The high sustained abundance and biomass in the North Pacific Ocean reported by Ruggerone and Irvine (2018) is driven in no small part by historically high abundance of Alaska salmon. It is instructive to put the current levels of salmon harvest into perspective of the 115 year time series of Alaska commercial salmon harvests (Figure 2), to recognize the extent of recovery and extraordinary recent productivity of Alaska salmon. In the early 1970's, Alaska salmon harvests were at their nadir, with statewide catches of all species averaging just 22 million fish in 1973 and 1974 (Figure 2). In the “good old days” of the 1930s, catches sometimes exceeded 100 million. The State of Alaska initiated a number of management actions to address the decline and rebuild production (Clark et al. 2006), with a goal of once again reaching harvests of 100 million salmon. In 1971, the Alaska Legislature established the Division of Fisheries Rehabilitation Enhancement and Development (FRED) within the Alaska Department of Fish and Game (ADF&G) for hatchery development. In 1972, Alaska voters approved an amendment to the state Constitution (Article 8, section 15), providing for an exemption to the “no exclusive right of fishery” clause, enabling limited entry to Alaska’s state fisheries and allowing harvest of salmon for broodstock and cost recovery for hatcheries. In 1974, the Alaska Legislature expanded the hatchery program, authorizing private nonprofit (PNP) corporations to operate salmon hatcheries.

Alaska's modern salmon hatchery system started in the 1970s and grew out of depressed fisheries that reached record low harvest levels. At the same time a century old Japanese salmon hatchery system was undergoing dramatic improvements in performance with record high marine survivals of young salmon, increased releases of up to 2 billion juveniles per year, and returns of adult chum salmon ranging from

40 to 60 million fish annually (Kobayashi 1980). These impressive results caught the attention of officials and scientists developing Alaska salmon hatchery program.

Exchanges between Japanese and Alaska scientists, fishermen, and industry helped forge the enhancement strategies and policies in Alaska, resulting in similarities in the two hatchery programs. Similarities include hatcheries operated by private fishermen groups where salmon catches are taxed under a user-pay system to help defray cost of hatchery operations, a focus mostly on pink or chum salmon production, and extensive short-term rearing of pink and chums salmon fry to improve marine survival. However, as reviewed by Heard (2011), there also are significant differences between salmon fisheries, policies, and hatchery operations in the two countries. Commercial salmon fisheries in Japan have been largely dependent on hatcheries while development of hatcheries in Alaska focused on fisheries based on a careful balance between wild and hatchery production (McGee 2004). Some important differences in the two systems include locating Alaska hatcheries on non-anadromous water sources and not on important wild stock river systems, careful selection of brood stocks within a region and restricting use of hatchery brood stocks to specific geographic areas.

Alaska salmon harvests recovered rapidly in the second half of the 1970s, and exceeded 100 million fish by 1980 (Figure 2). With the exception of 1986 (96 million), the statewide catch has been over 100 million salmon annually since 1980. For 1990-2015, harvest has averaged 177 million salmon. After 1980, hatchery production started making up an increasing portion of the harvest. In the last decade (2008-2017), hatchery salmon have composed about 33% of the total commercial harvest, averaging 67 million fish annually (Stopha 2018).

This remarkable recovery and historically high abundance of Alaska salmon can be attributed to five major factors: (1) large expanses of relatively pristine and undeveloped habitats; (2) salmon management policies that have evolved since statehood (Eggers 1992, Clark et al. 2006); (3) the elimination of high seas drift-net fisheries (Clark et al. 2006); (4) production from large-scale hatchery programs designed and managed to supplement natural production (McGee 2004, Stopha 2018); and (5) favorable environmental conditions associated with the 1977 “regime shift” affecting the ecosystem dynamics of the North Pacific Ocean.

### III. Ocean Conditions and Carrying Capacity

*“Trying to define ocean carrying capacity is like trying to catch a moonbeam in a jar”. O. Gritsenko, VINRO, Moscow. Member, NPAFC Committee on Scientific Research and Statistics.*

The recovery of Alaska salmon and the record abundances throughout the North Pacific have been repeatedly linked to changes in ocean conditions characterized as the 1977 regime shift. Warming ocean conditions resulted in striking increases in primary and secondary production (Brodeur and Ware 1992). These changes in temperature and lower-trophic level production were associated with profound changes in species composition of fish and crustaceans (Anderson and Piatt 1999). Salmon as a group benefitted (and are an important component of) these ecosystem level changes, with the dramatic increases in abundance observed around the Pacific rim. The importance of the marine ecosystem to the abundance trends is emphasized by the success of large-scale enhancement systems in both Alaska and

Japan concurrent with the high production of wild stocks from Alaska and Russia. Wild stocks are responding to the effects of climate on both freshwater and marine ecosystems, while variation in hatchery returns for a given level of production is driven entirely by the marine conditions encountered.

Carrying capacity has been defined as the ability of an ecosystem to sustain reproduction and normal functioning of a set of organisms (Farley et al. 2018). For salmon in the ocean, feeding and survival conditions are defined by a complex of physical and biological factors, involving both bottom-up (prey) and top-down (predators) processes (Radchenko et al. 2018). These are dynamic processes, resulting in annual variability in salmon production in the marine environment. The ocean conditions driving these processes vary over both short and long time periods, so that annual variability occurs in the context of “regimes” that can be favorable or unfavorable to salmon (Beamish et al. 1999,2004; Shuntov et al. 2017; Radchenko 2018).

Over the past few decades, “carrying capacity” conditions in the North Pacific Ocean have been generally favorable to Pacific salmon as reflected by the sustained high abundances and catches. However, responses of stocks of Pacific salmon have not been uniform during this period, and extremes in survival and production have occurred both temporally and geographically. Survival and year-class strength of salmon is the result of responses to local, regional, and basin scale conditions, and not a result of a homogeneous ocean carrying capacity (Heard and Wertheimer 2012).

Marine survival of Pacific salmon is more correlated between neighboring populations than with more distant ones (Mueter et al. 2005; Pyper et al. 2005; Sharma 2013), emphasizing the importance of local and regional conditions. The first few months at sea is the period of highest mortality per day for juvenile salmon in the marine environment (Heard 1991; Quinn 2005; Farley et al. 2007, 2018). Variability in mortality during this period can be large, and can be the major driver of year-class strength. An extreme example is the returns of Fraser River sockeye salmon in 2009 and 2010. In 2009, only 1.5 million fish returned, the lowest return since 1947; in 2010, 29 million fish returned, the highest number since 1913. Conditions during the early marine period are considered the primary factor affecting these changes in survival of Fraser River sockeye salmon (Beamish et al. 2012).

Salmon surviving the early marine period are exposed to continued mortality, albeit at a lower rate (Quinn 2005). The first winter at sea has been posited as a critical time period for determining year class strength (Beamish et al. 2004; Moss 2005). Older immature and maturing salmon have much lower mortality rates (Ricker 1976), but these extend over a longer period of time, from 1 year for pink salmon to 5 years for Chinook salmon. Forecasting approaches using juvenile salmon abundance index to predict returns (Wertheimer et al 2017; Murphy et al. 2017) assume that recruitment through the early marine stage has established year-class strength, and that subsequent mortality does not vary substantially from year-to-year. However, Radchenko (2018) reports that cumulative ocean mortality can vary 1.5-2 times. These ocean effects on survival can result in large deviations, positive and negative, from forecasts from juvenile salmon indexes (Figure 3). For 2006, the forecast for Southeast Alaska pink salmon harvest was 35 million fish; the actual harvest was 11 million fish, less than one third of the forecast. In contrast, the pink salmon forecast for 2013 was 53.8 M fish, but the forecast was 43% lower than the actual harvest of 94.7 million fish, the largest harvest since catch records were recorded dating back to 1900 (Figure 3, Figure 4).

These results illustrate that variations in marine survival between different local or regional areas occur in the context of larger basin-scale climatic influences on overall production levels of pink and chum salmon in the GOA. Prevailing basin-scale conditions likely strongly influence environmental factors that favor a higher or lower range or level of potential survival for juvenile salmon from different regions.

The “carrying capacity” encountered by a salmon population is a cumulative effect encompassing different life-history phases. The conditions encountered by the salmon will depend on their geographic origin and their ocean migration patterns, which differ by species and stocks. The ocean is a dynamic environment, with substantial variability throughout the North Pacific basin. In 2013, “carrying capacity” for pink salmon in the Gulf of Alaska (GOA) was high, with strong returns throughout the GOA. Returns in both Southeast Alaska and PWS were at record levels. In contrast, in 2015 pink salmon again returned to PWS in record numbers, while returns in Southeast Alaska were below the 1995-2015 average and below forecasts from juvenile salmon indexes, demonstrative of the regional nature of the response of pink salmon stocks to ocean conditions (nearshore and oceanic).

While the general warming in the North Pacific Ocean has been a feature of the high productivity for salmon (Brodeur and Ware 1992; Mantua et al. 1997; Farley et al. 2018), ocean warming events associated with climate change are occurring with more frequency, often with detrimental impacts on salmon (McKinnell 2017). Recent ocean warming events are associated with the decline of the even-year pink salmon in Southeast Alaska. From 1960 through 2005, there was no clear dominance of even or odd year lines of pink salmon in Southeast Alaska (Figure 4). In the summer of 2005, juvenile pink salmon from SEAK encountered anomalous warm conditions in the Gulf of Alaska (Figure 5). These ocean conditions were associated with the occurrence of neretic fish and invertebrates characteristic of more southern locales, including Humboldt squid, blue shark, Pacific sardine, and pomfret (Wing 2006). The resultant 2006 return was, as noted above, only one-third of forecast, and the lowest since 1988. Even year pink salmon appeared to be recovering relative to the 2006 return, attaining a harvest of 37 million in 2014.

In the winter of 2014/2015, another marine heatwave, aka the warm blob, reached the eastern GOA (DiLorenzo and Mantua 2016). The 2014-brood pink salmon that entered the GOA in 2015 again had poorer than expected survival, attaining only half of the forecast in 2016 (Figure 3). Poor pink salmon returns occurred throughout the Gulf of Alaska in 2016, resulting in a Federal disaster declaration for the fishery. The broad nature of the pink salmon run failure is indicative of shared ocean effects. However, regional and local variability were also apparent. In Southeast Alaska, harvests of pink salmon in the northern area were 20% of the recent 10-year average, whereas in the southern area harvest was 80% of the recent 10-year average. In PWS, much of the catch was supported by fish from Solomon Gulch Hatchery, which was still 50% below forecasts based on average marine survivals. Marine survivals were poorer yet for pink salmon from Prince William Sound Aquaculture Association hatcheries, where returns were less than 20% of forecast (Russell et al. 2017).

The 2005 and 2015 ocean heat waves thus had a broad-scale impact on the carrying capacity for pink salmon in the Gulf of Alaska, with 2015 having a more pervasive impact among regions. Both wild and hatchery fish were affected; the return to SEAK is predominately (> 95%) wild, and the hatchery return

to PWS was the lowest since 1993.

It is noteworthy that despite the poor returns of pink salmon, generally the most abundant species in the Alaska harvest, statewide harvest in 2016 was still above 100 million salmon (Figure 2). Variability in abundance numbers throughout the North Pacific reflects high variability in pink salmon, which appear to be the most sensitive salmon species to annual changes in ocean conditions because of their lack of multiple year-classes at sea.

Ruggerone and Irvine (2018) raised the concern that the high abundance of salmon coupled with variability in stock performances indicates that carrying capacity of the North Pacific Ocean for salmon has been reached or exceeded. This is not the first time such concerns have been raised. Various authors over the past 20 years have posited that high abundance of pink, sockeye, and hatchery chum salmon may have exceeded carrying capacity and be negatively affecting or constraining salmon production (e.g., Peterman et al. 1998; Ruggerone et al. 2003; Davis (2003); Sinyakov (2005, cited in Shuntov et al. 2017). In spite of these concerns, abundance and biomass have continued to be high, reaching record levels in recent years (Figure 1).

As Shuntov et al. (2017) noted, ocean carrying capacity for Pacific salmon is not a fixed productivity limit, and the considerable regional and temporal variability in salmon stocks is a response to non-homogeneous ocean conditions. Rather than indicate that carrying capacity has been exceeded, the trend of the past three decades show that the North Pacific Ocean has had the capacity for the recovery and sustained production of wild stocks while supporting the expansion of large-scale enhancement production from Japan (chum salmon) and Alaska (chum and pink salmon). The sky has not yet fallen. This is not to say that the high abundance will persist indefinitely. The shock of the marine heat waves of 2004/2005 and 2014/2015 to Alaska pink salmon demonstrates that carrying capacity can vary within a productive regime, and reminds us that the status of the current production regime is vulnerable to both gradual and abrupt changes driven by a warming climate. Continued warming could result in contraction of the range of Pacific salmon in the North Pacific Ocean (Welch et al. 1998).

#### **IV. Trophic Position of Salmon in the North Pacific Ecosystem**

A major concern over the high abundance of salmon is that their feeding capacity alters the biomass of oceanic zooplankton, and in turn the phytoplankton biomass (Ruggerone and Irvine 2018; Batten et al., in press). This “trophic cascade” and alteration of the food web has been linked to decline in size and abundance of Alaska Chinook salmon and coho salmon (Ruggerone and Irvine 2018; Shaul and Geiger 2016); growth and diet of salmon (Davis 2003); and declines in seabird nesting success and survival (Springer and Van Vleet 2014; Springer et al. 2018).

Dominance of oceanic food webs by salmon is not consistent with the abundance and biomass of salmon relative to other components of the North Pacific ecosystem, including competitors and prey fields. In the western North Pacific, Shuntov et al. (2017) estimated the nekton biomass was 81.3 million t (from 50 to 100 million t in different years). Pacific salmon accounted for 1–2% of this biomass in the 1980s. Biomass of salmon subsequently increased to the current levels of 4-5 million t, representing 4-8% of total nektonic biomass during the current period of high abundance. During this period, the biomass of

the two most abundant fish species within their ranges in the North Pacific, walleye pollock (*Theragra chalcogramma*) and Japanese pilchard (*Sardinops melanostictus*), reached 50 million t each.

In the epipelagic layer, Shuntov et al. (2017) estimated that the mean annual food consumption (plankton and small nekton) by the nektonic fauna varied within 210.4–327.3 million t; in the 0–1000 m layer it ranged from 389.0 to 516.0 million t. The amount of food consumed by salmon was 4–8 million t. The proportion of total nekton ration consumed by salmon in the epipelagic layer was 1% - 15%, depending on oceanic area (Figure 6).

This view of low to moderate impact on epipelagic food webs is consistent with mass-balance modeling of North Pacific ecosystems by Pauley et al. (1996). Pacific salmon and steelhead were estimated to make up 4.6% of the epipelagic fish biomass in the Alaska gyre. If squid are including as competitive nekton for zooplankton production, Pacific salmon made up 3.4% of the nektonic biomass. Estimated salmon biomass was < 1% of the estimated zooplankton biomass.

Similarly, the impacts of juvenile salmon feeding during early marine residency on zooplankton has been found to be relatively low. As noted above, the early marine residency is a period of high and variable mortality which may determine year class strength. Given more limited areal habitat than the coastal zone and ocean basin, this period may represent a potential bottleneck for survival. Orsi et al. (2004) used a bioenergetics model to examine consumption of zooplankton by hatchery and wild chum salmon in Icy Strait, Southeast Alaska. They found that juvenile chum salmon consumed only 0.05% of the zooplankton/km<sup>2</sup> in the upper 20-m of the water column, and 0.005% for the integrated water column to 200 m in June and July in 2001. Because juvenile salmon are typically in the upper water column, total standing crop of zooplankton is not likely to be available as forage on a daily basis, but does represent a source for zooplankton abundance in the surface layer through vertical diel migrations. The percentage of available prey consumed by juvenile salmon in the neritic habitat of Icy Strait was less than 0.05% of the available standing stock. Low consumption estimates were also estimated by several other studies. Karpenko (2002) reported that juvenile chum salmon consumed between 0.1 and 1.1% of the total stock of zooplankton in the upper 10 m of Karaginskii Bay, Kamchatka from June to August over a 5-year period. Cooney (1993) estimated juvenile salmon in PWS consumed 0.8–3.2% of the total herbivore production and 3.0–10.0% of the macrozooplankton production. Boldt and Haldorson (2002) reported that juvenile pink salmon near PWS could consume 15–19% of preferred prey taxa such as large calanoid copepods and amphipods if the available standing crop was fixed over a 10-day period; however, on a daily basis, consumption of no taxon exceeded 2% of the standing stock.

Pink salmon have been identified by some authors as the salmon species most affecting oceanic food webs (Ruggerone and Irvine 2018). Surface layer zooplankton indexes have been associated with differences in abundances of odd- and even-year pink salmon stocks (Batten et al. in press). However, there was no directed fish sampling or monitoring of zooplankton below the surface layer (7.5 m) in Batten et al.'s study. Radchenko et al. (2018) reviews studies showing that “as a rule, no significant correlations occur among pink salmon growth rate, stock abundance, or zooplankton standing crop.”

A conceptual problem to assigning plankton depletion to pink salmon feeding is prey-switching by salmon species. Pink, chum, and sockeye salmon have substantial overlap in their diets, and the latter two species have been shown to switch to other, “lower-quality” prey when pink salmon are abundant

(e.g., Davis 2003). These changes in feeding habit are often used to support the concept of density-dependent interactions with pink salmon and their congeners, e.g., Ruggerone and Connors (2015). However, if other species switch prey in response to high pink salmon abundance, they certainly would switch back to the “higher value” prey when pinks are not as abundant. Chum and sockeye salmon make up on average 78% of the biomass of these three species. As a result, there is more of a constant prey demand among this feeding guild in spite of the high variability in pink salmon abundance in the North Pacific. Rather than shaping the ocean food web, pink salmon appear to be most sensitive to interannual changes in oceanic conditions, resulting in high variability in their numbers, both temporally and geographically.

Competition among species may also be minimized by the distribution of salmon in oceanic habitats. Unlike the schooling behavior characteristic of juvenile salmon and maturing salmon in nearshore and coastal areas, salmon at sea are widely dispersed (Shuntov 2017). This behavior reduces competitive interactions and makes their feeding, growth, and survival in the ocean more density-independent.

The record numbers and abundance of Pacific salmon can appear to be an imposing load on the North Pacific Ocean ecosystem. Four to five million tons of biomass is not a trivial amount. Of this 40% is hatchery origin, primarily chum salmon. Approximately 5 billion hatchery juveniles are released into the North Pacific annually (Figure 7). However, the North Pacific Ocean is a large marine ecosystem, and the numbers are not overwhelming when put into context of total nekton and forage bases. Not all nektonic prey is available to salmon due to depth distribution; Ayedin (2000) concluded local depletion of prey by salmon can occur as salmon school density increases, even if prey is not depleted over large ocean areas. This is an important point in understanding regional differences in changes in size at return.

The sustained high marine abundances of both natural- and hatchery-origin salmon over the past 25 years indicates that the trophic structure has not been altered in some way that inhibits salmon productivity. We agree with the conclusion of Shuntov et al. (2017): “... the role of salmon in the trophic webs of subarctic waters is rather moderate. Therefore, neither pink nor chum salmon can be considered as the species responsible for the large reorganization in ecosystems and the population fluctuations in other common nekton species.”

## **V. Competition and density dependence versus density independent responses**

An intuitive concern with the high abundance of salmon in the context of ocean carrying capacity is that density-dependent competition for limited prey resources may affect growth and survival of salmon populations. Pink, chum, and sockeye salmon have substantial overlap in their diets (Davis 2003, Brodeur et al. 2007) and the latter two species have been shown to switch to other, “lower-quality” prey when pink salmon are abundant (e.g., Davis 2003). High abundance of pink salmon in the Gulf Alaska has been associated with growth and size at return of chum salmon, sockeye salmon, coho salmon, Chinook salmon, and pink salmon themselves (e.g., Agler et al. 2011; Jeffrey et al. 2017; Ruggerone et al. 2003, 2018; Shaul and Geiger 2017; Wertheimer et al. 2004a). Reduced growth can result in lower size-at-age, shifts in age at maturity for species spending multiple years at sea, and reduced fecundity, which can affect productivity of salmon populations. Ruggerone et al. (2003) ascribed large reductions



in marine survival of Bristol Bay sockeye salmon to the impact of Asian pink salmon on the sockeye salmon growth at sea. The concern for density-dependent competition is not new; Peterman (1984) found evidence of density-dependent interactions between Fraser River and Bristol Bay sockeye salmon. This was at a time when salmon abundance had not expanded to current levels and when hatchery fish made up a low proportion of the abundance and biomass. As salmon abundance and biomass increases, Aydin (2000) concluded that density-dependent interactions could result in negative feedback loops on prey availability in the ocean ecosystem.

Despite the existence of competitive interactions in the marine environment, high abundance and biomass have not resulted in consistent negative trends in salmon size or productivity. Ruggerone et al. (2018) reported that average size has declined for chum salmon and pink salmon since 1925, but not for sockeye salmon (Figure 8). Most of the size decline for pink and chum salmon occurred prior to 1977, which would suggest that pre-1977 regime change conditions were more important than density dependent interactions. Size of pink salmon and sockeye salmon remained stable during the recent period of high abundance, while chum salmon showed some continued decline. Jeffrey et al. (2017) reported similar results for average sizes of British Columbia pink, chum, and sockeye salmon since 1951. Pink salmon declined initially in size, and then have remained relatively stable since the 1990s at a size that is 20-30% less than in the 1950s and 1960s. There was little change over the time series in the average size of sockeye salmon. Regional differences have certainly been observed. For example, Wertheimer et al. (2004) found evidence of size declines in PWS pink salmon in relation to pink salmon abundance in the GOA, while. Shaul and Geiger (2017) reported that pink salmon size has increased in Southeast Alaska in recent years.

Helle et al. (2007) found that body-size of pink, chum, and sockeye salmon from Alaska to Oregon generally declined in after the 1977 regime shift as salmon abundance increased, until 1994. After 1994, body size of these species generally increased, during a period when biomass and abundance was at sustained high levels. They attributed the initial decline to density-dependent competition, and the lack of relationship of abundance to size in the latter period as an outcome of favorable ocean conditions. They concluded that the carrying capacity of the North Pacific Ocean for producing Pacific salmon is not a constant value and varies with changing environmental and biological factors.

In their study on size of British Columbia salmon, Jeffrey et al. (2017) examined the relationship of size trends to estimates of salmon biomass in the North Pacific Ocean. They found that the biomass of North American pink salmon entering the Gulf of Alaska was the most important biomass variable in explaining size variation in BC pink salmon. The direction of the effect was negative, suggesting intraspecific competition was affecting size. For chum salmon, combined biomass of North American pink, sockeye, and chum salmon was the most important biomass variable explaining size variation. The direction of the effect was negative, suggesting some degree of competition among these congeners. Biomass of North American chum salmon was the most important biomass variable explaining size variation in sockeye salmon. Adding Asian chum salmon to this (or combined measures of biomass) did not improve the fit. The direction of the effect was positive, indicating that when chums are abundant, growth conditions for sockeye are positive.

These associations (and lack of associations) between ocean abundance and size at return of Alaska and British Columbia salmon indicate that while competition can affect size and growth, density-

independent ocean conditions drive the variability in abundance and can override the impacts of density-dependent competition. We reiterate the findings of Radchenko et al. (2018) that generally, no significant correlations occur among pink salmon growth rate, stock abundance, or zooplankton standing crop.

Reduced survival and productivity of wild stocks in Alaska have been attributed to competitive interactions with Asian pink salmon (Bristol Bay sockeye salmon; Ruggerone et al. 2003) and hatchery pink salmon (PWS pink salmon; Hilborn and Eggers 2001). Alternate analyses and recent trends have refuted these conclusions. In Bristol Bay sockeye salmon, Ruggerone et al. (2003) estimated reduced survivals of even-year sockeye salmon smolts from Bristol Bay at 23-45% less than odd-year smolts for the 1977 to 1997 smolt years. Even-year smolts enter the ocean when odd-year pink salmon are on average more abundant. They concluded that competitive interactions with Russian pink salmon reduced growth of even-year smolts, and resulted in substantially lower average smolt survival. However, the abundance of Russian pink salmon was highly variable over the time period for both odd and even year lines. When pink salmon abundance was considered in a time series analysis of the survival data, rather than using odd/even year average survival, there was no discernable effect of pink salmon abundance on survival (Wertheimer and Farley 2012). Subsequent to the 1997 smolt year, both Asian pink salmon and Bristol Bay sockeye salmon increased in abundance, and a marine survival index for Bristol Bay sockeye salmon smolts was positively associated with abundance (Farley et al. 2018.) Thus increasing biomass of Asian pink salmon has not constrained the continued high productivity of Bristol Bay sockeye salmon.

In PWS, Hilborn and Eggers (2000) concluded that hatchery production provided no net benefit in terms of pink salmon harvest, but was simply replacing wild production through density-dependent interactions. However, Wertheimer et al. (2004a, 2004b) showed that a density-independent index of marine survival explained much of the variability in wild pink salmon productivity, and that there was a large net benefit from enhancement to the PWS pink salmon harvest, albeit with some reduction in wild stock production attributed to the effects of size at return on fecundity. Amorosa et al. (2017) also showed large net gains from hatchery production, albeit lower than would be expected from the authors own argument for proportionate increases in wild pink salmon production following the 1977 regime shift. They minimize the contribution of hatchery fish in PWS by focusing on changes in the common property fishery, dismissing the annual cost-recovery harvest of an average of eight million pink salmon in their evaluation of benefits. The cost-recovery harvest is important to the fisheries economy of PWS, and an important benefit of the enhancement program (Pinkerton 1994). The recent analysis of productivity of PWS pink salmon for the re-certification of sustainability of PWS pink salmon showed continued sustained production of wild stocks during the hatchery era (Figure 9; Gaudet et al. 2017). The historical record returns of wild pink salmon in 2013 and then again in 2015 are particularly demonstrative that wild stocks in PWS retain their high production capacity after 40 years of hatchery enhancement.

Our discussion thus far has focused primarily on the abundance trends of pink, chum, and sockeye salmon, which combined make up most of the biomass of salmon in the North Pacific Ocean. Besides interactions among these species, there is concern that their high overall abundance is negatively impacting coho and Chinook salmon (Ruggerone et al. 2018).

The commercial harvest of coho salmon averaged 1.5 million fish from 1970-1977, then increased rapidly following the 1977 regime shift, peaking at over 9 million in 1994. From 1995 until 2017 the harvest has ranged from 3 to over 6 million fish annually, averaging 4.5 million, with no apparent trend during this period (Figure 10). Approximately 22% of the commercial harvest during the latter period has been produced from Alaska hatcheries. Recreational harvest has increased in recent years, and averaged 1.2 million fish from 2007-2017 (M. Stopha, ADF&G, personal communication).

Mallick et al. (2008) examined marine survival of 14 stocks of coho salmon in Southeast Alaska. They found evidence of effects on marine survival at local, regional, and basin scales. There was high covariation in survival regionally, and no trend was noted over the recent time period. Abundance of juvenile hatchery releases in the year coho smolts went to sea was identified as affecting marine survival, but the effect could be positive or negative, depending on stock. This result exemplifies the complex competitor/predator interactions that have been posited for coho and pink salmon. Negative impacts of large hatchery releases could indicate competition for prey resources or aggregation of prey (Beamish et al. 2018). Positive influences could be a result of “predator sheltering,” where the abundant hatchery juveniles act as a buffer on predation on the less abundant, larger coho smolts (Holtby et al. 1990; Briscoe 2004; LaCroix 2009). Abundant hatchery fry and juveniles could also provide an important forage base for coho salmon. Coho salmon juveniles are a major predator of juvenile pink salmon in nearshore marine areas (Parker 1971, Hargreaves and LeBrasseur 1985) and as adults when returning to coastal areas as the juvenile pink salmon emigrate towards the ocean (Sturdevant et al. 2012).

Shaul and Geiger (2017) showed a negative trend in marine survival in recent years for Berners River coho salmon which they related to ocean biomass of North American pink salmon. They attribute the negative impact to predation of pink salmon on squids that are the major prey for coho salmon in offshore areas. They propose that pink salmon are keystone predators of squid, exerting top-down control and thus directing the energy flow in the system. In contrast, Aydin (2000) concluded that the squid, with its high biomass and productivity, was controlling energy flow to salmon. Aydin (2000) found that squid abundance, while highly variable, had increased greatly (as did salmon) after the 1977/1978 regime shift. That squid abundance increased commensurate with salmon abundance indicates the species were responding similarly to the increased productivity in the North Pacific (Brodeur and Ware 1992). Aydin (2000) also found differences in odd and even year distributions of squid in the North Pacific, which could contribute to the odd/even differences in coho salmon size observed by Shaul and Geiger (2017).

If pink salmon impacts on squid were driving marine survival for coho salmon, we would also expect decreasing trends in abundance and marine survival for coho salmon over the 1995-2015 time period of high pink salmon abundance. Instead, catch has been stable, and marine survival declines, at least in southeast Alaska, are a recent phenomenon. Commercial harvest data for coho salmon and pink salmon show very strong correlation annually (LaCroix et al. 2009). If density-dependent interactions were primary, we would expect negative correlation. The correlation is actually strongly positive; from 1960 – 2017, it had an  $r$  value of 0.82 ( $P < 0.001$ ; Figure 10). Because returning adult coho and pink salmon have roughly the same period of time in the marine environment, this indicates that shared ocean conditions are driving their year-class strength.

Size trends in coho salmon have varied regionally, with very different relationships to ocean salmon biomass. Shaul and Geiger (2017) found that size at harvest of coho salmon in southeast Alaska increased from 1970 until 1984, then declined from 1985 to 2015. They associated the decline with an index of the biomass of North American pink salmon. Their model did not indicate direct competition, but rather lagged effects at 2- and 4- years affecting the population dynamics of the squid (*Berryteuthis anonychus*). The lag response model requires that the squid have an obligate two-year life-history cycle as proposed by Jorgensen (2011). This is contradicted by other literature, which characterizes *B. anonychus* as an annual species with high productivity (Katugin et al. 2005, Drobney et al. 2008). Aydin (2000) cites studies showing that *B. anonychus* is highly productive, and spawns twice a year.

Regardless of mechanism, coho salmon size has declined in Southeast Alaska. In contrast, coho salmon body size has increased in British Columbia in recent years. Jeffrey et al. (2017) showed coho body weight declined from the 1950s, and did not reach its minimum until around 1985. Since then it has increased and is now at the highest level in the data series. The combined biomass of North American pink, sockeye, and chum salmon was the most important biomass variable explaining size variation in coho salmon, and had a positive effect on size. The authors speculate that the positive relationship may be driven by environmental conditions, which when favorable allow for greater total biomass of salmon species and higher growth (thus larger size) in coho salmon. Shaul and Geiger (2017) and Jeffrey et al. (2017) both use basin-scale measures of environmental conditions in their models exploring factors affecting coho salmon size. The contrasting results for Southeast Alaska and British Columbia are indicative of the variability in response of different populations to these conditions. This may be caused by different migration patterns in the ocean environment, or different local and regional responses of availability of salmon forage to basin-scale environmental factors.

The recent disastrous returns of Chinook salmon in Alaska has precipitated considerable focus on the least abundant but (on a fish by fish basis) most highly valued salmon species (ADF&G 2013). Chinook salmon have a highly varied and diverse life history, generally more complex than other Pacific salmon exemplified by numerous variations in run and spawn timing, freshwater biology, ocean distribution and behavior patterns, diet, slower ocean growth, and older age at maturity (Healey 1991). In the eastern North Pacific most juvenile Chinook salmon from Oregon to Southeast Alaska remained within 100-200km of their natal rivers until their second year at sea, regardless of their freshwater history (sub-yearling or yearling) and spring, summer, or fall adult run timing (Trudel et al. 2009). Healey (1983) reported that most fall type Chinook salmon tend to remain continental shelf and slope oriented during much of their ocean life history whereas many spring type fish spend much of their ocean life in more offshore waters. In recent years, based on coded-wire tag recoveries, it was found that many Alaska spring-type Chinook salmon also utilize slope and continental shelf waters as immature adults. Coded - wire tagged Chinook salmon from Southeast Alaska (SEAK) and Cook Inlet frequently are recovered in Bering Sea Aleutian Island and Gulf of Alaska trawl fisheries for Walleye Pollock (Meyers et al. 2001; Celewycz et al. 2006).

Marine habitats of Chinook salmon related to depth distribution and migration patterns are diverse and often distinct from most other Pacific salmon. Juvenile Chinook salmon distribute deeper than coho and other juvenile salmon in their first summer and fall at sea (Orsi and Wertheimer 1995; Beamish 2011). Immature Chinook salmon are associated with colder temperatures and deeper depths than other salmon species (Walker et al. 2007; Walker and Myers 2009; Riddell et al. 2018). Diel vertical migrations have

been documented in a number of data storage telemetry studies, with movement to greater depths during daylight hours (Radchenko and Glebov 1998; Murphy and Heard 2001; Walker et al. 2007). One Chinook salmon tagged in the Bering sea typically was between the surface and 100 m depth, but occasionally moved to depths in excess of 350 m (Walker and Meyers 2009).

Marine diets of Chinook salmon are distinctly different than diets of pink, chum, and sockeye salmon and more similar to coho salmon (Brodeur et al. 2007; Riddell et al. 2018). Juvenile (first-ocean year) Chinook salmon in coastal waters initially have highly varied diets composed of fish, zooplankton, and insects, then become predominately piscivorous in costal habitats (Brodeur et al. 2007). Fish made up from 65% to 99% of stomach contents by weight for juvenile (ocean- age 0) Chinook salmon sampled within the inside and outer coastal waters of SEAK (Landingham et al. 1998; Weitkamp and Sturdevant 2008). Fish were also the primary prey for immature (mostly ocean-age 1) fish in SEAK (Cook and Sturdevant 2013), coastal British Columbia (Herz et al. 2017), and northern and southern Bering Sea (Farley et al. 2009). Primary prey species included capelin, sand lance, lanternfish, and Pacific herring. In more offshore habitats, Chinook salmon consume primarily fish and squid, although euphasids can make up a substantial portion of their diet (Davis 2003; Shuntov et al. 2010; Karpenko et al. 2013). Herring and sandlance dominate the diets of older immature and maturing Chinook salmon (ocean-ages 2+) in coastal waters (Reid 1961; ATA 2016), with sandlance the dominant prey in outside waters of southeast Alaska and herring the dominate prey in inside waters (ATA 2016).

Run sizes increased across AK after the 1977 regime shift, and were variable but consistently above average until a precipitous decline starting in 2006 (Figure 11). This decline was consistent with reduced marine survival of southeast Alaska stocks after the 2000 and 2001 brood years (ADF&G 2013; Ohlberger et al. 2016; CTC 2018). Thus the decline began well after the current period of high biomass of salmon in the ocean started (Figure 1), and well after hatchery releases into the North Pacific peaked and stabilized at 5 billion per year in 1988 (Figure 7).

Size at maturity and age at maturation has declined over the last three decades for Alaska Chinook salmon stocks from southern Southeast Alaska to the Yukon River (Lewis et al. 2017). The size declines are coincident with high abundances and biomass of the Big Three (pink, chum, and sockeye salmon). Could competitive interactions with the Big Three be driving the decline? There are several lines of evidence that indicate this is not the case.

First, the differences in marine ecology we noted in the preceding paragraphs suggest that Chinook salmon, by their propensity to utilize deeper depth strata and distribute more broadly on shelf and slope areas during marine residency, are segregated to a large degree from other salmon in their use of ocean habitats with correspondingly different temperatures, prey fields, and predator complexes. These differences are exemplified by the growth differences of Chinook salmon and coho salmon in their first winter at sea. Although approximately the same size in the fall, by the following year coho salmon of the same ocean cohort are over three times larger than Chinook salmon (Riddell et al. 2018).

Second, while Lewis et al. (2017) found predominately declining size for older (ocean age 3 and 4) Chinook salmon, size of ocean age 2 fish has generally not changed over the time period (Figure 12). If competition was driving the size decline, competition should be most intense for the younger age Chinook salmon, which have a more extensive overlap in size and type of prey with other salmon. Also, lower ocean growth in Pacific salmon is typically associated with shifts in age distribution towards older

ages (Hard et al. 2008), but instead average age at maturity has declined. Thus there has not been an apparent decline in growth of 1-ocean and 2-ocean age Chinook salmon during the “high abundance” period.

Third, British Columbia Chinook salmon have been increasing in average size over this time period (Jeffrey et al. 2017). These authors found a positive relationship between biomass of North American salmon and British Columbia Chinook salmon average size, indicating that size was a function of the same favorable ocean conditions sustaining the record overall biomass.

Size declines of Chinook salmon are not new in Alaska waters; Ricker (1981) found a significant decrease in size of Chinook salmon harvested in the SEAK troll fisheries from 1960 to 1974, and identified selective fishing for older, larger fish as a factor in the decline. Research by Hard et al. (2009) and others indicate selective harvesting of large older age groups of Chinook salmon can introduce reductions in fitness and cause genetic drift in growth, size, and age of maturity due to the heritability of these characteristics. However, fishing alone does not explain the decline across the geographic range of Alaska Chinook salmon, because the degree to which populations are exposed to directed selective fishing varies considerably across the range. It also does not explain the sudden decline in marine survival, as fishing pressure and exploitation rates in the ocean have not increased (CTC 2018b).

Another large predator besides humans also target larger, older Chinook salmon. Resident killer whales have been found to preferentially feed on larger Chinook salmon (Olesiuk et al. 1990; Hanson et al. 2010). In northern British Columbia and southern Alaska waters killer whales have increased at annual rates of 2.9% and 3.5%, respectively (Hilborn et al. 2012; Matkin et al. 2014), more than doubling their abundance since the 1970s. Intense predation on larger fish, coupled with lower marine survival, could contribute to the changes at size at age and age at maturity of Alaska Chinook salmon.

There is substantial evidence that much of the variation in Chinook salmon marine survival is due to conditions in the first summer and winter at sea (e.g., Greene et al. 2005; Duffy and Beuchamp 2011; Sharma et al. 2013; Murphy et al. 2017). Local conditions encountered by juvenile Chinook salmon during early marine residency thus play an important role in determining year-class strength. However, the concordant trends in survival across such a broad geographic range indicate that large-scale processes are affecting stocks across regions. Increasing populations of pinnipeds could also be affecting early marine survival. Chasco et al. (2017) estimated predation on juvenile Chinook salmon by pinnipeds in Puget Sound had increased an order of magnitude from 1970 to 2015, and was now, expressed as adult equivalences, more than six times greater than the combined commercial and recreational catches in Puget Sound.

For Pacific salmon species that spend multiple years at sea, annual marine survival generally increases with size and age (Ricker 1976). For cohort reconstruction of Pacific northwest and SEAK Chinook salmon, natural mortality is assumed not to vary interannually and to decrease with ocean age, from 40% for ocean-age 1, 30% for ocean-age 2, 20% for ocean-age 3, and 10% for ocean-age 5 or older (Sharma et al. 2013; CTC 2018b). These assumptions are simplistic and undoubtedly not always correct, but there is little information to better inform the assumptions. Changes in the North Pacific ecosystem, such as increased killer whale populations, could introduce more mortality at older ages, and further depress realized survival during periods of poorer environmental conditions for Chinook salmon.

## VI. Conclusions

In spite of concerns over exceeding the carrying capacity of the ocean, Alaska salmon have been at unprecedented levels of abundance over the past 25 years. Conditions influencing survival in the ocean, rather than density-dependent interactions, seem to be driving both the high abundance at the basin-scale and the high variability in salmon populations at local and regional scales. The Alaska salmon harvest over the past 25 years has been characterized by sustained high production from wild stocks and large contributions of hatchery fish. Enhancement has made large net contributions to supplement wild stock harvest in some areas of the state. Density-dependent interactions have been observed at different life history stages of salmon and in nearshore and oceanic habitats during this period, but have not constrained the recovery of Alaska salmon from its nadir in the 1970's, or its sustained high abundance. Rather, density independent responses to climatic factors affecting ocean conditions appear to have largely driven the high and variable productivity of Alaska salmon.

Recent climatic and oceanographic events such as the marine heat waves of 2004/2005 and 2014/2015 in the Gulf of Alaska are demonstrative of the intrinsic variability of ocean conditions affecting salmon at local and regional scales. Will density-dependent interactions become increasingly important if and when ocean conditions become less favorable to salmon? Would then large releases of hatchery fish put wild stocks in more jeopardy? Or will hatchery fish provide a buffer to sustain fisheries when wild stock productivity is low in response to varying environmental conditions? The enhancement program in PWS offers empirical support for the latter concept. Even during the recent period of generally high productivity, wild pink salmon production in PWS has fluctuated dramatically (Figure 9). In 2009, wild stock harvests were below one million fish, while over 17 million hatchery fish were harvested. By focusing harvest on hatchery fish, managers met escapement goals (Gaudet et al. 2017). Subsequently, both hatchery and wild pink salmon set new historical highs for harvest and production in 2013 and 2015. Large releases and returns of hatchery pink salmon in years of both low and high wild stock abundance did not limit the production potential of the wild stocks.

## Authors

Alex Wertheimer retired after 35 years working for the National Marine Fisheries Service Fisheries as a Fisheries Research Biologist in Alaska. He has carried out research and published extensively on salmon in Alaska on issues including salmon enhancement technology and strategies, hatchery and wild salmon interactions, bycatch mortality of Pacific salmon, the impact of the Exxon Valdez oil spill on salmon in Prince William Sound, and the nearshore and pelagic marine ecology of Pacific salmon. He was a member of the science team that wrote the Alaska Genetic Policy, the National Oceanic and Atmospheric Administration (NOAA) Biological Review Team assessing status of Chinook salmon in the Pacific northwest, and the Chinook Technical Committee of the Pacific Salmon Commission. He was awarded the Wally Nuremberg Award for Fisheries Excellence by the American Fisheries Society Alaska Chapter. Upon retirement in 2009 after 35 years of Federal service, he received the NOAA Distinguished Career Award. Since retirement, he has continued to consult on scientific studies and reviews, including forecasting of Pacific salmon, quantification of by-catch mortality, and the Pacific Salmon Recovery Plan. He currently serves on the Pacific Salmon Commission's Standing Committee on Scientific Cooperation and on the Science Panel overseeing the Alaska Hatchery Research Program. He is the President of the Board of Directors of the Southeast Alaska Land Trust, and is a member of the Board of Directors for DIPAC, Inc., a major non-association private non-profit hatchery based in Juneau. He was supported in his work on this paper by the Northern Southeast Alaska Aquaculture Association.

William (Bill) Heard retired in 2012 after 52 years of Federal Service as Fishery Research Biologist. Much of his career was with NOAA Fisheries Alaska Fisheries Science Center's Auke Bay Laboratories, but he also worked for the U.S Fish and Wildlife Service Bureau of Commercial Fisheries and Bureau of Sport Fisheries and Wildlife. He did extensive research and published frequently on Alaska salmon and other fishes. Bill authored or co-authored peer reviewed publications on all five species of North American Pacific salmon. For over 35 years he supervised research at Little Port Marine Research Station focused on enhancement technology and ecology of pink, coho and Chinook salmon. He actively participated on many technical committees and focused groups involved with Alaska, National, and International salmon issues, including Governor Jay Hammond's Fisheries Council concerned with policies and development of salmon hatcheries in Alaska, North Pacific Fishery Management Council Plan Development Team for Fishery Management Plan (FMP) on salmon fisheries, Pacific Salmon Commission (PSC) Northern Boundary Technical Committee, North Pacific Anadromous Fish Commissions (NPAFC) Committee on Scientific Research and Statistics (CSRS) and U.S.-Japan Natural Resources (UJNR) Aquaculture Panel involved with salmon hatcheries in Japan. Participating in NPAFC, PSC, and UJNR afforded opportunity for travel to most North Pacific rim countries with populations of salmon including Russia and Republic of Korea . Bill received fre awards for research excellence in fisheries from ADF&G, Alaska Chapter American Fisheries Society, U.S. Department of Commerce Bronze Medal Award, NOAA Fisheries Employee of the Year and NOAA Fisheries Distinguished Career Award. He was an Affiliate Associate Professor, University of Alaska Fairbanks, School of Fisheries and Ocean Sciences.



## Figures

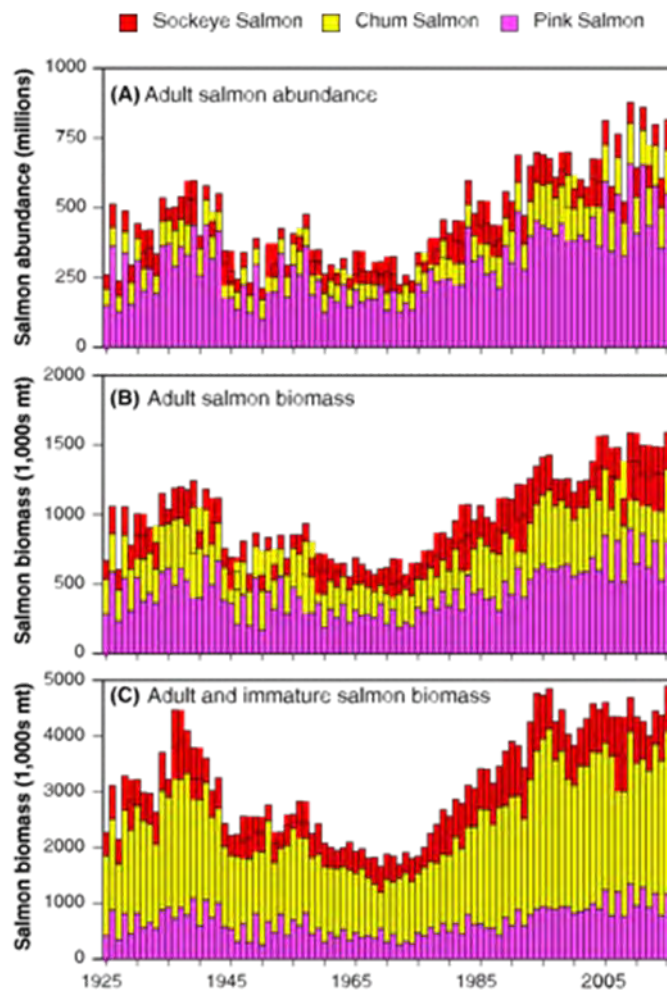


Figure 1. (A) Abundance (millions of fish), (B) adult biomass (thousands of metric tons), and (C) adult and immature biomass (thousands of metric tons) of Sockeye Salmon, Chum Salmon, and Pink Salmon in the North Pacific Ocean, 1925–2015. From Ruggerone and Irvine (2018).

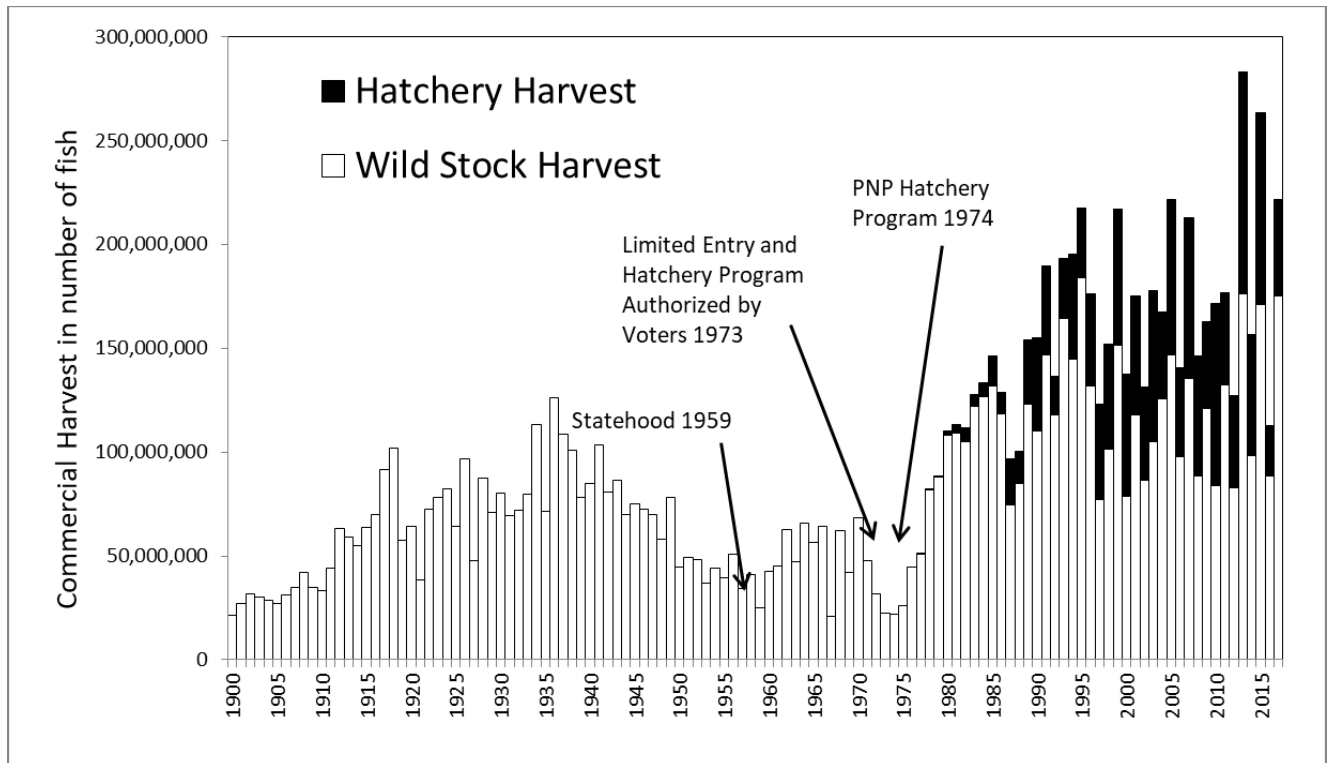


Figure 2. Commercial salmon harvest in Alaska, 1900-2017. From Stopha (2018).

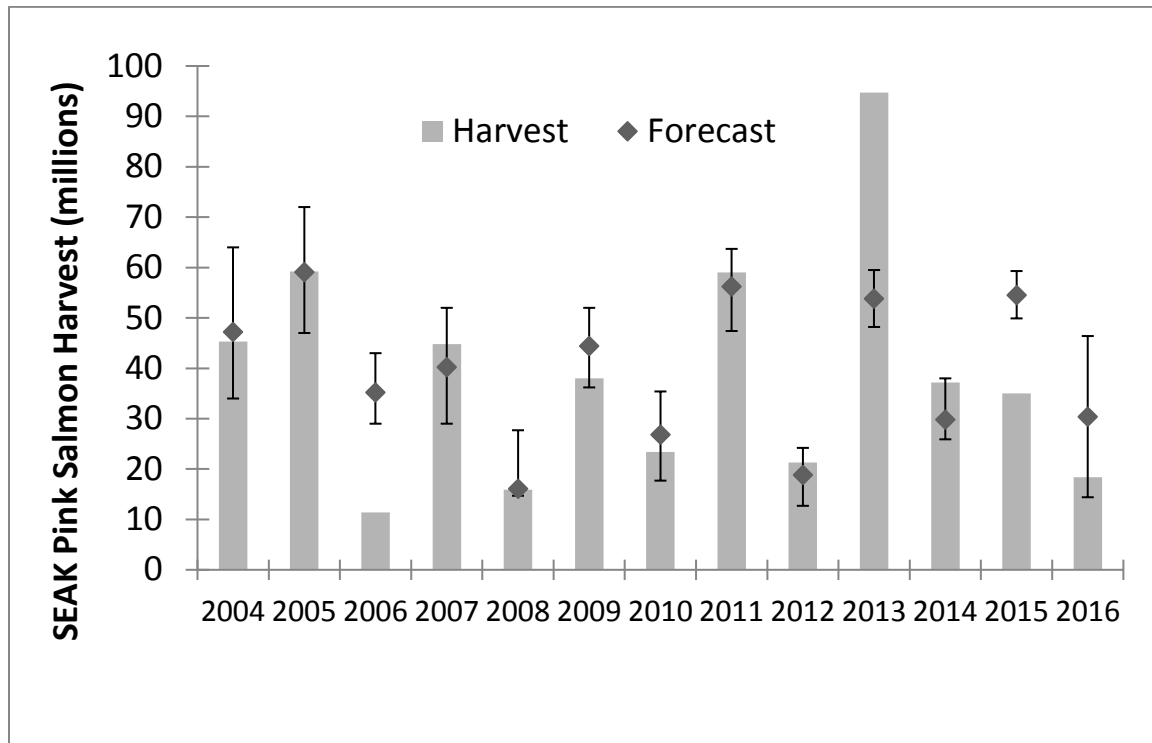


Figure 3.—Southeast Coastal Monitoring (SECM) project pink salmon harvest forecasts for Southeast Alaska (SEAK; symbols), associated 80% confidence intervals (lines), and actual SEAK pink salmon harvests (grey bars), 2004-2016.

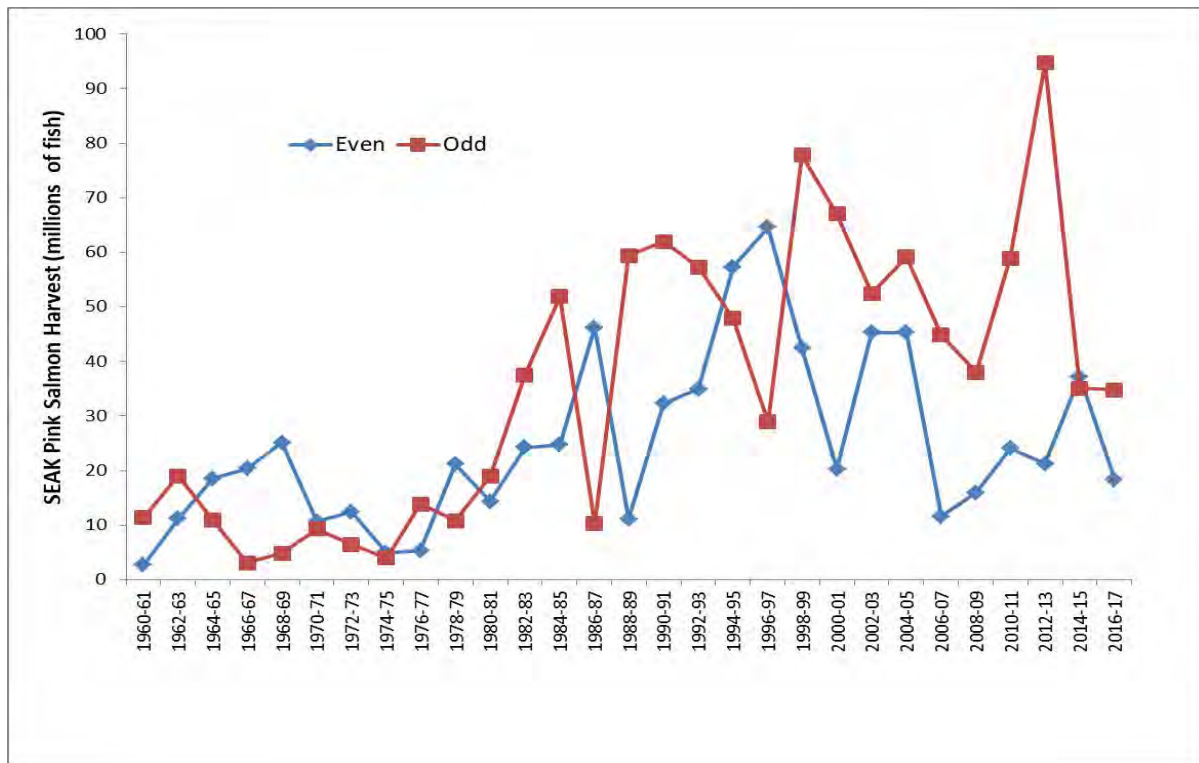


Figure 4. Even- and odd-year harvests of Southeast Alaska pink salmon, 1960-2017. Data are from Alaska Department of Fish and Game catch statistics.

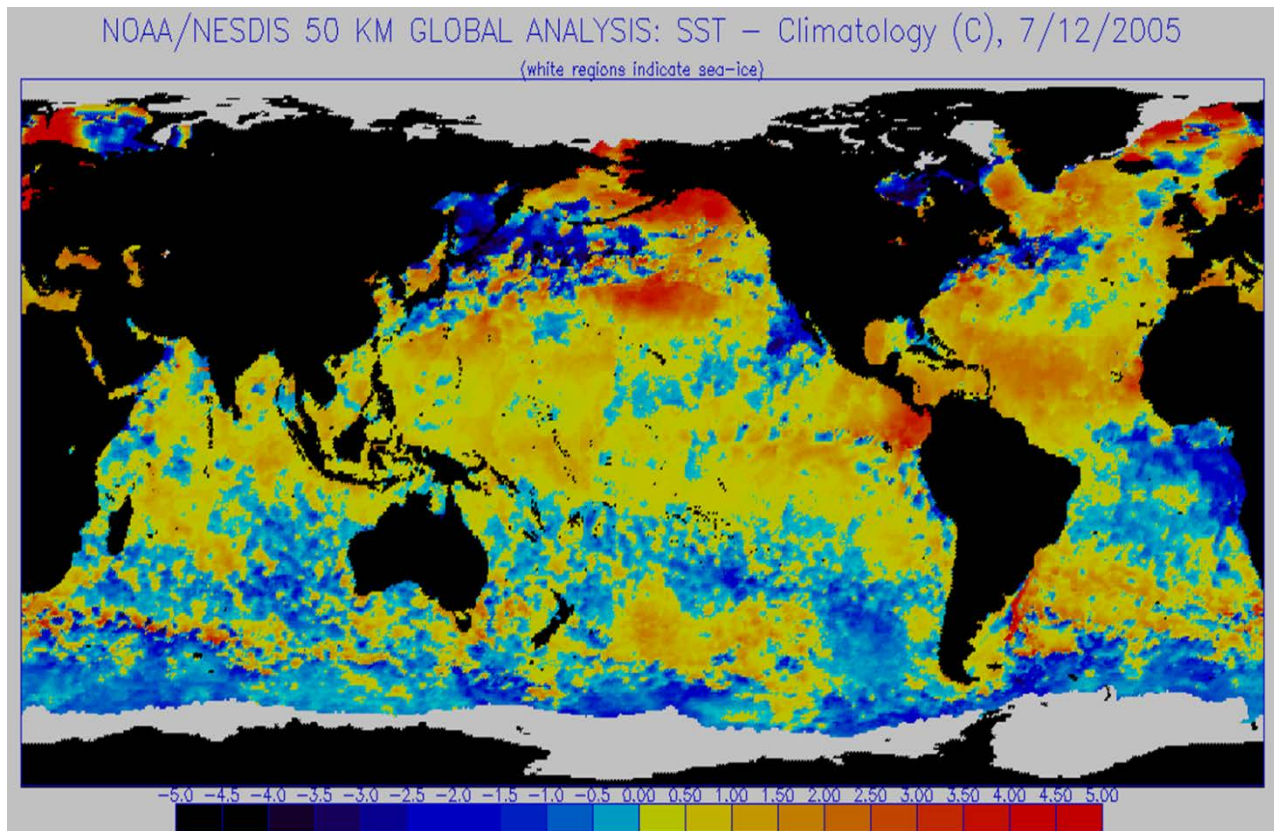


Figure 5. Sea surface temperature anomalies, July 12, 2005. NOAA Satellite and Information Service, National Environmental Satellite, Data, and Information Service (NESDIS)  
<http://www.osdpd.noaa.gov/PSB/EPS/EPS.html>

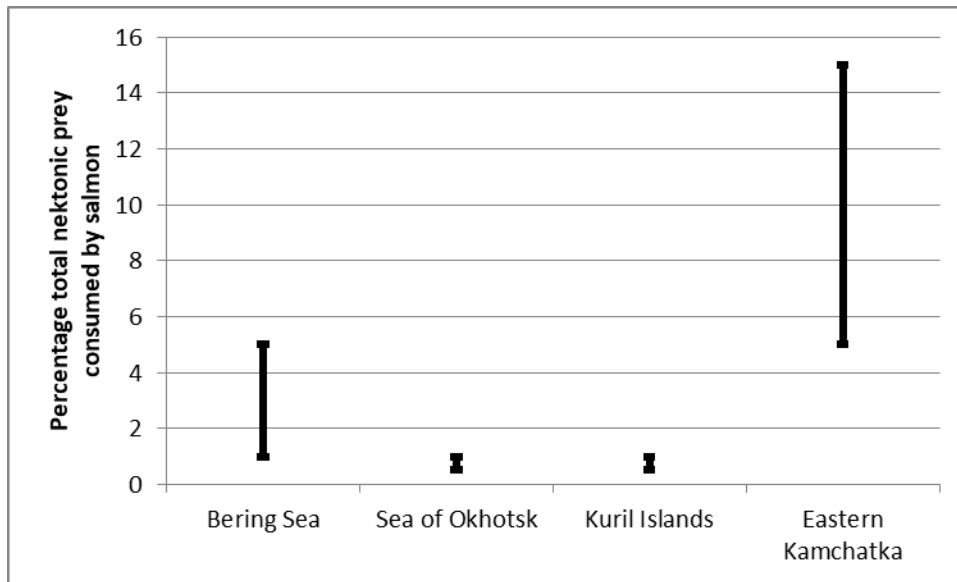


Figure 6. Percentage total nektonic prey consumed by salmon in the western North Pacific Ocean. Estimates are from Shuntov et al. (2017).

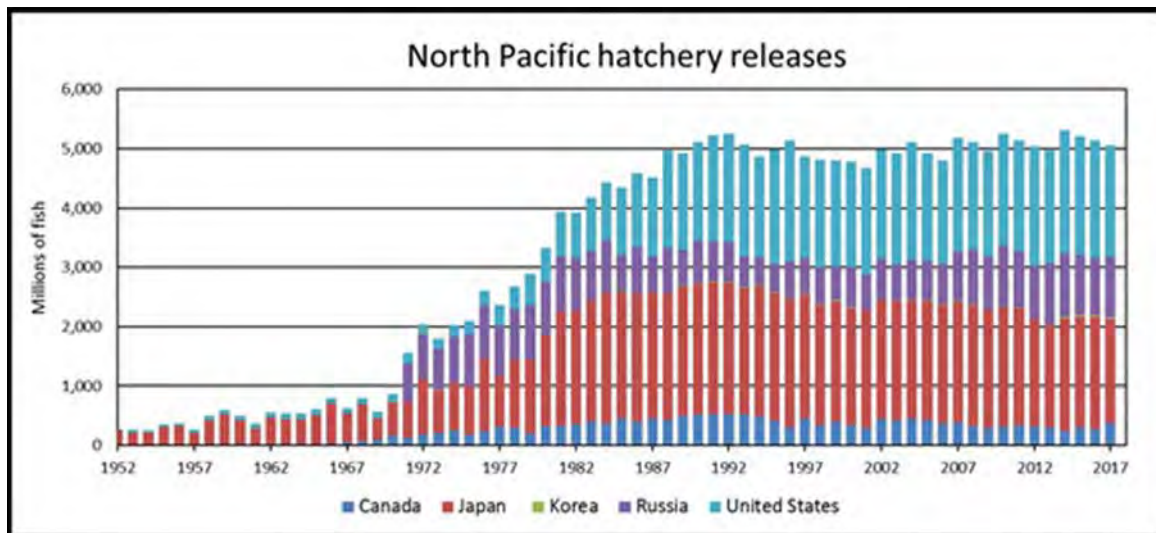


Figure 7. Hatchery releases of salmon into the North Pacific Ocean, 1952-2017. Source: North Pacific Anadromous Fish Commission.

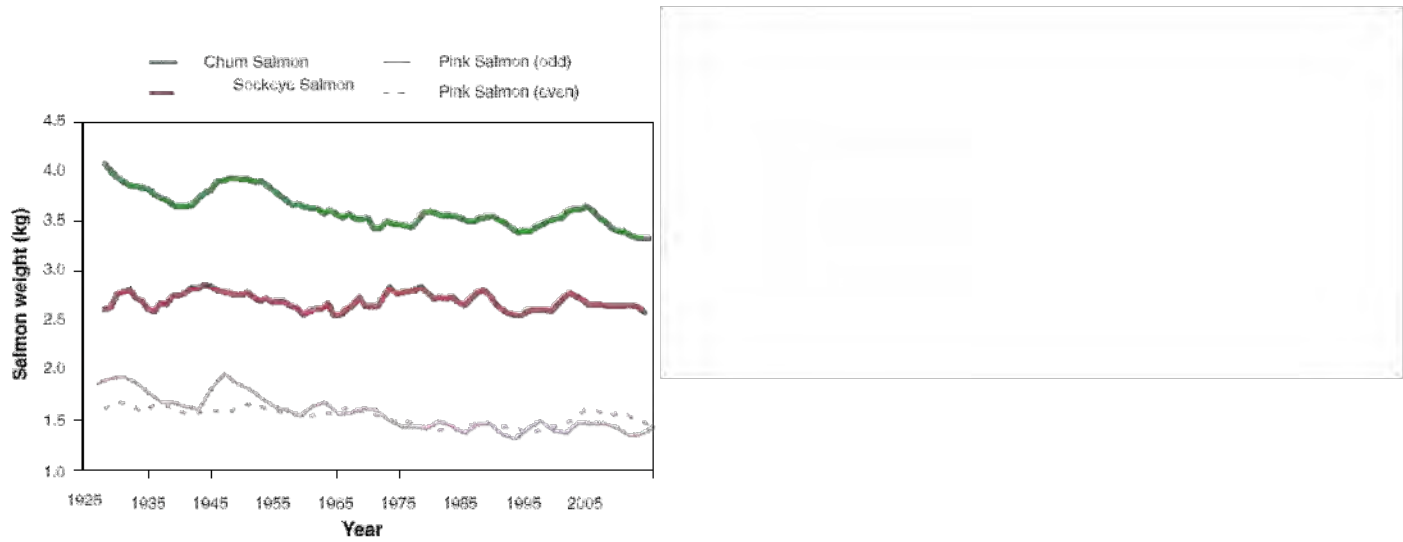


Figure 8. Average weight of pink salmon, chum salmon, and sockeye salmon captured in commercial fisheries, 1925-2015. From Ruggerone and Irvine (2018).

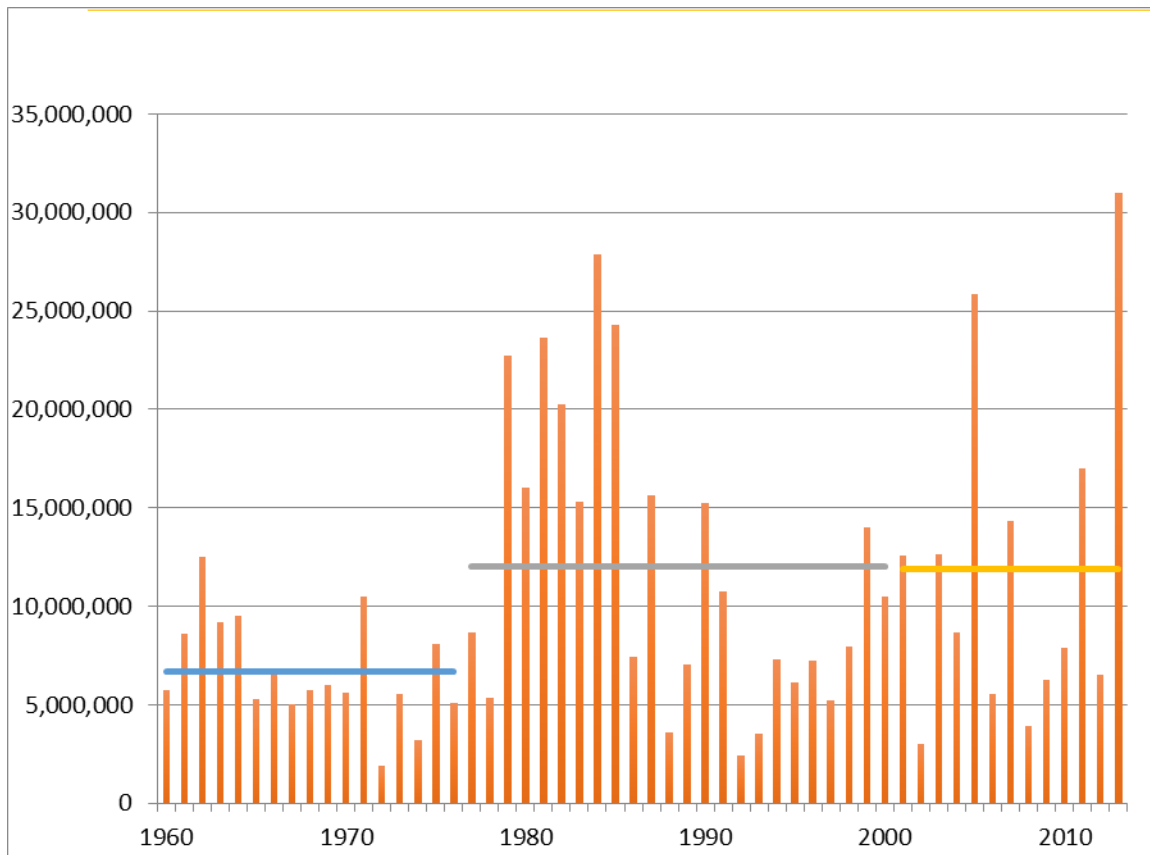


Figure 9. PWS Wild Pink Salmon Production for 1960-2013. Lines indicate average production for pre-hatchery years (1960–1976) and two hatchery time periods: 1977–2000 and 2001–2013. From Gaudet et al. (2017).



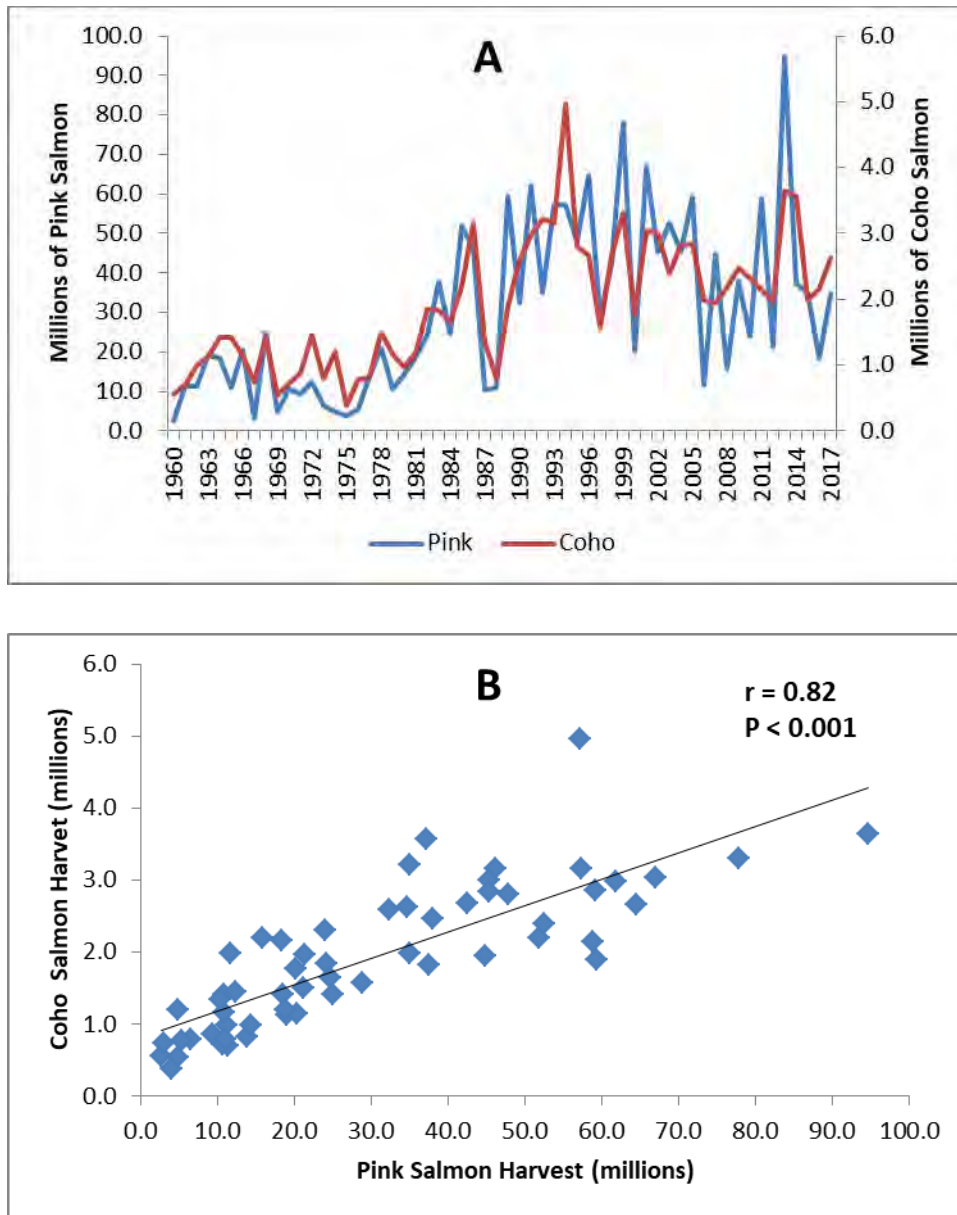


Figure 10. Commercial harvest of Southeast Alaska pink and coho salmon, 1960-2017 (A), and their correlation (B). Data are from Alaska Department of Fish and Game catch statistics.

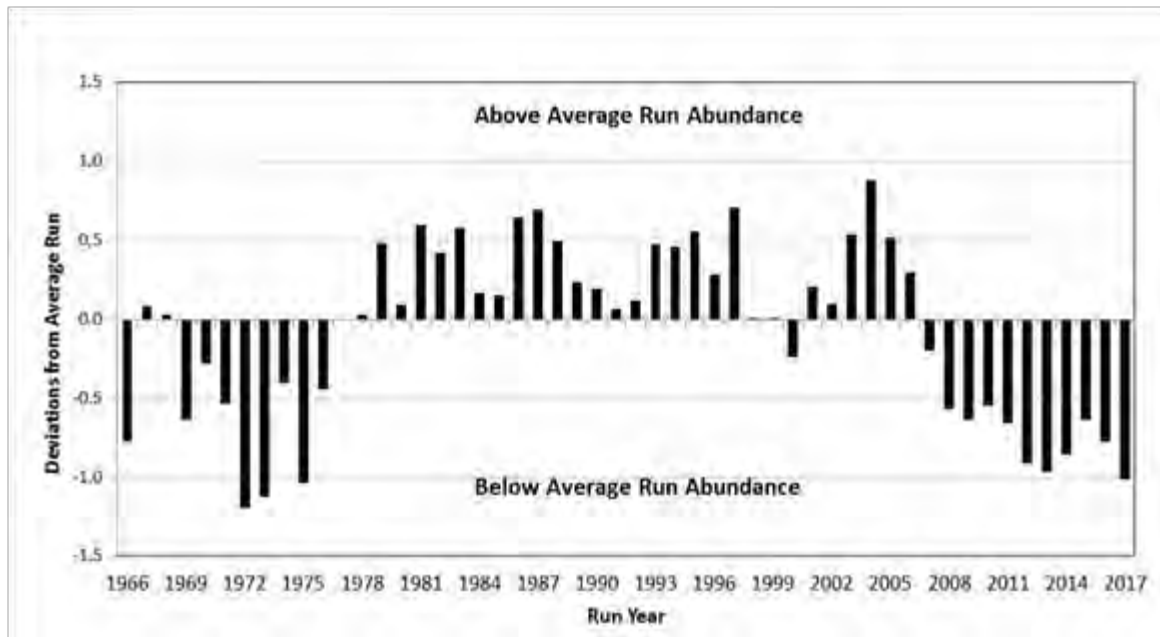


Figure 11—Average of standardized deviations from average run abundance for 21 stocks of Chinook salmon in Alaska (the Unalakleet, Nushagak, Goodnews and Kuskokwim in western Alaska; the Chena and Salcha on the Yukon River; the Canadian Yukon, the Chignik and Nelson on the Alaska Peninsula; the Karluk and Ayakulik on Kodiak Island; the Deshka, Anchor and late run Kenai in Cook Inlet, the Copper in the northeastern Gulf of Alaska, and the Situk, Alsek, Chilkat, Taku, Stikine, and Unuk in Southeastern Alaska). From CTC (2018a).

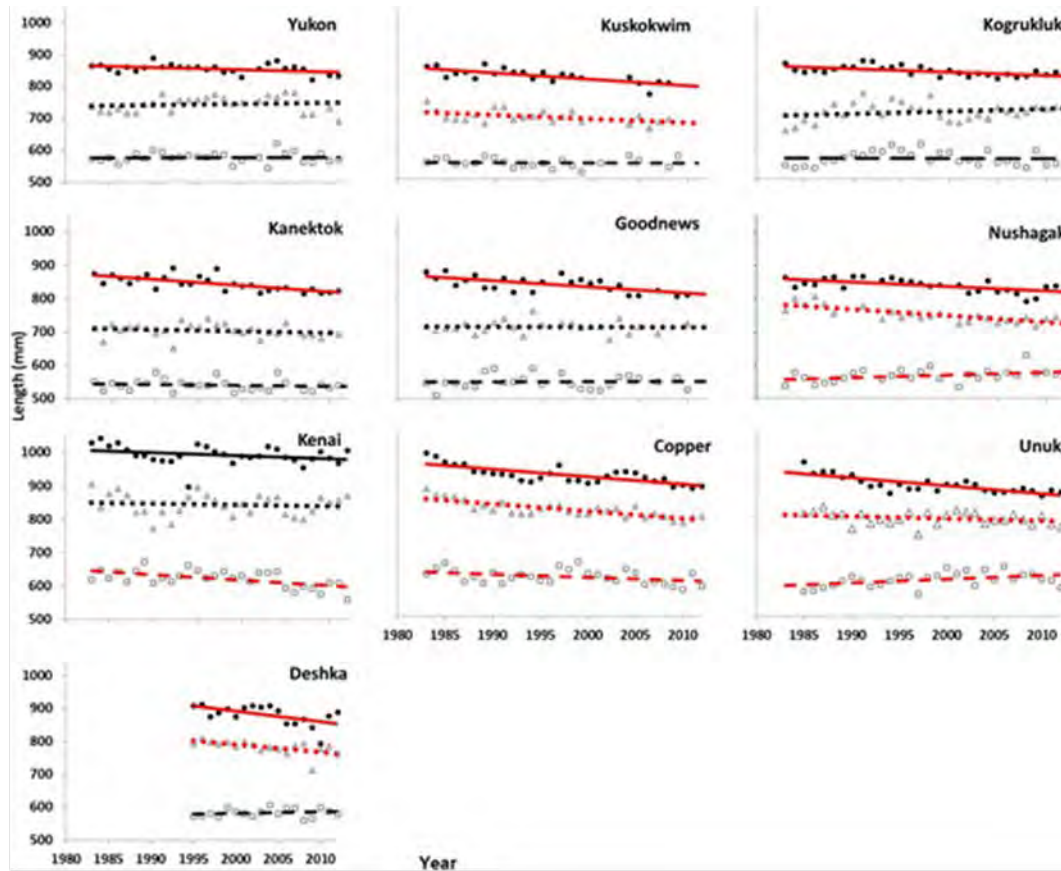


Fig 12. Linear regression of mean annual length (mm) Chinook salmon by stock, age class, and year. Closed circles and solid line = 4-ocean; triangles and dotted line = 3-ocean, open square and dashed line = 2-ocean. Red lines indicate slopes significantly different from zero ( $P < 0.05$ ). From Lewis et al. (2017).

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**Submitted by:** Ben Allen

**Community of Residence:** Willow

**Comment:**

support 51,52,53,63 We need to get more kings up river to spawn to maintain the ecology of the ecosystem and to provide opportunity for future generations. Ideally I'd like to see the commercial fishery completely closed until in river indices strongly suggest escapement goals will be met. Kings are on the brink of being listed as endangered and need protection from the most impactful user group. Last year ADF&G 's preseason Copper Basin king salmon projection was grossly overestimated which allowed for an unrestricted commercial fishery and completely closed sports fishery. The commercial fishery harvested close to half of the minimum escapement. Area managers were so concerned with in river King salmon abundance they could not even offer a catch and release opportunity to the very FEW anglers who were willing to participate. In 2020 and 2024 ADF&G could not provide a predictable king salmon sport fishery and no opportunity. oppose 55, 72 my whole season was taken away in 20&2024

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November 26, 2024

Re: **Oppose** Proposals 14, 15, 16, and 17 – PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

I am writing to you today on behalf of our family's 4 Kodiak-based trawl vessels, F/V Nichole, F/V Mar Del Norte, F/V Chellissa, and F/V Dawn, all of which are owned by my father, Joseph Ham. We are a true family business; my father, (Joseph D. Ham), continues to oversee our vessels, after being fishing himself for 30+ years. I manage bookkeeping and day-to-day operations for the boats. My sisters are also involved and two of my brother-in-laws are Captains on our boats, and all our Captains and crew are Kodiak residents. This is our home, we are raising our families here, and we are a part of the Kodiak community.

**We strongly oppose Proposals 14, 15, 16, and 17 regarding the Prince William Sound pollock fishery because these proposals offer zero benefits and only hurt Alaskan families and businesses like us, which in turn harms Kodiak.**

Prince William Sound pollock gives our vessels and crews their first paycheck of the year; we all fish there after the January 20th opener because the Sound has big, clean pollock that are easy to catch. Even though it's a longer journey from Kodiak, it allows us to bring fish to town to keep our plants operating while we wait for the CGOA pollock to school up in the Shelikof. Not only do we harvest pollock in the Sound, but our boats also spend the entire summer in the Sound, salmon tendering. It keeps us busy in the summer, but it allows us to support the salmon fleet which makes their fishery more efficient. If we stop catching pollock in the Sound, they will eat the young salmon, which will result in another disaster. This summer's salmon returns were already scary enough.

We have been fishing in PWS and tendering salmon there for about 10 years. We care about the health of PWS and maintaining sustainable fisheries. Our children, who are old enough, come tendering with us all summer (and started at 4 years old); we are training the next generation of fishermen to keep feeding Alaska and the world. Right now, the fishing industry is dealing with extreme hardship from skyrocketing costs and rock bottom ex-vessel prices. We need every opportunity, including PWS pollock and healthy pink fisheries for PWS salmon tendering, to remain in business. Taking anything away is another nail in the coffin for Alaskan family businesses like us.

We urge you to oppose Proposals 14, 15, 16, and 17.

Thank you for the opportunity to comment.

Sincerely,

Kori L. Allen

**Submitted by:** Marcus Allen

**Community of Residence:** Texas

**Comment:**

Copper River AF&G salmon management for 2024 of allowances for each consumer group and resulting insufficient fish return to spawn is evidence that management must be drastically changed to preserve the Copper River salmon fishery, especially King salmon. Sports fishing is not sustainable due to unpredictability: If, when, how long and what restrictions will be applied. Sport fishing consumer group is likely to be eliminated in the Copper River drainage; king salmon upstream of nets & wheels. Although I support Proposals like 51, 52 & 53, the high allowances for downstream consumers along with recent years' significantly lower returns creates an unequitable access to the King salmon. Increased salmon takes by Chinese and Russian trawlers, king salmon in commercial trawlers by-catch and food shortages for wild salmon from fish farming and legal non indigenous salmon is rapidly reducing returns. Downstream consumer allocations must be significantly reduced for next 3-5 years.

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Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fishermen fishing PWS gillnet for 14 years. I've been commercial fishing for 34 years.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

spencer allen

A solid black rectangular box used to redact the signature of Spencer Allen.

Homer

**SUPPORT this proposal with CDFU**

**Proposal 9 - SUPPORT**

*Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.*

The development and use of longlined collapsable slinky pots in the Pacific cod fishery allows much smaller vessels to fish pots than previously could. Multiple proposals have asked for the quota allocation of pots to be increased. Simply combining the longline and pot quota will allow fishermen to harvest the resource whichever way they prefer, while still leaving some quota set aside for small boat jig fishermen. Bycatch of rockfish is much lower when using pots than hooks. Closing the P-cod fishery to longline hooks for January and February will further incentivise fishermen to switch to fishing pots which will further reduce bycatch of rockfish.

**SUPPORT this proposal with CDFU**

**Proposal 10 - SUPPORT**

*Modify pot limit in the Prince William Sound Pacific cod fishery.*

The 60 pot limit was created when the pot fishery was being prosecuted with conventional hard pots weighing 500+ lbs and 6' tall or bigger. With the adoption of smaller lightweight slinky pots, a larger pot limit is prudent.

Lightweight, collapsible slinky pots used by the small boats participating in the cod fishery are much smaller than conventional hard pots. They have a volume of about 15 cubic ft per pot. A conventional hard pot has a volume of 120 cubic ft. Passing this regulation would allow small boats to fish 120 lightweight pots, which would further encourage the switch to pot gear from longlining hooks.

There is no definition of a slinky pot in regulation. Since it is a new, evolving technology, we would not suggest creating any regulation that might prohibit refinement of the design. Instead we suggest simply defining them as a "pot weighing less than 30 lbs".

**SUPPORT this proposal with CDFU**

**Proposal 13 - SUPPORT**

*Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery.*

There is an unharvested surplus of skates, and therefore fishermen should have the ability to harvest them. This could be either through a directed fishery or liberalized bycatch limits.

**SUPPORT this proposal with CDFU**

### **Proposal 47 - SUPPORT**

*-Require in season reporting in subsistence and personal use fisheries.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required real-time reporting for years, proving it is possible. We do not believe requiring weekly reporting on the lower Copper River will cause any burden to subsistence users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

### **OPPOSE this proposal with CDFU**

#### **Proposal 48 - OPPOSE**

*Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.*

The commercialization of subsistence resources in Alaska goes against their intended use. No one should collect profits from a subsistence fishery. Additionally, competition by professional guides in a subsistence fishery increases the cost and difficulty for participants not using a guide service to be as productive.

Preventing the commercialization and guiding within the subsistence fishery is a precedent being set across Alaska. Prohibiting the commercialization of subsistence fisheries became statewide regulation in 2024; repealing this would need to be taken up at the statewide BOF meeting.

### **SUPPORT this proposal with CDFU**

#### **Proposal 49 - SUPPORT**

*Prohibit transport services in the Glennallen Subdistrict.*

We support this proposal but with an edit that would add the restriction of “transporting” but also retain “directing” in the regulation. Removing “directing” may create ambiguity in the regulation.

### **OPPOSE this proposal with CDFU**

#### **OPPOSE this proposal with CDFU**

### **Proposals 51, 52, 53 - OPPOSE**

- Reduce commercial salmon fishing opportunity in the Copper River District.*
- Reduce commercial salmon fishing opportunity in the Copper River District.*
- Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.*

These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has shown to already restrict early commercial effort. The objectives of these proposals will have severe economic impacts to the fleet and the region.

The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment.

Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

### **SUPPORT this proposal with CDFU**

#### **Proposal 55 - SUPPORT**

*Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.*

We favor how this proposal addresses a shared burden of conservation. It is irresponsible and unsustainable to allow commercial guiding operations to efficiently harvest king salmon upriver while downriver commercial users are restricted in an effort to allow these same kings into the river. As the author stated, commercial users

throughout this river system should share the responsibilities when necessary to ensure the conservation of this resource.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 60, 61 - SUPPORT**

*-Modify the annual limit for the Chitina Subdistrict.*

*-Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.*

If the personal use fishery exceeds its allocation, there should be restrictions placed on this gear group to ensure conservation of the Copper River salmon population. With increased interest and growth in the personal use fishery, we must reduce the limits to allow all participants equal access, while also protecting this resource for future generations.

With no cap on personal use participants, the most direct way to protect the resource and remain within the allocation parameters is to reduce the annual bag limit.

**SUPPORT this proposal with CDFU**

**Proposal 62 - SUPPORT**

*Allow inseason adjustment of the Copper River personal use maximum harvest level.*

We favor how this proposal addresses a shared burden of conservation. We are in support of adopting a triggered regulation for conservation purposes. During times of concern, all user groups should be managed accordingly to ensure the long-term viability of this resource.

In years of low abundance, the commercial fishery typically bears the burden of conservation and sees significant reductions, but other user groups do not.

CDFU submitted a similar triggered-regulation proposal to the 2021 BOF meeting, which suggested a new section for regulation 5 AAC 77.591: if the Copper River District commercial harvest is 50% below the 10 year average by June 1, the maximum harvest level in the Chitina subdistrict will be reduced to 50,000 sockeye.

**OPPOSE this proposal with CDFU**

**Proposal 63 - OPPOSE**

*Amend the opening date of the Chitina Subdistrict personal use fishery.*

We share concerns about dip net pressure on Copper River stocks, however we do not support restricting management based on projected run timing curve. The run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

### **SUPPORT this proposal with CDFU**

#### **Proposal 64 - SUPPORT**

*Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.*

Personal use limits were originally set based on what needs a participant may have for the year. Allowing a user to obtain their bag limits in multiple personal use fisheries is a loophole in state regulation that should be closed for conservation purposes.

Commercial salmon boats must choose what state regulation area they will fish. In other instances in regulation, there are aggregate harvest limits based on area: In Game regulation, deer cannot be harvested to a full limit in PWS, Kodiak, and Southeast in one year.

### **SUPPORT this proposal with CDFU**

#### **Proposal 65 - SUPPORT**

*Require a weekly permit and inseason reporting in the Chitina Subdistrict.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting in the Chitina Subdistrict will cause any burden to its users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

**SUPPORT this proposal with CDFU**

**Proposal 66 - SUPPORT**

*Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.*

Despite evidence of a strong return, the egg take goal for Gulkana hatchery was not achieved in 2024. It is imperative for all user groups to be managed for salmon resource goals. A similar regulation is in place for every other hatchery in the area and this regulation alignment will close a loophole as well as ensure efficient hatchery operations.

**SUPPORT this proposal with CDFU**

**Proposal 67 - SUPPORT**

*Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.*

This proposal encompasses good science. King salmon that are released must be given an opportunity to survive and spawn.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 68, 69 - SUPPORT**

*-Prohibit dipnetting from a boat in the Chitina Subdistrict.*

*-Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.*

Regulation was written before the growing efficiency of this personal use fishery. We need to adapt regulation now to account for drastic changes in harvest and increased commercialization of the personal use fishery in recent years brought through guided express boat charters. Our Copper River king and sockeye resources simply cannot handle the impacts of an increased style of fishing prevalent in the Chitina subdistrict. The efficiency of the guided boat personal use dip net fishery has driven this gear group to be above their allocation.

**OPPOSE this proposal with CDFU**

**Proposal 70 - OPPOSE**

*Extend the lower boundary of the Chitina Subdistrict.*

The personal use dip net fishery has been exceeding its allocation in recent years. Instead of relieving pressure on the resource, this proposal to move a boundary would simply move pressure downriver: more area for the Chitina subdistrict will only increase

effort by dipnetters and lead to more boats and pressure on the resource. There is a finite resource that is fully allocated, and we cannot continue to give more.

### **SUPPORT this proposal with CDFU**

#### **Proposal 71 - SUPPORT**

*Prohibit guiding in the Chitina Subdistrict.*

We are in support of this proposal that addresses the increased commercialization of the personal use fishery. A commercial gillnet fishery for Copper River salmon already exists: the Area E commercial gillnet fishery at the mouth of the Copper River. Anyone who would like to commercialize the harvest of fish can purchase an Area E gillnet permit.

Personal use only makes sense if Alaska residents are getting access to a resource for less than it would cost to purchase the resource. The commercialization of the personal use fishery through private guiding increases the cost to the average participant, as each fisherman is forced to either compete with skilled guides in powerful boats or pay upwards of \$400 dollars a day to ride along. When personal use fishermen invest in expensive guide services to harvest their fish, it easily equates to \$20 per fish or more. This is more than someone might pay purchasing fish at Costco! Obtaining fish by paying money in the personal use fishery more closely resembles sport, because it is a joke, one where commercial fishermen are a punchline.

Prohibiting guiding in the Chitina subdistrict is a straightforward and fair way to alleviate congestion and pressure on the resource.

### **SUPPORT this proposal with CDFU**

#### **Proposal 72 - SUPPORT**

*Close sport fishing for salmon based on water temperature in the Gulkana River.*

Heat stress on salmon is well-studied. Similar practices are being put in place throughout the US.

### **OPPOSE this proposal with CDFU**

#### **Proposal 78 - OPPOSE**

*Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.*

There is no conclusive evidence to suggest this proposed decrease in pink and chum production. The BOF has repeatedly turned down similar anti-hatchery proposals for this very reason in the last twenty years. This proposal asks the BOF to modify regulation 5 AAC 24.370. However, this regulation does not address egg take level, nor does any regulation implemented by the BOF. For this reason, this proposal and any future proposals like it should be rejected.



Passing this proposal will result in serious economic harm to every salmon permit holder CDFU represents. The total economic impact of PWS hatcheries is significant, and reducing their production will mean immediate economic downturns on communities already beset with revenue losses due to depressed fish prices and fishery resource disasters. PWSAC activities alone are estimated to contribute approximately \$50 million in labor income and support roughly 2,400 jobs.

The goal of these hatcheries is not solely economic. They must achieve their corporate escapement goals to continue to operate and produce salmon for all user benefit. Their goal is to optimize Area E salmon production for the long-term wellbeing of all user groups, in addition to optimizing Alaska's wild salmon resources. We all should be reminded of the benefits that these hatcheries provide for all user groups, including commercial, sport, personal use, and subsistence.

### **SUPPORT this proposal with CDFU**

#### **Proposal 79 - SUPPORT**

*Close Main Bay to all fishing during hatchery cost recovery operations.*

All common property users should cooperate to allow PWSAC to achieve its corporate escapement goals. We should all understand the importance of efficient cost recovery and brood take at the Main Bay Hatchery. All user groups depend on the accomplishment of these two goals for the future of this resource. It is counterproductive to have some user groups interfering with PWSAC's operations that are essential for the benefit of all. Eliminating conflict and maximizing efficiency during cost recovery and brood operations will only help all users. At times, there may only be a window of just a few days when optimal harvest by cost recovery can take place. If that is bogged down by subsistence or personal use fishing, opportunity is lost for all.

Passing this proposal still allows for sufficient access inside Main Bay to harvest sockeye salmon. There are many areas outside the AGZ in Main Bay where sockeye build up and allow for great harvest opportunities for sport and subsistence users. When PWSAC is actively working to collect brood and harvest cost recovery, the Main Bay Subdistrict is generally closed to commercial fishermen, and this allows exclusive access to sport and subsistence users. Until cost recovery efforts terminate, these user groups would still have sole access to this resource outside the THA within Main Bay.

### **SUPPORT this proposal with CDFU**

#### **Proposal 80 - SUPPORT**

*-Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.*

Increasing the sport fishing distance from the barrier seine is essential to eliminating the majority of the damage from boats and tackle to the hatchery barrier seine. If we do not increase this distance, the problem will not be solved. The current setback distance does not protect hatchery property or its staff, as fishermen still can easily reach the barrier seine with their snagging hooks. Moving this distance back to 250 feet should eliminate the negative impact on the hatchery, and anglers will still have sufficient opportunity to harvest sockeye in Main Bay.

By closing the area behind the barrier seine to all sport fishing, fish being staged for broodstock will no longer be harvested. Closing the area will also reduce the number of wounded fish that are compromised and must be culled from the brood stock.

We also want to ensure ADFG has the tools to work with hatchery staff to manage the sport fishery in Main Bay. A precedent for this exists at the Ship Creek Hatchery in Anchorage, where EO authority has been used to shut down the sport fishery to ensure the hatchery accomplished its brood goals.

The end goal is to collaboratively assist PWSAC in successfully achieving their corporate escapement goals each year, while reducing the damage to PWSAC property and the risk of injury to PWSAC staff.

**SUPPORT this proposal with CDFU**

**Proposal 81 - SUPPORT**

*Modify the area open to sport fishing near the Main Bay Hatchery.*

We support PWSAC's effort to resolve this issue in Main Bay through their Proposal 81, but suggest adopting Proposal 80 to ensure the problem at hand is solved.

**OPPOSE this proposal with CDFU**

**Proposal 83 - OPPOSE**

*Allow a resident sport angler to use two rods when fishing for salmon.*

There is already reasonable access in this fishery. The suggested regulation change could cause enforcement issues. How would enforcement know that only salmon are being retained while fishing with two rods?

**SUPPORT this proposal with CDFU**

**Proposal 84 - SUPPORT**

*Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.*

Sport harvest of saltwater kings and rockfish has been significantly increasing over the last ten years. This is increasingly concerning for our region which is vested in the

conservation of Chinook salmon and rockfish. With a growing sport fish charter industry, it is not sustainable to continue to allow charter captains and crew to retain their bag limit while clients are on board. ADFG is already moving in this direction in Proposal 29, and the precedent is already set in Kodiak, Southeast, and federally for halibut. This would bring PWS into alignment.

**OPPOSE this proposal with CDFU**

**Proposal 85 - OPPOSE**

*Modify the bag and possession limit for coho salmon.*

This proposal is an allocative grab by the author to take a larger portion of the resource for the benefit of their company and clients. This year, ADFG reduced the bag limit to one coho salmon. This is not the time to double the bag limit from three fish to six fish.

The author also suggests this regulation change to target hatchery-bound coho salmon. There is already an expanded coho take in Valdez Arm to target these hatchery fish. Increasing the bag limit across the region has the potential to negatively impact many small wild coho streams around PWS.

**SUPPORT this proposal with CDFU**

**Proposal 86 - SUPPORT**

*Modify the sport fishing area and season dates in Ibeck Creek.*

With increased effort later in the season on Ibeck Creek, we support this proposal to protect spawning coho salmon. It does not make sense to allow fishing in spawning beds. These fish have already been counted as escapement by ADFG aerial surveys, and should be left to spawn and ensure future runs.

SUPPORT this proposal with CDFU

**Proposal 87 - SUPPORT**

*Modify the sport fishing area and season in a Copper River Delta system.*

We firmly support protections for spawning coho salmon in the Copper River Delta.

**SUPPORT this proposal with CDFU**

**Proposal 88 - SUPPORT**

*Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.*

We support this proposal that addresses a shared burden of conservation to protect our salmon fisheries. If the commercial fleet is restricted to protect coho salmon during years of low run entry and low aerial survey counts, the sport fishery should be similarly restricted to protect coho in the Copper River Delta. During years of low returns, we

must all work together to reach escapement goals and ensure future healthy salmon runs.

**SUPPORT this proposal with CDFU**

**Proposal 96 - SUPPORT**

*Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.*

The rebound of PWS herring populations needs action by the BOF to ensure the maximum value of the species. Changing the annual season dates to align more with the calendar year and begin with the spring sac roe fishery will enable processors and fishermen to best plan for how to participate. Instituting the rollover of quota from the sac roe fishery to the food and bait fishery will solve dilemma that exists in other Alaska herring fisheries.

**SUPPORT this proposal with CDFU**

**Proposal 97 - SUPPORT**

*Reduce the minimum herring spawning biomass threshold.*

Biomass thresholds are normally set based on a population's unfished size. There are now 30 years of population estimates where no fishery occurred. This data should be used to set fishery limits and exploitation rates.

The PWS and Gulf of Alaska ecosystems have changed drastically in the last 30-50 years, and will continue to change. There is no reason to keep the herring fishery closed until it achieves those historical population numbers. Environments are ever-changing and managers need to have an ability to adapt to outdated management strategies.

**SUPPORT this proposal with CDFU**

**Proposal 98 - SUPPORT**

*Align Prince William Sound herring and salmon management area descriptions.*

Defining salmon and herring areas in alignment will simplify regulation and bring consistency for participants in both fisheries.

SUPPORT this proposal with CDFU

**Proposal 99 - SUPPORT**

*Define commercial herring fishery districts in Prince William Sound.*

The recent discovery of a large new herring population at Kayak Island needs defined waters to operate an exploratory herring fishery.

**SUPPORT this proposal with CDFU**

**Proposal 100 - SUPPORT**

*Adopt a Kayak Island District herring management plan.*

A Kayak Island herring population was never included in the historic fishery or PWS herring management plan. As the ecosystem and climate changes, the BOF and ADFG must act rapidly to allow for new fisheries to be conducted.

SUPPORT this proposal with CDFU

**Proposal 102 - SUPPORT**

*Allow commercial fishery permit holders to harvest herring for the own use as bait.*

A regulation like this exists in most other areas in Alaska. Here are examples:

Southeast: 5 AAC 27.170. Harvest of bait by commercial permit holders in Southeastern Alaska Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held

Yakutat: 5 AAC 27.270. Harvest of bait by commercial permit holders in Yakutat Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

Kodiak: 5 AAC 27.545. Harvest of bait by commercial permit holders in Kodiak Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

Dear Alaska Board of Fisheries members and representatives,

On behalf of the majority of all citizens of Alaska collectively, as well as the citizens who reside, occupy, and work, and recreate in the Pacific Northwest including the West Coast of America as well as Canada, we are overwhelmingly in support of Proposals 14, 15, 16, and 17 that seek the Board of fisheries action to update regulations for the pelagic trawl pollock fishery in the Prince William Sound Management Area under 5 ACC 28.263.

ADF&G manages the only pelagic trawl fisheries within state waters which as you know is within 3 miles of Alaska's coastlines. Alaska's residents rely on both the anadromous species as well as the non-anadromous. Trawling, no matter the size and type, is the most destructive fishery happening in American waters and ADF&G enables the destruction by not banning trawling within their jurisdictional authority and the 3 miles within the coastline of Prince William sound, amongst all others. The data, as inaccurate and under reported as we as citizens receive, shows that trawling has all but decimated opportunity statewide for the citizens of Alaska to capitalize on both for local economic sustainability as well as the subsistence opportunity with has fed local Alaskans for literally hundreds and hundreds and hundreds of years.

It really isn't a fair management system and whomever has continued this destructive process over the last 30 years, both private individuals who lobby for the trawl fleet as well as the public appointees who have continued to allocate and cater to the trawl fleet should be tried in a court of law for treason, bribery, and the economic and nutritional losses that the citizens of Alaska have succumbed to over the past 40 years. Alaskan's and seafood go hand in hand and that's how it's always been. You, the ADF&G Board of Fisheries, over time, and time and time again, are the responsible ones who regulate us Alaskans. You have been bribed by big cooperate fast food industries and foreign owned seafood cooperations to rape and pillage anything and everything that can be made into a fish stick or fish sandwich or sell overseas from the top of the water column all the way to the bottom and everything in between at the severe cost to the citizens of this state.

As a collective Board in charge of managing and allocating by regulation, you have failed us all, (and even yourselves whether you believe that or not) significantly. Orcas and other species of whales, all species of sharks, seals, walruses, all species of crabs, squid, shrimp, halibut, all species of rockfish, all species of anadromous salmon, amongst all other aquatic species have been severely affected by allowing the trawl fleet free reign to do as they please, mostly without monitoring and oversight. Adding more monitors and oversight is not the solution as it's nowhere near accurate for a reason. I'm sure if you all knew the real true numbers of trawling bycatch and the wasted fisheries resources of this state, not including the mammals caught and discarded, you would all agree that trawl fishing is a very bad, very destructive, very indiscriminate type of fishing that can only be described as 'rape'...an act of plunder, violent seizure, and/or abuse while decimating Alaska's own economics and subsistence opportunities without any regard for the environmental impact, long term sustainability, or personal and economic impacts whose lives depend on the resource.

Not only should ADF&G immediately ban all trawling within their jurisdiction and the 3 miles within Alaska's coast in Prince William Sound, but it is imperative you also lobby the Governor of Alaska as well as our Federal Senators and fisheries managers and respective representatives and fisheries managers from WA state and also British Columbia to get trawling banned within 200 miles of all Alaska's waters being the economic sustainability of our state managed local fisheries as well as

our subsistence needs are being crushed, daily, even as you sit at this meeting and debate the issue. You all must be very proud of your service to building your resumes while serving on this Board. What all of the public sees is that you are inept at your responsibilities as Alaska's Fisheries Board members in reference to the Constitution of Alaska Article 8: "...The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people. Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use."

Lastly, I'd like to state the fact that habitat destruction from the trawl fleet around Alaska is obvious. It has been proven that many of the drag marks from the trawl fleet along the ocean's seabed are visible from Google Earth, but prior to that the drag marks were logged on sonar and underwater cameras. Every living organism that uses the Pacific Ocean, Gulf of Alaska, Prince William Sound, Bering Sea and all others, both anadromous and non-anadromous species of fish and eels, mammals, seals, walruses, whales, birds, crustaceans, etc. all rely on a healthy salt water habitat to thrive, survive, and maintain sustainability and continue healthy predictable, manageable fisheries and returns. Preserving the excess for future stocks and more economic stimulus spread further across the state of Alaska of which you represent is your sole duty as board members. The trawl fleet have become legal rapists of the Pacific Ocean and all adjoining waters. You have intentionally manipulated biological data and you also acknowledge the revenue the trawl fleet contributes to the economy albeit at the demise of all the localized traditional fisheries, both subsistence and the domestic local commercial fisheries. Fix it now or always be known to the majority of us citizens as "rapists." By doing nothing you are enabling rape. That is also a criminal offense punishable by law of which each and every one of you that serve on the Alaska Board of Fisheries are NOT immune to. Remember that; you as serve us, Alaskans; not foreigners and not the trawl fleets from Washington State and beyond. It's way past due to react and do something better. Manage without outside bias, not for personal gain, and not for personal feelings and if you want to build upon your personal resumes, represent Alaskans first. Your duty is stated above in Article 8 of the Alaska Constitution.

Thank you and sincerely,

Erik Anderson

Palmer, AK

**Submitted by:** John Anderson

**Community of Residence:** Fairbanks

**Comment:**

The Chitina Personal Use Fishery represents more than just a resource for harvesting salmon; it is a cultural, traditional, and subsistence activity that Alaskans hold dear. Any attempt to limit this fishery would unfairly burden residents who rely on it for sustenance, undermine the principles of equitable resource access, and erode an essential connection to Alaska's heritage.

First and foremost, the Chitina fishery provides Alaskans with a critical opportunity to secure fresh, high-quality salmon to feed their families. Many participants travel long distances at significant personal expense to exercise this right, and for some, the salmon caught in Chitina comprise a large portion of their yearly food supply. Limiting this fishery would disproportionately affect rural and lower-income residents who may lack alternative means to access fresh fish or commercial markets.

Moreover, the personal use fishery reflects a long-standing Alaskan tradition that connects people to the land.

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**Submitted by:** Phillip Anderson , pband3 LLC

**Community of Residence:** Cordova

**Comment:**

I am opposed to any new proposals or rules which would limit the amount of time and fishable areas. Every year, I bring a group of veterans up, stay in Cordova and we fish the Ibeck and Alaganik Slough for Silver Salmon. Luckily, these veterans are able to get further up the Ibeck as well as hike into 18 mile. Restricting these fisheries would force us to fish in close proximity to people liking to stay right along the road or the boat ramp at the Slough. What makes the Cordova fishery so appealing is our ability to escape the crowded roadside conditions and have a great time enjoying these rivers and these amazing fish. We keep only our limits and practice ethical catch and release methods to ensure the fish are treated delicately. We only fly fish so these waters are the perfect depth to do that. When the commercial boats are in, fishing becomes very limited and noticeable the closer you are to the highway system and the confluence with 18 Mile. Please reject 86, 87 and 88.

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Although I have comments for each of the proposals this year I will only highlight a few that I'm most concerned about and believe will be the best for subsistence and commercial fishing. Please take my comments seriously and don't do the government bureaucratic action of "doing what you want anyone" and saying "everyone had a chance to comment but we know better".

This rule is way over the top. What will this really do other than tell people that you "are the boss and give and take away".

- Proposal 50 – Prohibit the use of chart plotters or fish finders on boats in the Glennallen and Chitina Subdistricts.

The past 4 years have shown an increase in escapement. Although establishing this rule would more than likely increase early escapement there hasn't really been a problem making the goal.

- Proposal 54 – Allow for a maximum of 3 (12-hour) fishing periods where the inside closure area of the Copper River District is closed during statistical weeks 20 and 21.

I'm gathering food for my subsistence unlike commercial fishermen who are catching fish to make money. This proposal equates commercial fishing with subsistence fishing and they are completely different. I have the right to subsistence fish using a guide, particularly because as a Disabled Veteran doing subsistence fishing can be very difficult.

- Proposal 55 – Restrict commercial guide services in the Upper Copper River District when the Copper River commercial fishery is restricted.

The below allow for flexibility and a potential increase of subsistence fish. Giving more to the families that may need more.

- Proposal 58 – Allow the department to liberalize the Chinook salmon annual limit in the Chitina Subdistrict personal use dip net salmon fishery.
- Proposal 59 – Allow the department to liberalize the sockeye salmon annual limit in the Chitina Subdistrict personal use dip net salmon fishery.

Why establish these negative rules? Is there proof that not having these rules has minimized and hurt the escapement of fish? Also, these rules are vague.

- Proposal 60 – Modify the annual limit for the Chitina Subdistrict.
- Proposal 61 – Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.
- Proposal 62 – Allow inseason adjustment of the Copper River personal use maximum harvest limit.
- Proposal 63 – Amend the opening date of the Chitina Subdistrict personal use fishery.

This next one is just plain WRONG. This is like telling me I can fish in the MatSu area but then I can't go to Kenai peninsula and fish as well..I eat all my salmon every year and generally could use more. This proposal totally takes away a law given right established many years ago to help families in their subsistence and wouldn't prove to increase salmon run escapement. If you want to really affect the escapement, do something with the commercial fishing business to stop waste.

- Proposal 64 – Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.

What proof is there that this would do anything to help the subsistence fishing. This is just another bureaucratic rule. Is there any proof that the way reporting is done now (yearly) is negatively impacting the escapement goals? The subsistence catch is only, and maybe, 10% of all the fish caught. Really you are going to make people go from yearly reporting to you have to do it every week? Not needed.

- Proposal 65 – Require a weekly permit and inseason reporting in the Chitina Subdistrict.

Why are you going to remove a way for a Disabled Veteran from claiming his subsistence limit of fish? Using a boat is a safe way of fishing. If I have a boat I should be able to follow the laws and accomplish my Alaskan right of subsistence. If I chose to use a commercial boat to get me to a safe and productive spot on the river I should be allowed to do this. I'm the one doing the fishing, the captain isn't. I'm the one who reports the fish and ensures I don't go over my limit, the captain doesn't. This is just a way to stop capitalism from working. I believe using a boat is much safer than fishing off the cliffs.

- Proposal 68 – Prohibit dipnetting from a boat in the Chitina Subdistrict.
- Proposal 71 – Prohibit guiding in the Chitina Subdistrict fishery.

There are already restrictions and this is too vague.

- Proposal 69 – Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.

If my subsistence fishing is going to be equated to commercial fishing then there should be a complete equality to both in every rule and every law.

From what I read in the online documents the proposals I disagree with take away, remove, delete, my rights as an Alaskan to gather fish in the Copper River for the use of my family. The guided/boat services provide a safe way for me to get where I couldn't get on my own. I'm a 100% Disabled Veteran and would never be able to hike up and down the cliffs thus these rules create an even more restricted opportunity to get my family their rightful Copper River fish. Being able to use a guided service allows this Disabled Veteran a greater chance and maximizing my subsistence limit in a way of my choosing, using my abilities and particularly in the safest way due to my disabilities. Even if I wasn't disabled a boat would be safer and more productive.

To be clear the following proposals I dramatically and wholeheartedly oppose. They take away my rights as an Alaskan to use the resources of this state for my family's subsistence.

OPPOSE: 44, 45, 46, 47, 49, 50, 54, 55, 56, 57, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72

Also, note i dramatically and wholeheartedly agree with the following proposals. These few give my family greater use of the resources of Alaska.

SUPPORT:: 48, 58, 59, 70

I will be following up to see if my Alaskan rights are limited. I hope you don't treat the commercial fisheries better than my family and me just trying to gather fish for the year.

Sincerely,

Glenn Anderton

**Submitted by:** Betsy Andrews , SevenFifty Daily, VinePair, Food & Wine

**Community of Residence:** Brooklyn

**Comment:**

Dear Board of Fish members:

I support Proposal 16 to close the state-managed Prince William Sound (PWS) pollock trawl fishery. Chinook salmon are struggling in large regions of the state resulting in Alaska Department of Fish and Game (ADFG) closing or heavily restricting fishing for sport and subsistence fishing throughout the state. I also support of proposal 14 and recommend regulatory amendments that allow for Alaska DFG staff to manage the PWS pollock trawl fishery for conservation of bycatch species and important habitat under this proposal. If the PWS trawl fishery is not closed under proposals 14 and 16, the bycatch limits should be set to preserve the species that are bycaught and not be decided on the amount of pollock that is harvested. If the PWS trawl fishery is not closed under proposals 14 and 16, the fishery should have third-party onboard observers and onboard electronic monitoring to accurately verify all bycatch amounts.

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**Submitted by:** Nick Anliker , AK Expeditions

**Community of Residence:** Wasilla

**Comment:**

I believe restricting the dipnet area and even charters more will reduce interest in fishing this and also reduce food in people's freezers. I rely on charter services like AK Expeditions because I am not comfortable enough to navigate these waters but have the trust in them. I also do not want to fight for a spot on shore or repel down the rocks to attempt to put fish on the table for my family.

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**Submitted by:** Scott Anselm

**Community of Residence:** Wasilla

**Comment:**

I Support Proposals

48,51,52,53,58,59,70

I Oppose Proposals

44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71

Dip netting for personal use on the Copper river has become less and less productive. Last year was particularly poor. I support proposals and policies that will better the opportunity for Personal use fisheries on the Copper river.

Respectfully submitted,

Scott Anselm

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**PC27**

**Submitted by:** Randall Apling

**Community of Residence:** Wasilla

**Comment:**

I appose proposition 49 as I chose to hire a boat to dip salmon for safety. And not allowing this will potentially force inexperienced boaters to try to navigate this very dangerous water.

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**PC28**

**Submitted by:** Easton Armstrong

**Community of Residence:** Palmer

**Comment:**

Ok

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# ASHBURN & MASON P.C.

BENJAMIN J. FARKASH • MATTHEW T. FINDLEY • LAURA (DULIC) FISHER • DYLAN L. HITCHCOCK-LOPEZ  
 REBECCA E. LIPSON • DONALD W. MCCLINTOCK III • MICHAEL S. SCHECHTER • THOMAS V. WANG  
 OF COUNSEL JULIAN L. MASON III • A. WILLIAM SAUPE

November 26, 2024

VIA EMAIL: [dfg.bof.comments@alaska.gov](mailto:dfg.bof.comments@alaska.gov)

Chairwoman Märit Carlson-Van Dort  
 Alaska Board of Fisheries  
 P.O. Box 115526  
 Juneau, AK 99811-5526

**Re: Public Comments of Ashburn & Mason, P.C., Counsel for Prince William Sound Aquaculture Corporation in Opposition to Proposal 78 (Comment Due Date November 26, 2024).**

Dear Chairwoman Carlson-Van Dort and Members of the Board of Fisheries,

Ashburn & Mason, P.C., counsel to Prince William Sound Aquaculture Corporation (“PWSAC”), submits the following opposition and public comments to the above-referenced proposal.

## **INTRODUCTION**

Proponent asks the Board of Fisheries (“Board”) to arbitrarily override the hatchery permitting decisions of the Alaska Department of Fish and Game (the “Department”) and “[r]educe the permitted egg intake of each Prince William Sound hatchery that produced pink and chum salmon by 25%. Then do an evaluation within five years.” This proposal is a transparent attempt to veto Department permitting decisions, which AS 16.10.440(b) expressly prohibits, override the legislature’s decision to support hatchery activities, and



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financially ruin PWSAC and Valdez Fisheries Development Association (“VFDA”). It is an attack on the hatchery system and all the permit holders, crew, businesses, and communities that rely on a healthy and robust commercial fishing industry in the Prince William Sound (the “Sound”). And it is entirely arbitrary. There is no stated justification for the 25 percent reduction, it is just a percentage pulled from thin air. Even worse, there is no scientifically-validated evidence offered in support of the proposal whatsoever, just conjecture and the opinions of biased special interests that released hatchery fish in Prince William Sound are the cause of fisheries declines and closures *statewide*. For example, there is no credible evidence that pink salmon in prince William Sound are the cause for fishery closures on the Yukon River. Finally, the proposal for an “evaluation” is entirely undefined and too ambiguous a term to be implemented in a regulation.

Putting all the above issues aside, the focus of the comments here is that *the Board lacks statutory authority to amend hatchery permits and override the permits issued by the Department in the manner advocated by Proponent*. As set forth in detail below, the legislature made an express policy decision to create and support a statewide hatchery system and it invested the Department (*not* the Board) with the legal duty to oversee all aspects of hatchery creation, operation, and production,<sup>1</sup> including but not limited to how

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<sup>1</sup> AS 16.10.400–.480; 5 AAC 40.005–.990.



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many fish hatchery operators are allowed to incubate and release each year. By statute, the Department, not the Board, regulates hatchery activities that directly impact production levels, such as the harvest of eggs from hatchery broodstock.<sup>2</sup>

The Board, on the other hand, is tasked with regulating and allocating the harvest of both hatchery and wild salmon among all user groups that the hatcheries were established to serve, including commercial, personal use, sport, subsistence, and hatchery cost recovery.<sup>3</sup> The Department and the Board have respected and abided by this division of labor and authority for over 35 years. To our knowledge, the Board has never before attempted to second guess a decision by the Department to authorize a specific level of egg take in a hatchery permit.

The Proposal seeks to disrupt this well-established division of authority by interjecting the Board into the realm of production management. Specifically, the Proposal asks the Board to unilaterally reduce in an arbitrary and draconian fashion egg take levels from hatchery broodstock, which is squarely within the Department's sphere of authority and expertise, and outside the Board's jurisdiction over allocation of harvest levels. While the Proposal does not explain where the Board would derive legal authority to try and shut

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<sup>2</sup> AS 16.10.445; 5 AAC 40.300; 5 AAC 40.340; 5 ACC 40.840.

<sup>3</sup> *E.g.*, AS 16.05.251.





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down hatchery operations in the Sound, the Proponent will likely rely on AS 16.10.440(b), which only addresses the Board's limited authority to enact new regulations, subject to the Administrative Procedure Act, to amend hatchery permits regarding the "source and number of salmon eggs," so long as the regulation does not interfere with the Department's issuance or denial of permits required under AS 16.10.400. This provision in no way grants the Board authority to override Department permitting decisions and try and shut down hatchery operations by fiat.

When this statute was enacted in 1979, the legislature's reference to "the source and number of salmon eggs" almost certainly referred to the collection of *wild* salmon eggs, before the hatcheries' cost recovery operations had been fully established. Back in 1979, collection of salmon eggs from wild stocks involved the harvest of wild salmon still swimming out in the ocean. In those early days, egg take from wild salmon hypothetically could have affected the Board's allocative decisions. By contrast, hatchery egg take today is conducted entirely from returning hatchery broodstock, captured in terminal harvest areas, not out in the Sound, with little or no allocative implications.

Even if the statute could be construed to apply to eggs recovered from returning hatchery broodstock, it is an insufficient legal basis for disrupting the Department's comprehensive regulatory regime, which, by statute, includes hatchery production



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planning and detailed permitting requirements. Again, the Board has jurisdiction over harvest levels, and the Department has jurisdiction over all aspects of hatchery production, including egg take levels.<sup>4</sup>

To remove any doubt, the Department and the Attorney General's office both opposed a similar proposal to reduce Cook Inlet hatchery production by 75 percent because "the Board is not authorized to take action that effectively revokes or prevents the issuance of a permit,"<sup>5</sup> And because "to read the limited grant of authority to the Board over hatcheries set out in AS 16.10.440(b) to permit the Board to effectively veto fundamental policy decisions by the department for which there is specific statutory authority would upset the balance of the statutory scheme chosen by the legislature."<sup>6</sup>

Finally, putting aside the Board's legal authority (or lack thereof) over hatchery permitting, Proposal 78 is also procedurally infirm because it seeks to amend a regulation, 5 AAC 24.370, that has absolutely nothing to do with hatchery permitting or production. Rather, the regulation addresses "fair and reasonable allocation of the harvest of enhanced

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<sup>4</sup> *E.g.*, AS 16.10.445, granting the Department exclusive authority over "the source and number of salmon eggs taken" by hatchery operators.

<sup>5</sup> Attorney General's Office Comments to Proposal 43, Lower Cook Inlet Meeting Cycle 2023.

<sup>6</sup> Department Comments to Proposal 43, Lower Cook Inlet Meeting Cycle 2023, quoting Department of Law Memo on Authority of the Board of Fisheries Over Private Nonprofit Hatchery Production (1997).



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salmon among the drift gillnet, seine, and set gillnet commercial fisheries, and to reduce conflicts between these user groups.” Allocation of hatchery fish is a separate issue from hatcheries’ permitted salmon egg take levels. The reality is there is no existing Board regulation addressing hatchery permitting and releases because this is outside the Board’s regulatory purview. The Board may not adopt a proposal beyond its authority and shoehorn it into an existing regulation that is irrelevant to the proposal.

#### **ABOUT ASHBURN & MASON AND PWSAC**

Ashburn and Mason is submitting these comments, which focus on the relevant statutes, regulations, and established administrative practice, as a supplement to the comments submitted directly by the PWSAC. Ashburn & Mason has represented PWSAC since its creation in 1974. Our firm worked closely with PWSAC’s visionary founders in the legislative process that resulted in the creation of the private nonprofit hatcheries (“PNPs”) regional aquaculture associations, now codified at AS 16.10.375, *et seq.*

PWSAC’s founders were commercial fishers and community leaders who were responding to repeated wild salmon run failures, and the resulting economic distress throughout the Prince William Sound region in the early 1970s. Working together, the fishermen, local community representatives, the Department, and key legislators developed



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an innovative legal framework for the creation and operation of the state's PNPs and regional aquaculture associations.

Over the past 50-plus years, the statewide hatchery system has been a resounding success and is an integral part of Alaska's world class sustainable fisheries. Alaska's hatcheries have generated tens of millions of dollars of economic benefit every year spread across all user groups, supplementing, but not displacing, the sustained yield of Alaska's wild salmon stocks. In fact, all of PWSACs hatcheries were started with salmon eggs collected originally from local wild stocks. The genetics of all Prince William Sound hatchery fish are therefore traceable back to local streams.

## **DISCUSSION**

### **I. THE BOARD DOES NOT HAVE VETO AUTHORITY OVER HATCHERY PRODUCTION PERMITS**

#### **A. The Department Commissioner Has Primary Authority Over Hatchery Permitting and All Hatchery Operations**

##### **1. History and Purpose of the Hatchery Program**

The desire of Alaskans to manage their abundant salmon fisheries was a driving force behind Alaska Statehood.<sup>7</sup> The importance of protecting and developing natural resources

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<sup>7</sup> E.g., *Pullen v. Ulmer*, 923 P.2d 54, 57 n.5 (Alaska 1996); Alaska Legislative Affairs Agency, *Alaska's Constitution: A Citizen's Guide* (5th ed. 2021) at [https://akleg.gov/docs/pdf/citizens\\_guide.pdf](https://akleg.gov/docs/pdf/citizens_guide.pdf) (Many Alaskans concluded "that the notion



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such as salmon is embedded in the Alaska Constitution, which directs the legislature to “provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters.” It also requires the legislature to make decisions that “provide for the maximum benefit of its people.”<sup>8</sup> The Alaska Constitution proclaims that “fish, wildlife, and waters are reserved to the people for common use,”<sup>9</sup> and dictates that “Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.”<sup>10</sup> Further, the Constitution

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of the federal government’s superior vigilance as a trustee of the public interest was really a cloak for the institutional interests of bureaucrats and the economic interests of nonresident corporations exploiting those resources (principally Seattle and San Francisco salmon canning companies and east coast mining conglomerates).”); HOUSE COMM. ON INTERIOR AND INSULAR AFFAIRS, *Act Providing for the Admission of the State of Alaska into the Union of 1957*, H.R. REP. No 85-624 (1958) (The Statehood Act “will enable Alaska to achieve full equality with existing States, not only in a technical juridical sense, but in practical economic terms as well. It does this by making the new State master in fact of most of the natural resources within its boundaries . . . .”); Univ. of Alaska Anchorage, Institute for Social and Economic Research, *Salmon Fish Traps in Alaska* (1999), at 14, at [https://iseralaska.org/static/legacy\\_publication\\_links/fishrep/fishtrap.pdf](https://iseralaska.org/static/legacy_publication_links/fishrep/fishtrap.pdf) (“Alaska political entrepreneurs used the [fish] trap issue to rally the citizens of the territory around the quest for statehood.”).

<sup>8</sup> Alaska Const. art. VIII, § 2.

<sup>9</sup> Alaska Const. art. VIII, § 3.

<sup>10</sup> Alaska Const. art. VIII, § 4.



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expressly references the goal of “promot[ing] the efficient development of aquaculture in the State,” and protecting Alaska’s economy from outside interests:<sup>11</sup>

No exclusive right or special privilege of fishery shall be created or authorized in the natural waters of the State. This section does not restrict the power of the State to limit entry into any fishery for purposes of resource conservation, to prevent economic distress among fishermen and those dependent upon them for a livelihood *and to promote the efficient development of aquaculture in the State.*

By the early 1970s, salmon runs were in steep decline throughout Alaska. In the Sound, seining did not open at all in 1972 and 1974 due to dangerously low wild stock returns. In response, the State of Alaska resolved to restore the salmon fisheries. A constitutional amendment provided the basis for limited entry legislation for commercial

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<sup>11</sup> Alaska Const. art. VIII, § 15. The Constitution has since been amended to provide for the limited entry permit system now in place, *See infra* n.12, but the reference to promoting the “efficient development of aquaculture” remains unchanged.



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fisheries,<sup>12</sup> and the state hatchery program was initiated through the creation of the Fisheries Rehabilitation & Enhancement Division (FRED).<sup>13</sup>

Under AS 16.05.020, the Commissioner must “manage, protect, maintain, *improve*, and *extend* the fish, game . . . of the state in the interest of the economy and general well-being of the State.” The Department is further required to: “develop and continually maintain a comprehensive, coordinated state plan for the orderly present and long-range rehabilitation, *enhancement*, and development of all aspects of the state’s fisheries for the perpetual use, benefit, and enjoyment of all citizens” and “through rehabilitation, *enhancement*, and development programs do all things necessary to ensure perpetual and *increasing production* and use of the food resources of state waters and continental shelf

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<sup>12</sup> AS 16.43.400 *et seq.* Alaska’s limited entry fishery essentially provides that only permit holders may engage in commercial fishing. The granting of these permits, and the management of the commercial fisheries, are tightly regulated by numerous state agencies including the State Commercial Fisheries Entry Commission (CFEC), the Alaska Department of Fish & Game (ADF&G), and the Board of Fisheries (BOF). *See generally Johns v. CFEC*, 758 P.2d 1256, 1263 (Alaska 1988) (“The Limited Entry Act has two purposes: enabling fishermen to receive adequate remuneration and conserving the fishery.”).

<sup>13</sup> AS 16.05.092. As explained more fully below, FRED no longer exists as a distinct division within the Department. However, the operation (though not the ownership) of most or all of the original hatcheries owned and operated by FRED has been transferred to the regional aquaculture associations, under long-term professional services agreements. PWSAC, for example, currently operates the Cannery Creek, Main Bay, and Gulkana Hatcheries, all of which were constructed and initially operated as FRED hatcheries in the early 1970s.



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areas.”<sup>14</sup> Similarly, the Department is required generally to “manage, protect, maintain, *improve, and extend* the fish, game and aquatic plant resources of the state in the interest of the economy and the general well-being of the state.”<sup>15</sup> The Department is also generally charged to do everything possible to assist with hatchery operations.<sup>16</sup>

In addition, the legislature created the Fisheries Enhancement Revolving Loan Fund to promote the enhancement of Alaska’s fisheries by, among other things, providing long-term, low-interest loans for hatchery planning, construction, and operation.<sup>17</sup> PWSAC has received significant support from this program over the years, particularly for capital investments.

In 1974, the FRED state-owned and managed hatchery program was expanded to include private ownership of salmon hatcheries with the passage of the Private Non-Profit (PNP) Hatchery Act.<sup>18</sup> The Act stated that its purpose was to “authorize the private ownership of salmon hatcheries by qualified non-profit corporations for the purposes of

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<sup>14</sup> AS 16.05.092(1) and (3) (emphasis added).

<sup>15</sup> AS 16.05.020(2) (emphasis added).

<sup>16</sup> AS 16.10.443.

<sup>17</sup> AS 16.10.500–.560; *see generally* Alaska Division of Investments, “Fisheries Enhancement Revolving Loan Fund Program Overview,” April 2007 at <http://www.commerce.state.ak.us/investments/pdf/FEover07.pdf>.

<sup>18</sup> These provisions are now codified at AS 16.10.375 *et seq.*





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contributing, by artificial means, to the rehabilitation of the State's depleted and depressed salmon fishery." Further, as noted above, a separate fisheries enhancement loan program was created in 1976 to provide state financing for nonprofit hatcheries.<sup>19</sup>

Over time, the State has transferred operation of some of the FRED hatcheries to other entities, including the nonprofit hatcheries operated by the regional aquaculture associations, concluding that it would be more cost-effective for these hatcheries to be operated by the regional associations. The legislature specifically authorized the subcontracting of state hatcheries in 1988,<sup>20</sup> acknowledging that after 17 years of the State planning, building and operating hatcheries, Alaska sought an even more efficient way of ensuring a healthy, robust, and sustainable salmon fishery.<sup>21</sup>

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<sup>19</sup> AS 16.10.500 *et seq.*; see also *State Commercial Fisheries Entry Comm'n v. Carlson*, 65 P.3d 851, 867 (Alaska 2003) ("The state operates a revolving loan fund to support investments in developing and operating fish hatcheries and other fish enhancement projects.").

<sup>20</sup> AS 16.10.480.

<sup>21</sup> Alaska's partnership with the nonprofit hatcheries is unique. Almost all states operate hatcheries of some kind (salmon, trout, walleye, catfish, etc.), but no state operates a hatchery program like Alaska's, and no state works with private nonprofit entities to assist the state government in its hatchery programs. By way of example, California has 21 state hatcheries (<https://wildlife.ca.gov/Fishing/Hatcheries>), Oregon has 33 state hatcheries (<http://www.dfw.state.or.us/fish/hatchery/>), and Washington has 76 state hatcheries (<https://wdfw.wa.gov/fishing/management/hatcheries/facilities?county=All> ), and all of these hatcheries are operated by the government.



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Alaska law provides that the hatcheries may only be non-profit.<sup>22</sup> By design, the hatcheries are allowed to recover operating and capital expenses, as well as costs for research and development and expansion of the production system, including wild stock rehabilitation work.<sup>23</sup> The system is designed to provide benefits to the common property resource users. The nonprofit regional aquaculture associations have no stockholders, owners, or members. Today, five regional aquaculture associations, from Southeast Alaska to Kodiak, including PWSAC, produce hatchery salmon for common property fisheries.

Thus, the Alaska Constitution, combined with numerous statutes, including those creating the Department of Fish and Game,<sup>24</sup> the Limited Entry Act,<sup>25</sup> the Private Non-Profit Hatcheries Act,<sup>26</sup> and the Fisheries Enhancement Revolving Loan Fund,<sup>27</sup> together demonstrate a strong and long-standing state policy in Alaska of promoting hatchery development for the purpose of enhancing and ensuring the long-term vitality of Alaska's fisheries.

2. The Department Strictly Regulates All Aspects of Hatchery Creation, Operation, and Production

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<sup>22</sup> See AS 16.10.380; AS 16.10.400(a).

<sup>23</sup> AS 16.10.455.

<sup>24</sup> AS 16.05.010 *et seq.*; see also 5 AAC 40.100–.990.

<sup>25</sup> *Supra* note 12.

<sup>26</sup> AS 16.10.375–480.

<sup>27</sup> AS 16.10.500–.560.



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The Alaska Department of Fish and Game has been charged by the Alaska legislature with final authority over how many fish hatchery operations are allowed to incubate and release each year,<sup>28</sup> and to regulate all other details of hatchery operation.<sup>29</sup>

Pursuant to AS 16.10.375, the Commissioner must designate regions of the state for salmon production and develop a comprehensive salmon plan for each region through teams consisting of Department personnel and nonprofit regional associations of user groups. The Commissioner also has the task of classifying an anadromous fish stream as suitable for enhancement purposes before issuing a permit for a hatchery on that stream. AS 16.10.400(f).

Of particular relevance to the issue presently before the Board, AS 16.10.400(g) requires a determination by the Commissioner that a hatchery would result in substantial public benefits and would not jeopardize natural stocks. The statutes also require the Department to conduct public hearings near the proposed hatcheries, and to consider comments offered by the public at the hearings before issuance of a permit.<sup>30</sup>

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<sup>28</sup> AS 16.10.445; 5 AAC 40.300; 5 AAC 40.340; 5 AAC 40.840.

<sup>29</sup> AS 16.10.375–.480; 5 AAC 40.005–.990.

<sup>30</sup> AS 16.10.410.



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All state hatcheries are operated pursuant to a permit issued by the Department.<sup>31</sup> Standard permit conditions include: (1) provisions that eggs used for broodstock come from a source approved by the Department;<sup>32</sup> (2) no placement of salmon eggs or resulting fry into waters of the state except as designated in the permit; (3) restrictions on the sale of eggs or resulting fry; (4) no release of salmon before department inspection and approval; (5) destruction of diseased salmon; (6) departmental control over where salmon are harvested by hatchery operators; and (7) hatchery location to prevent commingling with wild stocks.<sup>33</sup>

Further, there is an intricate system of basic and annual hatchery plans that are reviewed annually by the Department and provide for performance reviews, and in appropriate cases, permit alterations.<sup>34</sup> The basic management plans include a complete

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<sup>31</sup> AS 16.10.400; 16.40.100–.199; 5 AAC 40.110–.240.

<sup>32</sup> AS 16.10.445. This requirement is related to regulations regarding fish transport permitting. *See* 5 AAC 41.001–.100. These regulations provide that no person may transport, possess, export from the state, or release into the waters of the state any live fish unless that person holds a fish transport permit issued by the Commissioner.

<sup>33</sup> *See generally* Steven G. McGee, *Salmon Hatcheries in Alaska – Plans, Permits, and Policies Designed to Provide Protection for Wild Stocks*, 44 American Fisheries Society Symposium 317, 327 (2004).

<sup>34</sup> 5 AAC 40.800–.990. As noted above, there is also an extensive Regional Comprehensive Planning Program established under AS 16.10.375 and 5 AAC 40.300–.370, with full public participation. This process creates Regional Planning Teams who are charged to



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description of the facility, including the special harvest area, broodstock development schedules, and description of broodstock and hatchery stock management.<sup>35</sup>

Year-to-year hatchery production is regulated through the annual management plans (AMPs) approved and adopted by the Department. For example, each year, PWSAC and the other PNPs across the state work with the Department, which ultimately formulates an AMP for each hatchery. That plan, among other things, determines the number of eggs the hatchery will collect, how the eggs will be collected, the number of fish it will incubate, and how many fish will be released from the hatchery.<sup>36</sup> The AMP also addresses how PNPs will conduct their cost recovery harvest at each hatchery and addresses other specifics of hatchery operation.<sup>37</sup>

**B. The Board Cannot Override Annual Hatchery Production Permits Issued by the Department**

1. The Board's Statutory Role Is to Allocate Harvest and Fishery Resources Between User Groups

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“prepare a regional comprehensive salmon plan . . . to rehabilitate natural stocks and supplement natural production . . .” 5 AAC 40.340.

<sup>35</sup> See generally McGee, at 329.

<sup>36</sup> 5 AAC 40.840.

<sup>37</sup> McGee, at 329.



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The Board of Fisheries is established by AS 16.05.221, “[f]or purposes of the conservation and development of the fishery resources of the state.”<sup>38</sup> In general terms, the Board’s duties complement those performed by the Department. Historically, the Board’s statutory authority has been understood as a mandate to allocate fisheries resources between and among the various user groups and gear types. The Board’s primary function is to: (1) establish fishing seasons; (2) set quotas, bag limits, and harvest levels; (3) determine allowable fishing means and methods; and (4) generally manage the commercial, subsistence, and sport fisheries of the state.<sup>39</sup> To the best of our knowledge, however, the Board has always deferred to the Department’s expertise and experience with respect to the detailed management of hatchery permitting and production levels.

2. The Board May Not Second Guess or Override Department Hatchery Permitting Decisions.

As set forth above, the Department oversees and permits hatcheries, and the Board allocates any resulting harvest. Any effort by the Board to override the Department’s permitting decisions and hatchery oversight would be overstepping the Board’s statutory bailiwick. Indeed, the legislature expressly limited the Board’s authority over hatchery permitting in AS 16.05.251(f) which provides (emphasis added):

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<sup>38</sup> AS 16.05.221.

<sup>39</sup> AS 16.05.251.



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Except as expressly provided in AS 16.40.120(e) [authorizing board regulations for the conservation, maintenance and management of species for which an acquisition permit is needed] and AS 16.40.130 [authorizing regulations for the importation of aquatic plants or shellfish for stock], the *Board of Fisheries may not adopt regulations or take action regarding the issuance, denial, or conditioning of a permit under AS 16.40.100 or AS 16.40.120, the construction or operation of a farm or hatchery required to have a permit under AS 16.40.100, or a harvest with a permit issued under AS 16.40.120.*

Consistent with this provision, the legislature also provided in AS 16.10.440(b) that the Board “may not adopt any regulations or take any action regarding the issuance or denial of any permits required in AS 16.10.400 – 16.10.470.”

The Proponent here will likely argue that AS 16.10.440(b) grants the Board the authority to upend the Department’s carefully constructed regulatory framework governing



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hatchery production and veto Department permitting decisions.<sup>40</sup> As an initial matter, the plain text of the statute does not authorize the generalized across-the-board percentage reduction set forth in proposal 78. Rather, the statute’s grant of authority to the Board is very narrow and only allows the Board to “after the issuance of a permit by the commissioner, amend by regulation adopted in accordance with AS 44.62 (Administrative Procedure Act), the terms of the permit relating to the source and number of salmon eggs . . . .” Under this provision, any Board regulation must amend a *specific permit* and only then modify a specific “*number of salmon eggs.*” It does not permit an across-the-board percentage reduction to all hatchery permits. In this way, Proposal 78 is not a well-considered amendment to a specific permit that would implement a scientifically-

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<sup>40</sup> AS 16.10.440 provides in full:

(a) Fish released into the natural waters of the state by a hatchery operated under AS 16.10.400 - 16.10.470 are available to the people for common use and are subject to regulation under applicable law in the same way as fish occurring in their natural state until they return to the specific location designated by the department for harvest by the hatchery operator.

(b) The Board of Fisheries may, after the issuance of a permit by the commissioner, amend by regulation adopted in accordance with AS 44.62 (Administrative Procedure Act), the terms of the permit relating to the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest. The Board of Fisheries may not adopt any regulations or take any action regarding the issuance or denial of any permits required in AS 16.10.400 - 16.10.470.





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validated-alternate-egg-take number. Rather, it is a special interest group's attempt to subvert the Department's statutory permitting power through a novel application of a statute in a manner contrary to the legislature's carefully crafted balance between the Department and Board that has served all stakeholders well for decades.

Further, any argument that this statutory provision gives the Board broad powers over hatchery egg take numbers reads it out of context and is inconsistent with its historical origins. Under Alaska law, AS 16.10.440(b) must be construed in light of the overall statutory scheme governing Alaska's salmon hatcheries,<sup>41</sup> its legislative history and intent,<sup>42</sup> and over 40 years of consistent administrative interpretation and practice, during

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<sup>41</sup> *E.g., Monzulla v. Voorhees Concrete Cutting*, 254 P.3d 341, 345 (Alaska 2011) (citing *In re Hutchinson's Estate*, 577 P.2d 1074, 1075 (Alaska 1978) (discussing the doctrine of *in pari materia*: the "established principle of statutory construction that all sections of an act are to be construed together so that all have meaning and no section conflicts with another").

<sup>42</sup> *E.g., Native Village of Elim v. State* 990 P.2d 1, 5 (Alaska 1999); *Kochutin v. State*, 739 P.2d 170, 171 (Alaska 1987) (citing *Hammond v. Hoffbeck*, 627 P.2d 1052, 1056 & n.7 (Alaska 1981)).



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which the Board (to our knowledge) has never attempted to use this statute as the basis for usurping the Department's traditional control over hatchery production.<sup>43</sup>

Section 440(b) was enacted in 1979 when the hatchery system was in its infancy. Most hatchery egg take was from wild stocks, not returning hatchery fish, which is how egg take is conducted today. The thinking at the time was that salmon eggs harvested from wild stocks were still a "public resource" while the fish were swimming out in the ocean, and the harvest of wild fish for egg take had allocation implications that could potentially fall within the Board's purview. In contrast, today's egg take procedures are conducted almost exclusively from returning hatchery broodstock that are captured in the special harvest areas directly in front of the hatcheries. At that point, the hatchery salmon cease to be a public resource, and their capture and the collection of their eggs have very limited allocative implications. Further, as the Department Commissioner explained to the Board addressing a 2018 emergency petition asking the Board to intervene in hatchery permitting,

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<sup>43</sup> *E.g., Marathon Oil Co. v. State, Dep't of Nat. Res.*, 254 P.3d 1078, 1082 (Alaska 2011); *Premiera Blue Cross v. State, Dep't of Commerce, Cmty. & Econ. Dev., Div. of Ins.*, 171 P.3d 1110, 1119 (Alaska 2007) (courts defer to reasonable agency determinations that implicate agency expertise); *Bullock v. State, Dep't of Cmty. & Reg'l Affairs*, 19 P.3d 1209, 1219 (Alaska 2001) (discussing that agency decisions based on "long-standing, consistent and widely known" interpretations of agency expertise should be given "great weight").



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“the Board’s authority over the possession, transport and release of live fish had not been delegated to the department when AS 16.10.440(b) was amended.”<sup>44</sup>

Moreover, the legislative history of Section 440(b) indicates that it was never intended to be used by the Board as a back door means of overriding the Department’s permitting authority or limiting hatchery production. The Resources Committee’s letter of intent on HB 359, which included the language in question, states as follows:

There are three other major changes made by the bill:

Section 2 of the bill amends AS 16.10.440(a)(b). The amendment clarifies the role of the Board of Fisheries. The role of the Board of Fisheries as envisioned by the original legislation was to regulate the *harvest* of salmon returning to the waters of the state. That role extends to regulating those fish which are returning as a result of releases from natural systems and also from hatchery releases. There are provisions in other specific locations for the harvest of salmon by the hatchery operator for sale, and use of the money from that sale, for the specific purposes as stated in AS 16.10.450. The added language clarifies that the Board of Fisheries may adopt regulations relating to the *harvest* of the fish by hatchery operators at the specifically designated locations. The Board of Fisheries in the past year or two has enacted regulations relating to those harvests for several of the private nonprofit hatcheries in the state.<sup>45</sup>

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<sup>44</sup> Memorandum from Sam Cotton, Commissioner, to John Jensen, Chair, dated January 14, 2018, Re: Emergency Petition to the Alaska Board of Fisheries requesting the Board to reverse a department decision to allow a 20 million increase in the number of pink salmon eggs to be harvested by VFDA in 2018.

<sup>45</sup> Alaska House Journal, March 15, 1979, pp. 601–602 (emphasis added).



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The exclusive reference to regulation of harvest, and the absence of any mention of production controls, corroborates the conclusion that the legislature never intended to authorize the Board to limit hatchery production, regulation of which is delegated to the Department under the statutes and regulations discussed above.

The Board's traditional function has always been to allocate harvests among competing user groups, not to regulate production of fish. This legislative history, with its emphasis on "harvest," is also consistent with PWSAC's long-held belief (apparently shared by the Department) that Section 440(b) was intended to cover egg take from wild salmon streams, not to apply to egg take from returning hatchery fish.

Further corroboration of this conclusion is found in AS 16.10.445(a), which unambiguously requires the Department, not the Board, to "approve the source and number of salmon eggs taken under AS 16.10.400–16.10.470," and in AS 16.05.251(9) which grants the Board limited authority to "prohibit[] and regulat[e] the capture, possession, transport or release of *native or exotic fish or their eggs*." (emphasis added). Read together, these provisions demonstrate that the Department has overarching authority on the taking of all salmon eggs (wild or hatchery) while the Board's statutory authority is limited to native/wild eggs.



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Additional evidence that the Department, not the Board, is responsible for regulating hatchery egg take can be found in 5 AAC 41.001 *et seq.* For example, 5 AAC 41.005 prohibits the release of hatchery fish without a permit issued by the Commissioner. Regulation of egg take and release of the resulting salmon fry are obviously two sides of the same coin. The regulatory scheme clearly and consistently assigns exclusive responsibility for regulating those two closely related hatchery activities to the Commissioner.<sup>46</sup>

Given the legislative history, the 30-plus-year pattern of administrative interpretation, the anomalous language in Section 440(b) regarding regulations to “amend...the terms of a permit,” and the Department’s mandate vis-à-vis Section 445(b), it is quite clear that the Board has little or no role in regulating hatchery production, including but not limited to egg take permit restrictions.

Moreover, regulation of hatchery production by the Board would overlap and almost certainly conflict with the comprehensive and detailed hatchery regulations that are currently in place and operating effectively. As noted above, the Department has a rigorous permitting process for new hatcheries, 5 AAC 40.100–.240. There is an extensive Regional

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<sup>46</sup> *E.g.*, 5 AAC 41.090 (granting the Commissioner authority to delegate provisions under 5 AAC 41 to persons within *the Department*).



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Comprehensive Planning program established under AS 16.10.375 and 5 AAC 40.300–.370, with full public participation. By regulation, the responsibility of the Regional Planning Teams is to “prepare a regional comprehensive salmon plan . . . to rehabilitate natural stocks and *supplement* natural production . . .” 5 AAC 40.340 (emphasis added). As mentioned earlier, there is also an intricate system of basic and annual hatchery plans that are reviewed annually by the Department, performance reviews, and, in appropriate cases, permit alterations. 5 AAC 40.800–.990. Production levels are carefully monitored by the Department under these regulations and adjusted if necessary for economic or biological reasons.

In summary, the Department's extensive statutory and regulatory authority for micro and macro hatchery regulation is legislatively defined and quite clear. There is little room for the Board to insert itself into the Department’s very public hatchery regulatory process without unintended and unpredictable collateral consequences that could, and likely would, destabilize a carefully-balanced predictable regulatory regime that has served stakeholders well for decades.

**C. Both the Department and the Attorney General’s Office Concluded that a Similar Past Proposal Was Beyond the Board’s Authority**

In late 2023, the Proponent here introduced an almost identical proposal (Proposal 43) to the Board to reduce hatchery production of pink salmon in Cook Inlet to 25% of the



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year 2000 production level.<sup>47</sup> The Attorney General’s office filed comments that this proposal was likely “beyond the Board’s authority, which is limited by AS 16.05.251(f) and AS 16.10.400 – 16.10.440.”<sup>48</sup> These comments went on to note that the Board:

[D]oes have authority to prohibit and regulate the capture, possession, transport or release of native or exotic fish or their eggs, AS 16.05.251(9), and to amend by regulation the terms of hatchery permits relating to the source and number of salmon eggs, harvest by hatchery operators, and locations for harvest, AS 16.10.440(b), *which may indirectly affect hatchery production*.<sup>49</sup>

Likewise, the Department *affirmatively opposed* the proposal, quoting a prior Attorney General informal opinion from 1997 that “we do not believe the Board may either (1) adopt regulations that effectively veto or override a fundamental department policy decision regarding whether to authorize the operation of a particular hatchery or (2) adopt regulations preventing the department from exercising its authority to permit a hatchery operation,” and that “to read the limited grant of authority to the Board over hatcheries set out in AS 16.10.440(b) to permit the Board to effectively veto fundamental policy decisions

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<sup>47</sup> Proposal 43 for Lower Cook Inlet Board Meeting November 28 – December 1, 2023 available at [https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/LCI\\_all.pdf](https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/LCI_all.pdf).

<sup>48</sup> State of Alaska Department of Law Comments on Proposal 43 Lower Cook Inlet Board Meeting dated November 22, 2023 available at <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/lci/dol-memo-lci.pdf>.

<sup>49</sup> *Id.* (emphasis added).



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by the department for which there is specific statutory authority would upset the balance of the statutory scheme chosen by the legislature.”<sup>50</sup> The Department also favorably quoted the informal opinion’s statement that “a Board amendment that puts a hatchery out of operation might be construed as an effective revocation or denial of a hatchery permit, an action that is expressly prohibited by AS 16.10.440(b).”<sup>51</sup> The Department concluded:

The department OPPOSES this proposal. Hatchery egg take levels are established through an iterative 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.<sup>52</sup>

The same reasoning applies here. There is no credible, scientifically-validated evidence whatsoever that such a dramatic decrease in hatchery egg take in the Sound will have any impact, positive or negative, on wild stocks, while conversely it would have catastrophic economic effects on the Prince William Sound hatcheries and the many that depend on them for sustenance and their livelihoods. This is a matter of simple arithmetic

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<sup>50</sup> Department Comments on Proposal 43 2023 Lower Cook Inlet Board Meeting available at [https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/lci/rc2\\_staff\\_comments\\_lci.pdf](https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/lci/rc2_staff_comments_lci.pdf).

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*





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and should be undisputed. Further, this draconian permit cut would have the precise impact of both overriding fundamental Department policy decisions on hatchery production and could potentially put one or more hatcheries out of operation entirely, thus effectively revoking their permits.

**D. The Department Opposes the Current Proposal as Misguided and Beyond the Board's Authority**

Consistent with its past position on similar proposals, the Department filed comments on proposal 78 likewise concluding it is beyond the Board's authority.<sup>53</sup> Again, the Department referenced the prior 1997 Attorney General opinion to state "Board action that effectively revokes or prevents the issuance of a hatchery permit is probably not authorized." The Department concluded regarding Proposal 78:

The department **OPPOSES** this proposal. Hatchery egg-take levels are established through an iterative process involving department staff and stakeholders. Hatchery operations are permitted with consideration of minimizing impact on wild salmon stocks. The commissioner can amend a permit if the hatchery is not in the public's best interest or to mitigate the adverse effects of the hatchery operation. If there is a compelling reason to amend the terms of a hatchery permit, the amendment should be based on analysis of data and there should be clear evidence the amendment will reduce adverse effects on wild stocks. This proposal did not provide evidence to support that current permitted pink and chum salmon egg-take levels adversely affect wild stocks, in or outside the Prince William Sound enhancement area.

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<sup>53</sup> Department Comments at 198, available at [https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2024-2025/pws/rc2\\_staff-comments.pdf](https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2024-2025/pws/rc2_staff-comments.pdf).



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If the board were to adopt this proposal, there would need to be a discussion of how to apportion the egg-take cap because egg-take capacity is set on each hatchery permit. A straight 25% cut to each species at each hatchery may have unintended effects on the production of other species of salmon and may affect harvest allocation, which are a primary concern of the boards of the PNP corporations.

In short, the Department likewise recognizes the legal flaws in proposal 78 as well as its substantive weaknesses.

## **II. PROPOSAL 78 IS PROCEDURALLY INFIRM BECAUSE IT SEEKS TO AMEND A REGULATION THAT DOES NOT ADDRESS HATCHERY PERMITTING**

Proposal 78 is also procedurally improper. It seeks to accomplish its 25 percent reduction in Prince William Sound Hatchery permitting by amending (without even explaining precisely how) 5 AAC 24.370, which addresses the Prince William Sound Management and Salmon Enhancement Allocation Plan. The problem is this regulation contains no provisions whatsoever addressing hatchery production or permitting. Rather, its stated purpose and sole subject is “to provide a fair and reasonable allocation of the harvest of enhanced salmon among the drift gillnet, seine, and set gillnet commercial



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fisheries, and to reduce conflicts between these user groups.”<sup>54</sup> There is no place in this regulation to incorporate Proposal 78’s proposed “[r]educ[ti]on] of the permitted egg intake of each Prince William Sound hatchery that produced pink and chum salmon by 25%.” Further, there is no current Board regulation addressing permitted hatchery production and releases, whether specific to Prince William Sound or statewide. Given the discussion above, this is because these issues are the purview of the Department, not the Board. In the past, the Proponent of Proposal 78 has proposed similar reductions in hatchery production in both Cook Inlet and Kodiak,<sup>55</sup> both times seeking to amend 5 AAC 40.820,

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<sup>54</sup> 5 AAC 24.370(a), which provides in full:

The purpose of the management and allocation plan contained in this section is to provide a fair and reasonable allocation of the harvest of enhanced salmon among the drift gillnet, seine, and set gillnet commercial fisheries, and to reduce conflicts between these user groups. It is the intent of the Board of Fisheries (board) to allocate enhanced salmon stocks in the Prince William Sound Area to maintain the long-term historic balance between competing commercial users that has existed since statehood, while acknowledging developments in the fisheries that have occurred since this plan went into effect in 1991.

<sup>55</sup> Proposal 59 for 2024 Kodiak Meeting to amend 5 AAC 40.820 to “[r]educe hatchery production to 25% of the year 2000 production as promised in 2000” available at [https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/kodiak\\_all.pdf](https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/kodiak_all.pdf); Proposal 43 for 2023 Lower Cook Inlet Meeting to amend 5 AAC 40.820 to “Amend the Cook Inlet Salmon Enhancement Allocation Plan to specify pink salmon production, as follows: Reduce hatchery production to 25% of the year 2000 production as promised in 2000.” Available at [https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/LCI\\_all.pdf](https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/LCI_all.pdf).



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which addressed the creation of hatchery basic management plans *statewide*.<sup>56</sup> In likely recognition that the Board may not amend a statewide regulation to address hatchery permitting in specific regions, Proponent here has changed tactics and seeks to amend a Prince William Sound-specific regulation addressing hatchery fish. But the fundamental problem remains that there is no place in the Board regulations addressing amendment of hatchery permits. Proponent cannot seek to accomplish this result simply by shoehorning the permit amendment into an unrelated regulation. As discussed above, the Board lacks statutory authority to set egg take policy for returning hatchery fish, full stop. Here, the

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<sup>56</sup> 5 AAC 40.820 provides:

(a) A hatchery operator shall manage the hatchery and its salmon returns in accordance with a basic management plan approved by the commissioner. Before the public hearing held under 5 AAC 40.210 on the proposed hatchery, department staff, in conjunction with the applicant, shall develop a draft basic management plan that includes a facility development schedule of no more than five years. Department staff and the applicant shall present the draft basic management plan and facility development schedule at the public hearing and shall make copies available for public review and comment at the hearing.

(b) If, following the public hearing, the commissioner decides to issue a permit for the proposed hatchery, department staff shall finalize the basic management plan and facility development schedule after all comments have been considered. The final basic management plan, which includes a facility development schedule, describes the conditions under which the permit will be implemented, and is an addendum to the permit.



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regulation Proposal 78 seeks to amend does not pertain to the Board's harvest allocation authority. Even if the Board could amend egg take from wild salmon via a new regulation adopted in accordance with the Administrative Procedures Act, that is not what Proposal 78 attempts to do. Proposal 78 seeks to amend a regulation that is unrelated to the Board's limited authority under AS 16.10.440(b).

Although Proposal 78 is procedurally impermissible, the larger issue is it would be untenable for two agencies to each have authority to set egg take policy for returning hatchery salmon. Stakeholders must be able to rely on the policy set by the agency with statutory decision-making authority for short- medium- and long-term planning purposes. Here, that agency has always been the Department. The stakes are too high to change the status quo for the sake of implementing experimental policy advocated for by a special interest group through a statute that the legislature intended to govern the Board's authority to regulate harvest allocation, not egg take from returning hatchery salmon.

### **CONCLUSION**

Back in the early 1970s, Prince William Sound experienced recurring wild salmon run failures, which caused serious financial distress throughout the region. In response, the framers of the Constitution and the Alaska Legislature took active and far-sighted steps to first establish a state-run hatchery system and, shortly thereafter, the private non-profit and



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regional hatchery regime that has consistently stabilized the runs and enhanced salmon harvests throughout the state since 1974. Overall, Alaska's hatcheries have been a remarkable success and have helped the state's salmon resources to thrive and expand over the past 50 years, creating millions of dollars of positive economic impact, without any demonstrable harm to wild salmon stocks. From the very beginning, every aspect of Alaska's hatcheries' creation, operation, and production have been closely supervised and regulated by the Department, with harvest area and allocation decisions made by the Board. This division of responsibility has served Alaska well for many years and there is no good reason to abandon it now.

For these reasons, the Board should reject Proposal 78.

ASHBURN & MASON, P.C.

A blue ink signature of Matthew T. Findley, written in a cursive style.

Matthew T. Findley

A black ink signature of Dylan L. Hitchcock-Lopez, written in a cursive style.

Dylan L. Hitchcock-Lopez

Alaska Board of Fisheries  
Alaska Department of Fish & Game  
PO Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

RE: Oppose Proposals 14,15,16 and 17 – PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

The fishing vessel Gold Rush is a Kodiak trawler, fishing for Pollock, Cod and Rockfish. This is a small family business, dependent on Alaska fisheries.

Bert Ashley began working on the Gold Rush in the late 80's as Captain and brought his brother, Don, to Kodiak in 1990, to work on the Gold Rush as a deck hand. Bert was able to purchase the boat in 2001.

Bert is a Kodiak resident and began fishing for Pollock in Prince William Sound in the 1990's. This fishery has helped to provide some stability to the business and has been counted on to start the year with a much needed first paycheck for the vessel and her crew.

We, and other Kodiak vessels, have worked closely with ADF&G management over many years, to be able to responsibly participate in a fishery that provides so much benefit to all of us, as well as our community. With daily catch reporting from a limited number of vessels fishing at any one time and "check-in/check-out" procedures, State Managers can provide a very high level of protection to the area.

We appreciate the Pelagic nature of the fishery in this area, avoiding any bottom contact, as well as the 100% catch retention. As an "Electronic Monitoring" vessel, we are very comfortable with both electronic and in person observers and believe in the catch accountability of this system.

This well managed fishery is an important contributor to the overall health of the Prince William Sound, as well as the health of the small fleet of responsible participants and their local communities.

We appreciate the opportunity to share part of our story.

Respectfully,

A handwritten signature in black ink, appearing to read 'Don Ashley', with a long horizontal line extending to the right.

Don Ashley, F/V Gold Rush Fisheries.

**Submitted by:** Joseph Austin

**Community of Residence:** Wasilla

**Comment:**

Proposals 63, 64, and 65.

These proposals are an attack on non-native Alaskan residents. The segregation of rights is getting out of hand. Alaskan residents of all origins have the legal rights to harvest fish, game, and plants for subsistence purposes. It's absurd that these rights be taken away from us to only benefit a small fraction of the Alaskan populace. Let's be real, this is a progressive step to give the Native Corporations even more power and further their agenda to limit the majority of Alaskans, access to most of our accessible resources. It's time to treat everyone the same. We are all residents, we all give back to this great state, and we all deserve to reap the benefits of living here.

There's no reason to limit residents when the resources are sustainable. Fish and Game's research is proof of that sustainability.

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## B&J Sporting Goods

113 W Northern Lights Blvd. Anchorage AK 99503 | (907) 274.6113 | bnjsg.com

### **Board of Fisheries Prince William Sound Management Area Proposals 14-17**

Alaska Department of Fish & Game

Board of Fisheries Division

Attn: Art Nelson, Executive Director & BoF Members

P.O. Box 115526

1255 W. 8th Street

Juneau, AK 99811-5526

*November 25, 2024*

Dear Members of the Alaska Board of Fisheries,

Thank you for the opportunity to provide comments on Proposals 14, 15, 16, and 17. As the owner of B&J Sporting Goods, Alaska's largest fishing tackle and bait shop, I write on behalf of our business and the many Alaskans we serve who rely on Prince William Sound for their livelihoods, sustenance, and recreation. These proposals address critical issues that impact the health of our marine ecosystems, the sustainability of our fisheries, and the long-term prosperity of Alaska's communities. We appreciate your commitment to carefully considering these proposals and ensuring that the regulations governing Alaska's fisheries align with the best interests of the people and ecosystems of our state.

**Proposal 14: Support**

As Alaska's largest fishing tackle and bait shop, we strongly support Proposal 14, which would allow ADF&G to close the fishery if pelagic trawl gear makes bottom contact or Chinook salmon are caught. The waters of Prince William Sound are vital to Alaska's economy, culture, and food security, sustaining over 300 fish species that support subsistence, commercial, and sport fisheries. While midwater trawl gear is intended to avoid seabed contact, evidence shows this is not consistently achieved, resulting in habitat destruction and increased bycatch. This is deeply concerning to us, and we desire to see the damage done to our irreplaceable sea floor mitigate to the maximum possible potential. Allowing ADF&G to act swiftly in these cases protects the broader interests of Alaskans, ensuring our resources are managed sustainably.

**Proposal 15: Support**

We support Proposal 15, which seeks to modify bycatch limits in the pelagic trawl fishery by decoupling them from pollock harvest amounts. Linking bycatch limits to pollock harvest fails to address the ecological realities of species conservation. By prioritizing the health of vulnerable species like Chinook salmon and rockfish, this proposal reflects responsible resource management that aligns with Alaska's values of sustainability and long-term economic health. The proposal benefits not just commercial interests but also the subsistence and sportfishing communities who rely on these ecosystems.

**Proposal 16: Support**

We strongly support Proposal 16, which calls for the closure of the Prince William Sound pelagic trawl fishery. This fishery poses a direct threat to the ecosystems and communities of Prince William Sound, contributing to habitat degradation, significant bycatch, and competition with directed fisheries. The Sound is a cornerstone of Alaska's economy, supporting tourism, recreation, and small-scale commercial fisheries. Closing this fishery to pelagic trawl is a necessary step to preserve the balance and health of these interconnected systems for future generations.

**Proposal 17: Support**

We support Proposal 17, which requires electronic monitoring and observers on pelagic trawl vessels. Transparency and accountability are critical in fisheries management, and electronic monitoring addresses longstanding issues with underreporting and enforcement. Alaska's fisheries have long been held as a global model of sustainability,

and proposals like this reinforce our state's leadership in responsible resource management. While monitoring alone cannot solve all the challenges posed by industrial trawling, it is a vital tool to ensure compliance and provide accurate data for informed decision-making.

### **Closing Statement**

In closing, we urge the Board of Fisheries to pass Proposals 14, 15, 16, and 17 as necessary steps to protect the integrity of Alaska's fisheries and the communities they support. Prince William Sound is not just a vital economic resource but a cornerstone of our culture and way of life. These proposals provide an opportunity to safeguard our marine ecosystems from the harmful effects of industrial trawling and ensure sustainable management practices that prioritize Alaska's long-term interests.

Thank you for your dedication to stewarding Alaska's fisheries responsibly. We appreciate the opportunity to share our perspective and remain committed to supporting efforts that preserve and protect these invaluable resources for future generations.

Sincerely,

*Troy Arnold*

Owner

**B&J Sporting Goods**, Anchorage, AK

**B&J's Tackle Repair Center**, Anchorage, AK

**B&J's Tackle Box**, Whittier, AK

**Submitted by:** Todd Baer

**Community of Residence:** Eagle River

**Comment:**

Trawling is DESTROYING the ecosystem and it must be stopped for the sale of the flora and fauna of our precious oceans

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**Submitted by:** Ryan Baldrige

**Community of Residence:** Sterling, AK

**Comment:**

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman. I grew up commercial fishing, and have been an owner operator of purse seiner in Prince William Sound since 2012.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Ryan Baldrige

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**Submitted by:** Ryan Baldrige

**Community of Residence:** Sterling, AK

**Comment:**

My original comment submission did not have my positions in my letter. Please see attached.

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Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman.

I grew up commercial fishing, and have been owner operator of purse seiner in Prince William Sound since 2012.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Ryan Baldridge

[REDACTED]

Sterling

**Proposal 1 - Establish pot gear as legal gear for sablefish in PWS subsistence, sport, and personal use fisheries.:** OPPOSE this proposal with CDFU

**Proposal 2 - Reopen waters closed to the harvest of groundfish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 3 - Modify Prince William Sound groundfish pot specifications.:** SUPPORT this proposal with CDFU

**Proposal 5 - Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.:** OPPOSE this proposal with CDFU

**Proposal 6 - Allow for release of rockfish in mechanical jig and hand troll fisheries.:** SUPPORT this proposal with CDFU

**Proposal 7 - Establish gear specifications for directed lingcod fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 8 - Modify the Prince William Sound pacific cod fishery guideline harvest level.:** SUPPORT this proposal with CDFU

**Proposal 9 - Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 10 - Modify pot limit in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 13 - Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 19 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 20 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 22 - Allow the concurrent use of longline gear and sablefish pot gear in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 23 - Prohibit the retention of sablefish from state waters.:** SUPPORT this proposal with CDFU

**Proposal 25 - Establish a personal use sablefish fishery in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 26 - Establish a Prince William Sound groundfish personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 27 - Modify rockfish bag and possession limits.:** SUPPORT this proposal with CDFU

**Proposal 28 - Modify the rockfish area, bag and possession limit.:** OPPOSE this proposal with CDFU

**Proposal 29 - Create additional provisions for yelloweye rockfish management.:** SUPPORT this proposal with CDFU

**Proposal 31 - Repeal closed waters for the Prince William Sound subsistence and commercial Tanner crab fisheries.:** SUPPORT this proposal with CDFU

**Proposal 32 - Reopen the subsistence and commercial Dungeness crab fisheries in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 33 - Adopt community-based subsistence harvest permits and reporting requirements for shellfish in the Prince William Sound Area.:** OPPOSE this proposal with CDFU

**Proposal 34 - Repeal the Registration Area E Tanner crab harvest strategy.:** SUPPORT this proposal with CDFU

**Proposal 35 - Modify the harvest strategy for Prince William Sound Tanner crab.:** SUPPORT this proposal with CDFU

**Proposal 36 - Increase the pot limit in the Prince William Sound Tanner crab fishery.:** SUPPORT this proposal with CDFU

**Proposal 37 - Establish a pot limit of 30 pots per vessel in the Prince William Sound Tanner crab fishery.:** SUPPORT this proposal with CDFU

**Proposal 39 - Establish season dates for a commercial golden king crab fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 40 - Adopt a harvest strategy for golden king crab in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 42 - Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 43 - Establish a directed octopus fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 46 - Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.:** SUPPORT this proposal with CDFU

**Proposal 47 - Require inseason reporting in subsistence and personal use fisheries.:** SUPPORT this proposal with CDFU



**Proposal 48 - Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 49 - Prohibit transport services in the Glennallen Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 51 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 52 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 53 - Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.:** OPPOSE this proposal with CDFU

**Proposal 55 - Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.:** SUPPORT this proposal with CDFU

**Proposal 58 - Amend the Copper River King Salmon Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 59 - Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 60 - Modify the annual limit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 61 - Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 62 - Allow inseason adjustment of the Copper River personal use maximum harvest level.:** SUPPORT this proposal with CDFU

**Proposal 63 - Amend the opening date of the Chitina Subdistrict personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 64 - Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.:** SUPPORT this proposal with CDFU

**Proposal 65 - Require a weekly permit and inseason reporting in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 66 - Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.:** SUPPORT this proposal with CDFU

**Proposal 67 - Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 68 - Prohibit dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 69 - Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 70 - Extend the lower boundary of the Chitina Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 71 - Prohibit guiding in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 72 - Close sport fishing for salmon based on water temperature in the Gulkana River.:** SUPPORT this proposal with CDFU

**Proposal 78 - Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.:** OPPOSE this proposal with CDFU

**Proposal 79 - Close Main Bay to all fishing during hatchery cost recovery operations.:** SUPPORT this proposal with CDFU

**Proposal 80 - Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.:** SUPPORT this proposal with CDFU

**Proposal 81 - Modify the area open to sport fishing near the Main Bay Hatchery.:** SUPPORT this proposal with CDFU

**Proposal 83 - Allow a resident sport angler to use two rods when fishing for salmon.:** OPPOSE this proposal with CDFU

**Proposal 84 - Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.:** SUPPORT this proposal with CDFU

**Proposal 85 - Modify the bag and possession limit for coho salmon.:** OPPOSE this proposal with CDFU

**Proposal 86 - Modify the sport fishing area and season dates in Ibeck Creek.:** SUPPORT this proposal with CDFU

**Proposal 87 - Modify the sport fishing area and season in a Copper River Delta system.:** SUPPORT this proposal with CDFU

**Proposal 88 - Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 96 - Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.:** SUPPORT this proposal with CDFU

**Proposal 97 - Reduce the minimum herring spawning biomass threshold.:** SUPPORT this proposal with CDFU

**Proposal 98 - Align Prince William Sound herring and salmon management area descriptions.:** SUPPORT this proposal with CDFU

**Proposal 99 - Define commercial herring fishery districts in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 100 - Adopt a Kayak Island District herring management plan.:** SUPPORT this proposal with CDFU

**Proposal 102 - Allow commercial fishery permit holders to harvest herring for the own use as bait.:** SUPPORT this proposal with CDFU

**Submitted by:** Brittany Banks

**Community of Residence:** Cordova

**Comment:**

Oppose #51,52,53 and 78

Dear board of fish please oppose 51,52, 53, and 78. I am a Native village of Eyak tribal member and my family depends on the copper river and Prince william sound commerical fisheries for our main source of income. We reside in cordova year round.

These proposals would have negative economic impacts on my family, the majority of tribal member house holds, and our community.

70 percent of our NVE tribal members are supported by our commercial fisheries.

Thank you.

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Cordova, Alaska, and I am tied to commercial fishing.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

John Banks

A solid black rectangular box used to redact the signature of John Banks.

Cordova, Alaska

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman.

I have been fishing commercially in Area E Drift for 4 years..

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Micah Banks

A black rectangular redaction box covering the signature of Micah Banks.

Cordova

**Proposal 46 - Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.:** SUPPORT this proposal with CDFU

**Proposal 47 - Require inseason reporting in subsistence and personal use fisheries.:** SUPPORT this proposal with CDFU

**Proposal 48 - Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 49 - Prohibit transport services in the Glennallen Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 51 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 52 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 53 - Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.:** OPPOSE this proposal with CDFU

**Proposal 55 - Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.:** SUPPORT this proposal with CDFU

**Proposal 58 - Amend the Copper River King Salmon Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 59 - Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 60 - Modify the annual limit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 61 - Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 62 - Allow inseason adjustment of the Copper River personal use maximum harvest level.:** SUPPORT this proposal with CDFU

**Proposal 63 - Amend the opening date of the Chitina Subdistrict personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 64 - Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.:** SUPPORT this proposal with CDFU

**Proposal 65 - Require a weekly permit and inseason reporting in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU



**Proposal 66 - Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.:** SUPPORT this proposal with CDFU

**Proposal 67 - Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 68 - Prohibit dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 69 - Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 70 - Extend the lower boundary of the Chitina Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 71 - Prohibit guiding in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 72 - Close sport fishing for salmon based on water temperature in the Gulkana River.:** SUPPORT this proposal with CDFU

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**Proposal 79 - Close Main Bay to all fishing during hatchery cost recovery operations.:** SUPPORT this proposal with CDFU

**Proposal 80 - Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.:** SUPPORT this proposal with CDFU

**Proposal 81 - Modify the area open to sport fishing near the Main Bay Hatchery.:** SUPPORT this proposal with CDFU

**Proposal 83 - Allow a resident sport angler to use two rods when fishing for salmon.:** OPPOSE this proposal with CDFU

**Proposal 84 - Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.:** SUPPORT this proposal with CDFU

**Proposal 85 - Modify the bag and possession limit for coho salmon.:** OPPOSE this proposal with CDFU

**Proposal 86 - Modify the sport fishing area and season dates in Ibeck Creek.:** SUPPORT this proposal with CDFU

**Proposal 87 - Modify the sport fishing area and season in a Copper River Delta system.:** SUPPORT this proposal with CDFU

**Proposal 88 - Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.:** SUPPORT this proposal with CDFU

**Submitted by:** Michael Barner

**Community of Residence:** Anchorage

**Comment:**

As a 61 year old lifelong Alaskan I oppose all three proposals (63,64,65) as this is unwarranted and quite frankly ridiculous, especially from the Ahtna.

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**Submitted by:** Tony Barnes

**PC39**

**Community of Residence:** Palmer, AK

**Comment:**

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman. I have been fishing on PWS for 24 years and have been a permit holder for 18 years.

My comments are regarding proposal 44. I'll make this comment brief. I'm sure the amount of gear in the water has been discussed at length, but I think by the time the 100 unfished permits turn in the the extra 50 fathoms it gonna be about the same.

In all my seasons the one thing that makes everything equal on the fishing ground regardless of vessel type or area is net length. If one wants to get out early and stay late they can get the fish, no matter if it's your first season or starter boat. With extra long gear length for those who can afford it, what has been a constant for many decades with change. If this proposal passes I suspect a competitive fishery will be transformed into an aggressive environment on the fishing grounds.

Tony Barnes

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**PC40**

**Submitted by:** Ian Barrand

**Community of Residence:** Portland Oregon

**Comment:**

I fully support CLOSURE of the destructive and unsustainable commercial PWS pollock trawl fishery as specified in Proposals 14 and 16. If the Board fails to pass either of these Proposals, I would highly encourage them to consider measures to reduce bycatch impacts and ensure greater accountability in bycatch reporting as specified by the Chenega IRA Council in Proposals 15 and 17.

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**PC41**

**Submitted by:** Paul Barrett

**Community of Residence:** Fairbanks

**Comment:**

The highest priority for salmon stocks should go to the individual who harvests it for his own and his family's consumption. Maximum good for the maximum number of Alaskans.

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**Submitted by:** Gordon Bartel

**Community of Residence:** Willow AK

**Comment:**

OPPOSE Proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71

SUPPORT Proposals 48,51,52,53,58,59,70

Alaska residents should have a priority for use of our resources!

Thank you

Gordon

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**Submitted by:** Jeffrey Bartlemus , AK eXpeditions

**Community of Residence:** Palmer

**Comment:**

I fully support AK eXpeditions stance on all issues.

This organization makes it possible for myself and family to affordably fulfill our subsistence needs.

They provide a safe and enjoyable means of fishing this great river!

Oppose: 44, 45, 46, 47, 49, 50, 54, 55, 56, 57, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72

Support: 48, 58, 59, 70

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**Submitted by:** Petro Basargin

**Community of Residence:** Kachamak bay Homer Ak

**Comment:**

Proposal 5

I strongly oppose this proposal for several reasons. First of all the factory trawlers target bycatch such as bottom fish in which case cause negative devastating effects to the seafloor and the ecosystem effecting may bottom fish and shell fish including yelloweye, roughey and short raker. These factory trawler vessels are not observed and bycatch is reported by the skipper and processors. And heard of lots of unreported bycatch getting dumped back in the water by witnessed commercial fisherman on and off these factory draggers.

Second the language in this Proposal is very specific at targeting to restrict only one gear type. Small boat Commercial halibut fishermen, like myself and many other similar smaller boats that try to only target halibut. We do not target rockfish!

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**PC45**

**Submitted by:** Robert Bauer

**Community of Residence:** Wasilla

**Comment:**

As a retired resident that has lived in the state before it became a state and know what it means to be without sufficient food for the winter. I am against anything that will limit my opportunity to harvest what I consider my share of the goodness of the great state of Alaska. Those who profit from the harvest should take a back seat to those of us who cannot spend the kind of money they require for their services. But being fair about the whole scheme they should be allowed to do their business just so it is not at the expense of us poor folks. Thank you.

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**PC46**

**Submitted by:** Henry Bauer

**Community of Residence:** Wasilla

**Comment:**

I use charters to harvest fish for winter protein for my family. Charters help me to be more responsible and to harvest fish in a safe manner. Limiting this fishery limits my ability to provide for my family. Please continue to help me provide for my family.

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**PC47**

**Submitted by:** Ross Beal

**Community of Residence:** Fairbanks

**Comment:**

Thousands of Alaskan residents have gathered salmon to eat long before the Alaska Legislature statutorily created a Board of Fisheries (BOF) to determine who gets to harvest salmon on the Copper River. Recently there has not been adequate numbers of salmon returning to the Copper River to meet escapement goals and the desires of Alaskans who would prefer to eat salmon from the Copper river. Reducing commercial salmon harvest early in the run will still leave hundreds of thousands of salmon for the industry to take, from the publicly owned resources, for their livelihood...

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**Submitted by:** Ross Beal

**Community of Residence:** Fairbanks

**Comment:**

Proposal #51

Thousands of Alaskan residents have gathered salmon to eat long before the Alaska Legislature statutorily created a Board of Fisheries (BOF) to determine who gets to harvest salmon on the Copper River. Recently there has not been adequate numbers of salmon returning to the Copper River to meet escapement goals and the desires of Alaskans who would prefer to eat salmon from the Copper river. Reducing commercial salmon harvest early in the run will still leave hundreds of thousands of salmon for the industry to take, from the publicly owned resources, for their livelihood.

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**Submitted by:** Ross Beal

**Community of Residence:** Fairbanks

**Comment:**

I'm writing in strong support of Proposal #14

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- Proposal 46 & 47 (Support)
  - o In-season reporting for subsistent and personal use fisheries is essential for best management practices. It is paramount that this information be accessible to local ADFG biologists so that they can make appropriate decisions. Reporting this information should not be a problem as there are multiple avenues for reporting like online reporting or by making a direct phone call.
- Proposal 48 (Oppose)
  - o The commercialization of subsistence fishing directly contradicts the intended purpose of subsistence fishing..... This proposal would have to be tabled and taken up at the state level.
- Proposals 51-53 (Oppose)
  - o Proposals 51, 52, & 53 seek to drastically change the way in which ADFG manages the Copper River district. Delaying openers and having concrete restrictions on fishing time is completely unnecessary due to the diverse run timing that the Copper River has experienced over the years. Additionally, ADFG currently has the capability to limit the commercial fleet early in the season and has done so in prior instances when warranted. Support of these proposals (51-53) strips ADFG the ability to best manage the salmon stocks of the Copper River.
- Proposals 56-57 (Oppose)
  - o Based on the current language, proposals 56 & 57 would have significant impacts on the fishery. Permit stacking among Area E drift gillnet permit holders raises concerns like gear conflict and allocation.

Area E drift gillnet permit stacking would create major specific effects in the Eshamy District. The Eshamy district is geographically the smallest district in the sound and is a district that accommodates both drift and set gillnet permit holders. Allowing permit stacking would exacerbate the amount of gear in such a small area, specifically in areas of large build up (inside the THA, stream closures, line areas etc.) While this proposal aims to reduce the overall number of boats being fished, it does not necessarily reduce the amount of gear being fished in specific areas. Competitive areas of high build up, which inevitably have more boats, would experience major gear conflict. There have already been instances of “gear wrapping” with some drift and set gillnet fisherman. Allowing 50 additional fathoms of gear would worsen these instances. I especially see this being a problem inside of the THA of Main Bay where the setnet fleet is already limited to only being able to fish up to 50 fathoms of gear on a single set. This additional 50 fathoms would further congest an already packed and highly competitive zone in the Eshamy District. Essentially, allowing permit stacking



could eliminate the overall number of boats fleet wide, however, the competitive areas of buildup which almost always draw in a significant number of boats will become more congested and ultimately will lead to more gear conflict. I also foresee there being an issue within the drift fleet. Permit stacking will be beneficial for a few boats that have the means to purchase another permit. This puts a large strain on fisherman that are only able to operate one permit. In order to fully understand what portion of the fleet finds this proposal effective and sustainable for the future of the fishery I think a fleet wide poll would be appropriate. These proposals would have significant effects on the future participation of the drift gillnet fishery in ways that may not benefit the majority of the fleet and the future of this fishery.

Support of these proposals would have disproportionate allocation effects in districts that have concurrent gear groups fishing. The setnet fleet for example in the Eshamy district has the potential risk of being squeezed out overtime with drift permit stacking. The overall productivity of lines throughout the district would substantially increase, which as a result would reduce harvest throughout the rest of the district. I fear that this drastic efficiency of harvest in very specific areas, and the subsequent decline of harvest in the remainder of the Eshamy district, would negatively alter the allocation plan that is currently set in place.

To stay consistent with protecting the longevity and viability of the fishery, some changes to Proposals 56 & 57 should be taken into consideration, if in fact the drift fleet as a whole wants to move forward with this proposal. First, Area E drift permit stacking should be excluded from the Eshamy district. Allowing permit stacking in the Eshamy district would bring forth various complications mentioned above. Primarily, gear conflict issues that are already present in the district would significantly increase. This increase in gear conflict would almost certainly lead to more enforcement issues which during the peak season are already spread thin trying to cover multiple districts for various calls and concerns. Next, permit stacking should only be allowed and carried out when two permit holders are simultaneously fishing on the same vessel. When two Area E drift permit holders are physically on the vessel together, they shall be allowed to fish an additional 50 fathoms, and in total 200 fathoms of gear. Modifying this proposal ensures that new entrants can join the fishery and be physically present in the fishing operation. To alleviate the reliance of enforcement and make it easier on boats that elect to permit stack, the following protocols should be taken into consideration. The additional 50 fathoms of gear shall be shackled in a way that is easy to remove if either a) the

second permit holder is absent from the vessel or b) the boat enters the Eshamy district. Boats that choose to permit stack will also have to display a decal of some sort to signify that they are indeed fishing a “stacked” permit.

- Proposal 78 (Oppose)
  - o Reduction of pink and chum egg take of this amount is not warranted based on the lack of conclusive evidence. Moreover, communities within and outside Prince William Sound could economically suffer from this drastic reduction.
- Proposal 79 (Support)
  - o The completion and efficiency of obtaining PWSAC cost recovery and brood stock is paramount for all user groups. Without the completion of cost recovery and ensuring brood stock, the future operation of the Main Bay Hatchery would be jeopardized greatly. To ensure these goals are met it is important that a) enough fish are available for harvest and b) PWSAC has adequate space to operate. At times, it is required that the Main Bay subdistrict be shut down to commercial fishing which in the past has given exclusive fishing rights to sport and subsistent users. Proposal 79 seeks to prohibit all users from fishing within the Terminal Harvest Area (THA). Prohibiting users from the THA would allow PWSAC appropriate area to operate to the best of their abilities.

This proposal does not eliminate the ability for sport and subsistent user groups from harvesting salmon in Main Bay. Sport and subsistent users can harvest salmon outside of the THA (a small subdistrict of Main Bay). This proposal is not looking to alienate certain user groups from others. Rather, this proposal is looking out for the interest of all user groups and seeks to expedite the cost recovery process and brood stock collection so that all user groups have access to areas within the THA.

- Proposal 80 (Support)
  - o Main Bay and more specifically the AGZ subdistrict has experienced a rapid growth in boat traffic and sport users during the summer months. This increase in boat traffic and sport users (snagging) has led to safety concerns among PWSAC staff members and equipment. Moving the distance back to 250 feet, currently set at 60 feet, would protect equipment that has repeatedly been damaged from fishing tackle and boats.

Closing off the area behind the barrier seine from sport fishing ensures that fish behind the seine (potential brood stock) are not being physically wounded from snag hooks and other angling casualties. Reducing these casualties helps hatchery staff as these fish ultimately are required to be culled from brood stock.

**Submitted by:** David Belt

**Community of Residence:** Ocean Park Wa

**Comment:**

My support of proposal 16 is for the protection of the by catch species.

And to stop the more destruction of the sea floor.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Seward, Alaska, and I am tied to commercial fishing. Alaskan salmon hatcheries are how I make a living. It's hard to make a living as it is. A 25% reduction would be very challenging for my family.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries

Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Gifford Benoit

A solid black rectangular box used to redact the signature of Gifford Benoit.

Seward, Alaska

**Oppose Alaska Board of Fisheries proposals #63, #64, and #65 to reduce the opportunities for Alaska residents to gather salmon to eat.**

At the Chitina Personal Use fishery Alaskans harvest less than 10% of sockeye salmon returning to the Copper River drainage, and less than 5% of the king run. Well over 500,000 sockeye and tens of thousands of kings still are reported upriver every year. Sharing returning salmon among Alaskans is the law under state abundance-based management.

**Oppose Proposal #63 and #65 submitted by the Athna Intertribal Fish and Wildlife Committee.** Currently, there are salmon abundant enough to share a very small portion of the salmon harvest with other Alaskans who choose to participate in the Personal Use fishery on the Copper River.

**Oppose Proposal #64 submitted by the Cordova District Fisherman United to restrict Alaskan households gather salmon under both an Upper Cook Inlet personal use salmon fishery permit and a Chitina personal use permit during the same year.**

Currently there is ample returning salmon to feed Alaskans in the town of Cordova while allowing families who choose to access publicly owned salmon for family use in the Copper River drainage.

**Kirsten Berg**

**Submitted by:** Joseph Berkeland

**Community of Residence:** Fairbanks

**Comment:**

I appose 63,64,65 for all Alaska residents!

---

**Submitted by:** Alice Bielling

**Community of Residence:** Anchorage

**Comment:**

I support the Chenega IRA Council (proposals 15-17) and Alaska Outdoor Council (proposal 14) proposals. I believe we need to stop wasteful bycatch and better protect our waters. We once had an abundance of salmon and other fish. We should do everything possible to restore the land and waterways and that includes protecting our oceans and being good stewards in that way.

Thank you,

Alice Bielling

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**Submitted by:** Richard Bishop

**Community of Residence:** Fairbanks

**Comment:**

I support proposals 48,51,52,53,58,59,70 because they help maintain a level playing field in terms of allocation consistent with laws and regulations , and also are consistent with State efforts to ensure sustained yield management of Copper River salmon populations.

I oppose proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66,67,68,69,71 because,in general, they run counter to the principle of a level playing field in terms of allocation among legitimate users of Copper River salmon populations and seek to overturn past actions of the Board of Fisheries to achieve a level playing field in allocation while ensuring sustained yield of Copper River salmon populations.

---

Charles S. Blackadar Cordova Alaska

I am writing to try and influence the board to take further actions to protect the declining Coho and Chinook salmon runs. I am a casual sport fisherman with no commercial interests, either in direct commercial fishing or activities that benefit from sport fishing. Several of the proposals do not make logical sense from an outside observer.

I am against proposal 44, allowing commercial and subsistence gear while subsistence fishing. This would make enforcement of subsistence fishing rules harder as subsistence fisherman would not have to return to port to change nets where they are subjected to easy inspection of the catch and could remain at sea and possibly sell the fish to tenders. Although the effect on the Sockeye fishery would probably not be significant, it could significantly increase the catch of King salmon driving the species closer to extinction.

I am against proposal 45 for similar reasons. Keeping the inside area closed is only one of many measures we should be taking to protect the King salmon.

Proposal 54 also would allow additional targeting of Kings and should not be approved.

Proposals 86, 87 and 88 are designed to target sport fisherman to the benefit of the commercial fleet targeting wild coho stocks. The Ibek and 18 mile make up less than 5 % of the Coho bearing streams of the copper river delta and copper river according to ADF&G's anadromous sight map. As Coho have dramatically decreased throughout the state, we are taking less than half measures to protect our copper river delta fish. Akin to re arranging the deck chairs on the Titanic we should not distract ourselves with a few cheap shots at sport fishermen but address the root cause. The two delta streams (Ibek and 18 mile) have already seen a dramatic decline in sport fishing success, limiting further the catch and area to fish will accomplish nothing. Limiting the large take of wild fish at the mouths of the streams would have a much larger effect.

Sincerely,

Charles S Blackadar, MD  
Family Medicine  
Wasilla Medical Clinic  
Wasilla, AK 99654  
(907) 373-6055



Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fishermen. I have been a commercial fisher in Area E, PWS for over 40 years. I urge the Board to look carefully at all proposals to the intent of what the underlying reason for the submission (usually there is a personal gain reason for the proposal).

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

David Blake

A solid black rectangular box used to redact the signature of David Blake.

St Maries ID

**OPPOSE this proposal with CDFU****OPPOSE this proposal with CDFU****Proposals 25 and 26 - OPPOSE**

*-Establish a personal use sablefish fishery in Prince William Sound.*

*-Establish a Prince William Sound groundfish personal use fishery.*

The proposal 25 author states that the sablefish GHL is not being fully harvested, and that therefore a surplus supports reallocating leftover GHL to a new personal use fishery. We do not support this, as we have authored proposals and support others that will remove some of the regulatory hurdles that prevent the commercial fleet from harvesting the full GHL.

Similar regulation exists in Southeast Alaska but Prince William Sound sablefish populations do not compare. The addition of a sport/personal use pot fishery in PWS will create a gear conflict with established longline gear. Participation in a sablefish pot fishery will require excessive gear and equipment expenses in order to safely haul pots, line and anchors to set in 2,000+ ft of water. This is burdensome for an average sport/personal use vessel, and very unlike setting shrimp pots in 300 ft of water. Associated difficulties will result in much lost gear. Today, sport fishermen are currently quite successful at targeting black cod with rod and reel. Electric reels are now affordable and commonplace.

**OPPOSE this proposal with CDFU****Proposal 5 - OPPOSE**

*Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.*

Commercial rockfish harvest is not consistently exceeding its GHL. In fact, looking at the average harvest for the last ten years, commercial harvests are below the GHL. Being that rockfish are long-lived species and that on average the GHL is not exceeded, one individual year of exceeding the GHL does not necessitate BOF action. Harvest by commercial has not been growing, but sport harvest has more than doubled since the early 90's. Sport harvest in PWS now exceeds an estimated 340,000 lbs, which is more than double the commercial GHL. Furthermore, the commercial GHL was based on mean annual harvest and the state of Alaska has had no consistent rockfish survey in PWS.

ADFG is not enforcing the regulations of the current PWS rockfish management plan that are designed to limit rockfish harvest specifically: "a) A vessel may not land or have on board more than a combined total of 3,000 pounds (round weight) of all rockfish species within five consecutive days." Enforcing this regulation would be sure to limit trawl bycatch.

The Commissioner already has the ability to close any state fishery to conserve rockfish. This proposal is a means to regulate the federal halibut fishery, over which it does not have management authority. We have concerns that granting the state this power will, if it is used to close state waters to federal halibut fishing, put the state in conflict with federal law and open yet another legal dispute.

### **SUPPORT this proposal with CDFU**

#### **Proposal 6 - SUPPORT**

*Allow for release of rockfish in mechanical jig and hand troll fisheries.*

Sport fishermen regularly use deep water releases to return unwanted rockfish unharmed. We would like to see this proposal expanded to allow longline and pot fishermen to also be allowed to use deepwater releases to return rockfish.

### **OPPOSE this proposal with CDFU**

#### **Proposal 7 - OPPOSE**

*Establish gear specifications for directed lingcod fisheries in Prince William Sound.*

This proposal is an attempt to reallocate the lingcod resource away from traditional user groups. Longline fishermen in PWS rarely, if ever, target lingcod as claimed by proposer. Instead, the quota is caught as bycatch in the halibut longline fishery. The lingcod fishery in PWS is quite small, with annual harvests of 20,000-30,000 lbs - the majority of which is harvested outside state waters.

The bycatch of rockfish in this fishery is only a small percentage, and is not enough to necessitate an expensive gear change. The GHL for lingcod is not being fully harvested, and longline fisheries are staying within the determined rockfish bycatch limits. Closing the lingcod fishery to longline gear would do little to reduce harvest of lingcod by the halibut longline fleet. They simply would be forced to surrender the proceeds of their lingcod bycatch to the state.

### **SUPPORT this proposal with CDFU**

#### **Proposal 9 - SUPPORT**

*Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.*

The development and use of longlined collapsable slinky pots in the Pacific cod fishery allows much smaller vessels to fish pots than previously could. Multiple proposals have asked for the quota allocation of pots to be increased. Simply combining the longline and pot quota will allow fishermen to harvest the resource whichever way they prefer, while still leaving some quota set aside for small boat jig fishermen. Bycatch of rockfish is much lower when using pots than hooks. Closing the P-cod fishery to longline hooks

for January and February will further incentivise fishermen to switch to fishing pots which will further reduce bycatch of rockfish.

### **SUPPORT this proposal with CDFU**

#### **Proposal 10 - SUPPORT**

*Modify pot limit in the Prince William Sound Pacific cod fishery.*

The 60 pot limit was created when the pot fishery was being prosecuted with conventional hard pots weighing 500+ lbs and 6' tall or bigger. With the adoption of smaller lightweight slinky pots, a larger pot limit is prudent.

Lightweight, collapsible slinky pots used by the small boats participating in the cod fishery are much smaller than conventional hard pots. They have a volume of about 15 cubic ft per pot. A conventional hard pot has a volume of 120 cubic ft. Passing this regulation would allow small boats to fish 120 lightweight pots, which would further encourage the switch to pot gear from longlining hooks.

There is no definition of a slinky pot in regulation. Since it is a new, evolving technology, we would not suggest creating any regulation that might prohibit refinement of the design. Instead we suggest simply defining them as a "pot weighing less than 30 lbs".

### **SUPPORT this proposal with CDFU**

#### **Proposal 27 - SUPPORT**

*Modify rockfish bag and possession limits.*

The sport fleet is targeting rockfish on the same pinnacles day after day, catching and releasing hundreds of fish. Deep water releases have a decent survival rate when used once on a fish. But the same rockeye are being caught over and over again. We support the BOF creating a hard cap on rockfish harvest by the sport fleet to prevent their harvest level from continuing to grow.

### **OPPOSE this proposal with CDFU**

#### **Proposal 28 - OPPOSE**

*Modify the rockfish area, bag and possession limit.*

There is no separate management for rockfish for inside and outside waters of PWS. As more and more participants move to outside waters, sport rockfish limits should be lowered, not raised.

SUPPORT this proposal with CDFU

#### **Proposal 29 - SUPPORT**

*Create additional provisions for yelloweye rockfish management.*

Any regulations should be placed on the user group whose harvest is growing unchecked. Sport rockfish harvest has been growing for 20 years. Commercial harvest has remained steady.

This proposal does not go far enough. The BOF should consider placing a harvest cap on sport rockfish to prevent continued expansion of this fishery. It should also expand to best manage all rockfish, not just yelloweye.

**SUPPORT this proposal with CDFU**

**Proposal 38 - SUPPORT**

*Allow vessels participating in the Prince William Sound Tanner crab fishery to also tender Tanner crab.*

Modern communications and reporting requirements eliminate the concerns that have restricted tenders in the past. Allowing tendering by participants in this fishery will allow fishermen to reduce fuel usage by combining their catch on one boat to run to deliver. In the current economic environment, the BOF should be considering all options to reduce fuel consumption and increase profitability of small scale fisheries.

**SUPPORT this proposal with CDFU**

**Proposal 40 - SUPPORT**

*Adopt a harvest strategy for golden king crab in Prince William Sound.*

Golden King crab fisheries must depend on CPUE in the commercial fishery to set its GHL, because there is no good way to survey. This proposed harvest strategy is similar to the one being used with success in Southeast.

As the fishery develops and distinct populations of Golden King crab are discovered, it will be prudent to break the area into districts. In the meantime, the statistical areas that are already in regulation allow for a reasonable starting point until the next BOF meeting cycle.

Local PWS economies are struggling following years of depressed fish prices, increased overhead costs for operations, and increased efforts of time for static harvests. It is imperative that the BOF direct ADFG to open these small scale fisheries, because they are simply not being proactively opened without BOF direction.

**OPPOSE this proposal with CDFU**

**Proposal 42 - OPPOSE**

*Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound.*

Crab fisheries close during the summer months because this is when crab are molting and most susceptible to mortality from handling.

We oppose the opening of a sport fishery for King or Tanner crab without also opening a commercial fishery.

**SUPPORT this proposal with CDFU**

**Proposal 43 - SUPPORT**

*Establish a directed octopus fishery in Prince William Sound.*

In recent years the GHL for PWS octopus has not been harvested but fishermen are interested in an octopus fishery.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 46, 47 - SUPPORT**

*-Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.*

*-Require in season reporting in subsistence and personal use fisheries.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required real-time reporting for years, proving it is possible. We do not believe requiring weekly reporting on the lower Copper River will cause any burden to subsistence users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

**OPPOSE this proposal with CDFU**

**Proposal 48 - OPPOSE**

*Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.*

The commercialization of subsistence resources in Alaska goes against their intended use. No one should collect profits from a subsistence fishery. Additionally, competition

by professional guides in a subsistence fishery increases the cost and difficulty for participants not using a guide service to be as productive.

Preventing the commercialization and guiding within the subsistence fishery is a precedent being set across Alaska. Prohibiting the commercialization of subsistence fisheries became statewide regulation in 2024; repealing this would need to be taken up at the statewide BOF meeting.

### **SUPPORT this proposal with CDFU**

#### **Proposal 49 - SUPPORT**

*Prohibit transport services in the Glennallen Subdistrict.*

We support this proposal but with an edit that would add the restriction of “transporting” but also retain “directing” in the regulation. Removing “directing” may create ambiguity in the regulation.

### **OPPOSE this proposal with CDFU**

#### **OPPOSE this proposal with CDFU**

#### **OPPOSE this proposal with CDFU**

#### **Proposals 51, 52, 53 - OPPOSE**

*-Reduce commercial salmon fishing opportunity in the Copper River District.*

*-Reduce commercial salmon fishing opportunity in the Copper River District.*

*-Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.*

These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has shown to already restrict early commercial effort. The objectives of these proposals will have severe economic impacts to the fleet and the region.

The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment.

Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start

passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

### **SUPPORT this proposal with CDFU**

#### **Proposal 55 - SUPPORT**

*Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.*

We favor how this proposal addresses a shared burden of conservation. It is irresponsible and unsustainable to allow commercial guiding operations to efficiently harvest king salmon upriver while downriver commercial users are restricted in an effort to allow these same kings into the river. As the author stated, commercial users throughout this river system should share the responsibilities when necessary to ensure the conservation of this resource.

### **OPPOSE this proposal with CDFU**

#### **Proposal 58 - OPPOSE**

*Amend the Copper River King Salmon Management Plan.*

With statewide concerns for king salmon, this is not a time to consider raising limits.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of sockeye, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

### **OPPOSE this proposal with CDFU**

#### **Proposal 59 - OPPOSE**

*Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.*

This proposal is a reallocation of a resource that is already at its allocation limit.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of king salmon, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the



fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 60, 61 - SUPPORT**

*-Modify the annual limit for the Chitina Subdistrict.*

*-Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.*

If the personal use fishery exceeds its allocation, there should be restrictions placed on this gear group to ensure conservation of the Copper River salmon population. With increased interest and growth in the personal use fishery, we must reduce the limits to allow all participants equal access, while also protecting this resource for future generations.

With no cap on personal use participants, the most direct way to protect the resource and remain within the allocation parameters is to reduce the annual bag limit.

**SUPPORT this proposal with CDFU**

**Proposal 62 - SUPPORT**

*Allow inseason adjustment of the Copper River personal use maximum harvest level.*

We favor how this proposal addresses a shared burden of conservation. We are in support of adopting a triggered regulation for conservation purposes. During times of concern, all user groups should be managed accordingly to ensure the long-term viability of this resource.

In years of low abundance, the commercial fishery typically bears the burden of conservation and sees significant reductions, but other user groups do not.

CDFU submitted a similar triggered-regulation proposal to the 2021 BOF meeting, which suggested a new section for regulation 5 AAC 77.591: if the Copper River District commercial harvest is 50% below the 10 year average by June 1, the maximum harvest level in the Chitina subdistrict will be reduced to 50,000 sockeye.

**OPPOSE this proposal with CDFU**

**Proposal 63 - OPPOSE**

*Amend the opening date of the Chitina Subdistrict personal use fishery.*

We share concerns about dip net pressure on Copper River stocks, however we do not support restricting management based on projected run timing curve. The run timing

curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

### **SUPPORT this proposal with CDFU**

#### **Proposal 64 - SUPPORT**

*Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.*

Personal use limits were originally set based on what needs a participant may have for the year. Allowing a user to obtain their bag limits in multiple personal use fisheries is a loophole in state regulation that should be closed for conservation purposes.

Commercial salmon boats must choose what state regulation area they will fish. In other instances in regulation, there are aggregate harvest limits based on area: In Game regulation, deer cannot be harvested to a full limit in PWS, Kodiak, and Southeast in one year.

### **SUPPORT this proposal with CDFU**

#### **Proposal 65 - SUPPORT**

*Require a weekly permit and inseason reporting in the Chitina Subdistrict.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting in the Chitina Subdistrict will cause any burden to its users. We cannot

continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

**SUPPORT this proposal with CDFU**

**Proposal 66 - SUPPORT**

*Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.*

Despite evidence of a strong return, the egg take goal for Gulkana hatchery was not achieved in 2024. It is imperative for all user groups to be managed for salmon resource goals. A similar regulation is in place for every other hatchery in the area and this regulation alignment will close a loophole as well as ensure efficient hatchery operations.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 68, 69 - SUPPORT**

*-Prohibit dipnetting from a boat in the Chitina Subdistrict.*

*-Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.*

Regulation was written before the growing efficiency of this personal use fishery. We need to adapt regulation now to account for drastic changes in harvest and increased commercialization of the personal use fishery in recent years brought through guided express boat charters. Our Copper River king and sockeye resources simply cannot handle the impacts of an increased style of fishing prevalent in the Chitina subdistrict. The efficiency of the guided boat personal use dip net fishery has driven this gear group to be above their allocation.

**OPPOSE this proposal with CDFU**

**Proposal 70 - OPPOSE**

*Extend the lower boundary of the Chitina Subdistrict.*

The personal use dip net fishery has been exceeding its allocation in recent years. Instead of relieving pressure on the resource, this proposal to move a boundary would simply move pressure downriver: more area for the Chitina subdistrict will only increase effort by dipnetters and lead to more boats and pressure on the resource. There is a finite resource that is fully allocated, and we cannot continue to give more.

**SUPPORT this proposal with CDFU**

**Proposal 71 - SUPPORT**

*Prohibit guiding in the Chitina Subdistrict.*

We are in support of this proposal that addresses the increased commercialization of the personal use fishery. A commercial gillnet fishery for Copper River salmon already exists: the Area E commercial gillnet fishery at the mouth of the Copper River. Anyone who would like to commercialize the harvest of fish can purchase an Area E gillnet permit.

Personal use only makes sense if Alaska residents are getting access to a resource for less than it would cost to purchase the resource. The commercialization of the personal use fishery through private guiding increases the cost to the average participant, as each fisherman is forced to either compete with skilled guides in powerful boats or pay upwards of \$400 dollars a day to ride along. When personal use fishermen invest in expensive guide services to harvest their fish, it easily equates to \$20 per fish or more. This is more than someone might pay purchasing fish at Costco! Obtaining fish by paying money in the personal use fishery more closely resembles sport, because it is a joke, one where commercial fishermen are a punchline.

Prohibiting guiding in the Chitina subdistrict is a straightforward and fair way to alleviate congestion and pressure on the resource.

**SUPPORT this proposal with CDFU**

**Proposal 72 - SUPPORT**

*Close sport fishing for salmon based on water temperature in the Gulkana River.*

Heat stress on salmon is well-studied. Similar practices are being put in place throughout the US.

**OPPOSE this proposal with CDFU**

**Proposal 78 - OPPOSE**

*Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.*

There is no conclusive evidence to suggest this proposed decrease in pink and chum production. The BOF has repeatedly turned down similar anti-hatchery proposals for this very reason in the last twenty years. This proposal asks the BOF to modify regulation 5 AAC 24.370. However, this regulation does not address egg take level, nor does any regulation implemented by the BOF. For this reason, this proposal and any future proposals like it should be rejected.

Passing this proposal will result in serious economic harm to every salmon permit holder CDFU represents. The total economic impact of PWS hatcheries is significant, and reducing their production will mean immediate economic downturns on communities already beset with revenue losses due to depressed fish prices and fishery

resource disasters. PWSAC activities alone are estimated to contribute approximately \$50 million in labor income and support roughly 2,400 jobs.

The goal of these hatcheries is not solely economic. They must achieve their corporate escapement goals to continue to operate and produce salmon for all user benefit. Their goal is to optimize Area E salmon production for the long-term wellbeing of all user groups, in addition to optimizing Alaska's wild salmon resources. We all should be reminded of the benefits that these hatcheries provide for all user groups, including commercial, sport, personal use, and subsistence.

### **SUPPORT this proposal with CDFU**

#### **Proposal 79 - SUPPORT**

*Close Main Bay to all fishing during hatchery cost recovery operations.*

All common property users should cooperate to allow PWSAC to achieve its corporate escapement goals. We should all understand the importance of efficient cost recovery and brood take at the Main Bay Hatchery. All user groups depend on the accomplishment of these two goals for the future of this resource. It is counterproductive to have some user groups interfering with PWSAC's operations that are essential for the benefit of all. Eliminating conflict and maximizing efficiency during cost recovery and brood operations will only help all users. At times, there may only be a window of just a few days when optimal harvest by cost recovery can take place. If that is bogged down by subsistence or personal use fishing, opportunity is lost for all.

Passing this proposal still allows for sufficient access inside Main Bay to harvest sockeye salmon. There are many areas outside the AGZ in Main Bay where sockeye build up and allow for great harvest opportunities for sport and subsistence users. When PWSAC is actively working to collect brood and harvest cost recovery, the Main Bay Subdistrict is generally closed to commercial fishermen, and this allows exclusive access to sport and subsistence users. Until cost recovery efforts terminate, these user groups would still have sole access to this resource outside the THA within Main Bay.

### **SUPPORT this proposal with CDFU**

#### **Proposal 80 - SUPPORT**

*-Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.*

Increasing the sport fishing distance from the barrier seine is essential to eliminating the majority of the damage from boats and tackle to the hatchery barrier seine. If we do not increase this distance, the problem will not be solved. The current setback distance does not protect hatchery property or its staff, as fishermen still can easily reach the barrier seine with their snagging hooks. Moving this distance back to 250 feet should

eliminate the negative impact on the hatchery, and anglers will still have sufficient opportunity to harvest sockeye in Main Bay.

By closing the area behind the barrier seine to all sport fishing, fish being staged for broodstock will no longer be harvested. Closing the area will also reduce the number of wounded fish that are compromised and must be culled from the brood stock.

We also want to ensure ADFG has the tools to work with hatchery staff to manage the sport fishery in Main Bay. A precedent for this exists at the Ship Creek Hatchery in Anchorage, where EO authority has been used to shut down the sport fishery to ensure the hatchery accomplished its brood goals.

The end goal is to collaboratively assist PWSAC in successfully achieving their corporate escapement goals each year, while reducing the damage to PWSAC property and the risk of injury to PWSAC staff.

SUPPORT this proposal with CDFU

**Proposal 81 - SUPPORT**

*Modify the area open to sport fishing near the Main Bay Hatchery.*

We support PWSAC's effort to resolve this issue in Main Bay through their Proposal 81, but suggest adopting Proposal 80 to ensure the problem at hand is solved.

OPPOSE this proposal with CDFU

**Proposal 83 - OPPOSE**

*Allow a resident sport angler to use two rods when fishing for salmon.*

There is already reasonable access in this fishery. The suggested regulation change could cause enforcement issues. How would enforcement know that only salmon are being retained while fishing with two rods?

SUPPORT this proposal with CDFU

**Proposal 84 - SUPPORT**

*Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.*

Sport harvest of saltwater kings and rockfish has been significantly increasing over the last ten years. This is increasingly concerning for our region which is vested in the conservation of Chinook salmon and rockfish. With a growing sport fish charter industry, it is not sustainable to continue to allow charter captains and crew to retain their bag limit while clients are on board. ADFG is already moving in this direction in Proposal 29, and the precedent is already set in Kodiak, Southeast, and federally for halibut. This would bring PWS into alignment.

**OPPOSE this proposal with CDFU****Proposal 85 - OPPOSE**

*Modify the bag and possession limit for coho salmon.*

This proposal is an allocative grab by the author to take a larger portion of the resource for the benefit of their company and clients. This year, ADFG reduced the bag limit to one coho salmon. This is not the time to double the bag limit from three fish to six fish.

The author also suggests this regulation change to target hatchery-bound coho salmon. There is already an expanded coho take in Valdez Arm to target these hatchery fish. Increasing the bag limit across the region has the potential to negatively impact many small wild coho streams around PWS.

**SUPPORT this proposal with CDFU****Proposal 86 - SUPPORT**

*Modify the sport fishing area and season dates in Ibeck Creek.*

With increased effort later in the season on Ibeck Creek, we support this proposal to protect spawning coho salmon. It does not make sense to allow fishing in spawning beds. These fish have already been counted as escapement by ADFG aerial surveys, and should be left to spawn and ensure future runs.

SUPPORT this proposal with CDFU

**Proposal 87 - SUPPORT**

*Modify the sport fishing area and season in a Copper River Delta system.*

We firmly support protections for spawning coho salmon in the Copper River Delta.

**SUPPORT this proposal with CDFU****Proposal 88 - SUPPORT**

*Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.*

We support this proposal that addresses a shared burden of conservation to protect our salmon fisheries. If the commercial fleet is restricted to protect coho salmon during years of low run entry and low aerial survey counts, the sport fishery should be similarly restricted to protect coho in the Copper River Delta. During years of low returns, we must all work together to reach escapement goals and ensure future healthy salmon runs.

**SUPPORT this proposal with CDFU****Proposal 96 - SUPPORT**

*Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.*

The rebound of PWS herring populations needs action by the BOF to ensure the maximum value of the species. Changing the annual season dates to align more with the calendar year and begin with the spring sac roe fishery will enable processors and fishermen to best plan for how to participate. Instituting the rollover of quota from the sac roe fishery to the food and bait fishery will solve dilemma that exists in other Alaska herring fisheries.

**SUPPORT this proposal with CDFU**

**Proposal 97 - SUPPORT**

*Reduce the minimum herring spawning biomass threshold.*

Biomass thresholds are normally set based on a population's unfished size. There are now 30 years of population estimates where no fishery occurred. This data should be used to set fishery limits and exploitation rates.

The PWS and Gulf of Alaska ecosystems have changed drastically in the last 30-50 years, and will continue to change. There is no reason to keep the herring fishery closed until it achieves those historical population numbers. Environments are ever-changing and managers need to have an ability to adapt to outdated management strategies.

**SUPPORT this proposal with CDFU**

**Proposal 98 - SUPPORT**

*Align Prince William Sound herring and salmon management area descriptions.*

Defining salmon and herring areas in alignment will simplify regulation and bring consistency for participants in both fisheries.

**SUPPORT this proposal with CDFU**

**Proposal 99 - SUPPORT**

*Define commercial herring fishery districts in Prince William Sound.*

The recent discovery of a large new herring population at Kayak Island needs defined waters to operate an exploratory herring fishery.

**SUPPORT this proposal with CDFU**

**Proposal 100 - SUPPORT**

*Adopt a Kayak Island District herring management plan.*

A Kayak Island herring population was never included in the historic fishery or PWS herring management plan. As the ecosystem and climate changes, the BOF and ADFG must act rapidly to allow for new fisheries to be conducted.



SUPPORT this proposal with CDFU

**Proposal 102 - SUPPORT**

*Allow commercial fishery permit holders to harvest herring for the own use as bait.*

A regulation like this exists in most other areas in Alaska. Here are examples:

Southeast: 5 AAC 27.170. Harvest of bait by commercial permit holders in Southeastern Alaska Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held

Yakutat: 5 AAC 27.270. Harvest of bait by commercial permit holders in Yakutat Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

Kodiak: 5 AAC 27.545. Harvest of bait by commercial permit holders in Kodiak Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am from Cordova, Alaska, and I have been a commercial salmon fisher in Prince William Sound for over 40 years. Over the years that I have been fishing in the Prince William Sound area, the hatcheries (both VFDA and PWSAC) have been a stabilizing factor in the region for ALL user groups. Personal use fishers, subsistence fishers, sport fishers, seafood processors, Prince William Sound charter operators, and local communities in Whittier, Valdez, and Cordova all benefit from these hatcheries. Additionally, residents of the Upper Copper River area, who benefit from PWSAC's Gulkana operations in Paxton, as well as the State of Alaska, which depends on the reliable fisheries in Prince William Sound, also benefit from the fish tax collected. Yes, the hatcheries benefit my business and family, but they also benefit all those listed above, as well as many others. Lowering the egg take will lower opportunities for all user groups and reduce revenue for local communities and the State of Alaska. This will have a negative impact on any citizen of Alaska, as well as a direct negative impact on those closer to the resource.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be


under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
David Blake

  
Cordova, Alaska

Dear Board of Fish Members,

The following comments are in reference to the Board of Fish Meeting on Dec 10-16 and more specifically to proposals 86,87 and 88 for Prince William Sound Area

I am addressing all three of these proposals together since I am opposed to all of them for similar reasons even though they are separate proposals. Reasons for opposition to these proposals is listed below.

First, these proposals are unneeded, harmful to some groups and will be ineffectual in producing any of the stated goals of the indicated proposals.

**UNNEEDED**—The Cordova area targeted by these proposals is in the Eyak, Ibeck and 18 Mile river systems near Cordova. This area has been very effectively managed by the Sport and Commercial employees of the Alaska Department of Fish and Game for many years. From my understanding there has only been one or two years in the last decades that this area has not met its Escapement goal for Silver/Coho Salmon. Even in 2024, when many of the Coho areas in Alaska were not meeting their escapement goals, Commercial and Sport Fishing in these areas had to be curtailed. But in the area these proposals are designed to impact, the escapement goal was reached and Commercial and Sport Fishing proceeded normally. This is a great compliment to the management of the current ADFG employees with responsibilities in this area i.e., Brittany Blaine Roth and Jeremy Botts. They have managed the fishery in this area to insure the adequate return of Coho Salmon to this area. Proposal number 88 is an attempt to remove the ability of the Sport and Commercial Fishery area managers to deal with conditions that affect their specific areas independently. Why would anyone consider a proposal to alter the management of a system that has been working well to provide the escapement that is necessary and meet the stated goal. Thus, the proposal makes no sense to implement since a system already exists to modify fishing activities and the current system has worked well currently and in the past. Thus, I am opposed to proposal 88 and to any proposal to change any system that is working. Maybe the escapement goal should be increased and if so, the current system would still work to meet the new goal.

Likewise, the same comments can be made for proposals 86 and 87. The fishing areas in these proposals has been the same for at least the last 10 years and before that, the 3 mile limit restricting fishing on the Ibeck above the highway didn't exist either. These proposals, 86 and 87, limit areas that have never been limited before. Thus, no argument can be made that it is for the goal of increasing Coho salmon in the river since the escapement goal has been made on a consistent basis practically every year and fishing is and has always been allowed in these areas. There are also dozens and dozens of spawning areas that sport fishermen have no access to so to eliminate these areas seems totally unneeded. Current fishing areas, as they are now, seem perfectly matched with achieving the escapement goal. Again, if more fish are desired in the river system, just increase the escapement goal. Then both Sport and Commercial fishermen have to participate in more limitations and not just the sport fishermen.

**HARMFUL TO SOME GROUPS**—Proposals 87 would limit access to areas that are most frequently used by both older sport fishermen, young children fishermen and handicapped fishermen. These groups of sport fishermen can not hike into many of the holes on the 18 mile system. Thus, by closing these areas close to the road, several groups will be very much limited in fishing. Other areas are not available for them to get there.

Also, proposals 86 and 87 are directly aimed at only the sport fishing area. It seems as though the people making these proposals think that fishing in areas that have always been open is now hurting the salmon returns and that suddenly sport fishermen seem to be targeting spawning salmon. Closing these areas would close many areas that are not spawning areas as well causing harm to the above groups mentioned. I've seen fish spawning in the Eyak River, Ibeck River and the 18 mile river system. Do you close all of them? Again, if more spawning fish are needed in the rivers, increase the escapement goal.

**INEFFECTUAL**—I don't believe these proposals would increase the number of returning Coho Salmon. First, the number of Coho Salmon taken by Sport Fishermen in approximately 7% (per ADFG statistics given to me). These changes would not produce even a negligible change in the number of returning Coho. Case in point is when the 3 mile limit was put on the Ibeck years ago and I don't think it made any improvement in the number of Coho returning in the years following the change. Now, to become even more drastic with limitations, and to expect a different result wouldn't seem logical. The numbers of affected fish would be too small since the total harvest of Coho by Sport Fishermen is so small, that implementing these changes would only add complexity to the rules and management of the fishery. Implementing the proposals would harm certain groups and other ways to increase the spawning fish are more equitable to the entire group of users. Thus, I urge you to deny the acceptance of any of the proposals 86,87 or 88.

As a post note:

There has been a lot of concern with the numbers of Sport Fishermen walking in on the Fox Farm Trail and fishing on the 18 mile system. I myself have observed as many as 11 vehicles parked at this trailhead and I too am concerned about this. The fault of this occurring is put on the Sport Fishermen, but I believe this is the symptom of a problem and not the cause. The cause of this overuse of the 18 mile system is due to the fact that after the escapement goal is met, multiple long duration commercial openers are held in the area. Some commercial fishermen fish on these openers in the Egg Island Channel and very close to the mouth of the Eyak (and consequently the Ibeck) Rivers. Once a commercial opener is held, it takes several days for Cohos to reestablish in the rivers. Thus, if 2 openers per week are held, it takes fish out of the Eyak and Ibeck for about 4 days. Then, when sportfishermen try to fish on the Eyak or Ibeck and the fishing is VERY poor, they go to the place where they can catch fish, the 18 mile system. No one is walking in there because they like the 45 min walk in and out, especially when carry fish out. They are walking in there because that is the only place to catch fish. If other areas are closed like more of the Ibeck or areas on the 18 mile system, it will only increase the congestion even more. To end the congestion on the 18 mile system, restrict the commercial fishermen from fishing in the Egg Island channel and so close to the Eyak river mouth. If this is not addressed soon, I feel it will end the viability of the Sport Fishing operators in the Cordova area, including me!

Thank you for reading my concerns,

Calvin Blohm  
Owner Hideaway on the Eyak  
801 787 6676

Proposal 86- Oppose

Reducing the amount riverbank to fish along Ibek Creek will force the already extremely overcrowded area to accommodate even more fishermen and since there will likely not be fewer fishermen, the fish take will likely not be decreased. My understanding is that this issue has been previously considered and that the current area restrictions are adequate.

Proposal 87 – Oppose

We have been coming to Cordova to fish for Coho salmon for more than (15) years now, and it isn't clear to me where this restriction would be.

We usually come to Cordova to fish on the Eyak River and are usually able to fish for about (5) days. During the week we are there, there are normally (2) commercial openers. On the day or two after each commercial opener, the number of fish in the Eyak River is extremely limited and the only other areas we have to fish are on Ibek Creek, which is extremely overcrowded already, or on the (18) mile system, along the Copper River Highway.

I am 79 years old now and my wife is 75, so with advancing age and decreasing mobility, the only places we can access, other than from a boat on the Eyak River, are on the 18 mile system along the Copper River Highway. To close any of this area would leave us, literally, with no accessible place to fish.

Proposal 88- Oppose

The relative impact on the fishery between commercial fishing and sport fishing is so dramatically different that it seems that different management and rules are warranted. My understanding is that ADF&G does have different committees to manage each of these interests, so it isn't clear why management of the two should be combined or related. The current system seems to be managing the fishery sufficiently that the escapement goal is met consistently. Please continue to manage sport fishing separately from commercial fishing.

Donald Blohm

Alaska Department of Fish and Game  
Board of Fish Meeting  
Prince William Sound Area

Date of Meeting: December 10-16, 2024  
Cordova, Alaska

Dear Board of Fish Members:

I am writing this letter to provide feedback on Proposal 86, 87 and 88 to be discussed and considered at the Board of Fish Meeting in Cordova, AK on December 10-16, 2024

#### Proposal 86

I am opposed to proposal 86. The proposal is to limit access to Ibeck Creek for fishing 1 and ½ miles above the Copper River Highway on and after September 21<sup>st</sup> of every year. This proposal is to supposedly protect spawning areas in Ibeck Creek. Approximately 10 years ago Ibeck Creek was closed to any fishing 3 miles above the highway because of spawning concerns. Now, evidently, the fish have moved downriver another 1 ½ miles to spawn there. This proposal would only cause confusion among sport fishermen and would provide limited benefits. There are spawning fish above and below this arbitrary point before and after September 21<sup>st</sup>. I have witnessed spawning fish in the lower Eyak and Ibeck many times and even before the September 21<sup>st</sup> date. Are we supposed to close all of these areas? What about the multiple commercial openers that are going on well into the month of October? Is the purpose just to eliminate sport fishing yet have increased harvest of "spawners" by the commercial fleet continuing on for nearly a month after sport fishermen are barred from fishing in this area. Another point is that as the glaciers have receded, many more small streamlets have opened up allowing for increased spawning areas above the existing 3 mile barrier. There are dozens and dozens of small streams throughout the Copper River Delta that are literally impossible for sport fishermen to access and to cut off another 1 1/5 mile section of the Ibeck after the 21<sup>st</sup> of September would only cause even more congestion on the 18 mile system. If sport fishermen are desired to come to Cordova to fish, why are so many proposed changes made every 3 years to limit access etc.? If more spawners are wanted to spawn, increase the escapement goal. Then the professional commercial and sport fishing managers can manage the fishing activities to achieve the escapement goal. Currently, I understand that the desired escapement goal is routinely achieved in this area. Another restriction on a relatively minor user group is without warrant.

#### Proposal 87

I am opposed to this proposal. This proposal is like the proposal in 86. The escapement goal is being met, why are you considering adding more and complicated regulations to fix a problem that exists only if the current escapement goal is not adequate. Also, if these areas continue to be closed down and access limited even more, then the congestion and over crowding everyone is concerned with will only increase until eventually it is all shut down. Sport fishermen, I am told by the Alaska Department of Fish and Game is only a minor harvester of Coho Salmon. It seems impossible to correct perceived problems (perceived because the escapement goal is routinely met) by placing limitations on one of the smallest user groups of the resource. The areas in proposals 86 and 87 have been open for many, many years and again, the escapement goal is reached. If over crowding and increased fishing pressure is the problem, then you can't fix over crowding by limiting even more areas. Besides, I have sport fished for Coho for

many years and I don't know of any sport fisherman that is targeting the actual spawning of fish. Proposal 86 and 87 are trying to solve a problem that doesn't exist as far as meeting the stated goals of the ADFG escapement goal and their implementation would only lead to over crowding in other areas.

#### Proposal 88

I am very much opposed to this regulation of eliminating the sport fishing managers to make their own decision about how sport fishing should be conducted in this area. Several years ago, the sport fishing manager in the Cordova area had to make a decision to limit the harvest of Coho salmon in the Copper River delta area to 1 fish. It was painful, but it did show that the system currently in place is working and is a viable system. Again, if the system as it stands now was not working, the escapement goal would not be achieved regularly in this area as it has been. I have heard that the escapement goal was not achieved only once in the last several decades in this area. Why would a proposal be considered to alter this system of management when it has achieved such a record of success. One final note...As we have fished the areas mention in the proposals, we have met and talked with families with small children and people who are handicap. This is a wonderful place for all to enjoy. Therefore, I urge you to reject proposal 88

Thank you for the opportunity to provide input on these proposals.

Leesa Blohm





**Submitted by:** Joshua Bloink

**Community of Residence:** Anchorage

**Comment:**

I have been using the Chitina personal use dipnet fishery to feed family for the last 6 years. We have been careful to dial in the amount of fish that we use each year. We actual didn't dipnet at Chitina in 2019 so that we could use the rest of the 2018 fish. We know what we need, and take only what we need. I doubt seriously that any such argument could be made from the commercial side of the fence. I urge you to protect this fishery for Alaskans. I have indicated my support or opposition on the form below.

---

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fishermen. I have been fishing the Copper river for 10 years. It is the sole income of my family with 2 young children

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Michael Blume

A black rectangular redaction box covering the signature of Michael Blume.

Juneau alaska

**SUPPORT this proposal with CDFU****Proposal 49 - SUPPORT**

*Prohibit transport services in the Glennallen Subdistrict.*

We support this proposal but with an edit that would add the restriction of “transporting” but also retain “directing” in the regulation. Removing “directing” may create ambiguity in the regulation.

**OPPOSE this proposal with CDFU****OPPOSE this proposal with CDFU****OPPOSE this proposal with CDFU****Proposals 51, 52, 53 - OPPOSE**

*-Reduce commercial salmon fishing opportunity in the Copper River District.*

*-Reduce commercial salmon fishing opportunity in the Copper River District.*

*-Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.*

These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has shown to already restrict early commercial effort. The objectives of these proposals will have severe economic impacts to the fleet and the region.

The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment.

Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

**SUPPORT this proposal with CDFU****Proposal 55 - SUPPORT**

*Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.*

We favor how this proposal addresses a shared burden of conservation. It is irresponsible and unsustainable to allow commercial guiding operations to efficiently harvest king salmon upriver while downriver commercial users are restricted in an effort to allow these same kings into the river. As the author stated, commercial users throughout this river system should share the responsibilities when necessary to ensure the conservation of this resource.

**OPPOSE this proposal with CDFU****Proposal 58 - OPPOSE**

*Amend the Copper River King Salmon Management Plan.*

With statewide concerns for king salmon, this is not a time to consider raising limits.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of sockeye, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**OPPOSE this proposal with CDFU****Proposal 59 - OPPOSE**

*Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.*

This proposal is a reallocation of a resource that is already at its allocation limit.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of king salmon, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**SUPPORT this proposal with CDFU****SUPPORT this proposal with CDFU****Proposal 60, 61 - SUPPORT**

*-Modify the annual limit for the Chitina Subdistrict.*

*-Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.*

If the personal use fishery exceeds its allocation, there should be restrictions placed on this gear group to ensure conservation of the Copper River salmon population. With increased interest and growth in the personal use fishery, we must reduce the limits to allow all participants equal access, while also protecting this resource for future generations.

With no cap on personal use participants, the most direct way to protect the resource and remain within the allocation parameters is to reduce the annual bag limit.

### **SUPPORT this proposal with CDFU**

#### **Proposal 62 - SUPPORT**

*Allow inseason adjustment of the Copper River personal use maximum harvest level.*

We favor how this proposal addresses a shared burden of conservation. We are in support of adopting a triggered regulation for conservation purposes. During times of concern, all user groups should be managed accordingly to ensure the long-term viability of this resource.

In years of low abundance, the commercial fishery typically bears the burden of conservation and sees significant reductions, but other user groups do not.

CDFU submitted a similar triggered-regulation proposal to the 2021 BOF meeting, which suggested a new section for regulation 5 AAC 77.591: if the Copper River District commercial harvest is 50% below the 10 year average by June 1, the maximum harvest level in the Chitina subdistrict will be reduced to 50,000 sockeye.

### **OPPOSE this proposal with CDFU**

#### **Proposal 63 - OPPOSE**

*Amend the opening date of the Chitina Subdistrict personal use fishery.*

We share concerns about dip net pressure on Copper River stocks, however we do not support restricting management based on projected run timing curve. The run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count

reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

**SUPPORT this proposal with CDFU**

**Proposal 64 - SUPPORT**

*Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.*

Personal use limits were originally set based on what needs a participant may have for the year. Allowing a user to obtain their bag limits in multiple personal use fisheries is a loophole in state regulation that should be closed for conservation purposes.

Commercial salmon boats must choose what state regulation area they will fish. In other instances in regulation, there are aggregate harvest limits based on area: In Game regulation, deer cannot be harvested to a full limit in PWS, Kodiak, and Southeast in one year.

**SUPPORT this proposal with CDFU**

**Proposal 65 - SUPPORT**

*Require a weekly permit and inseason reporting in the Chitina Subdistrict.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting in the Chitina Subdistrict will cause any burden to its users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

**SUPPORT this proposal with CDFU**

**Proposal 66 - SUPPORT**

*Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.*

Despite evidence of a strong return, the egg take goal for Gulkana hatchery was not achieved in 2024. It is imperative for all user groups to be managed for salmon resource goals. A similar regulation is in place for every other hatchery in the area and this regulation alignment will close a loophole as well as ensure efficient hatchery operations.

**SUPPORT this proposal with CDFU**

**Proposal 67 - SUPPORT**

*Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.*

This proposal encompasses good science. King salmon that are released must be given an opportunity to survive and spawn.

**SUPPORT this proposal with CDFU**

**Proposal 68, 69 - SUPPORT**

*-Prohibit dipnetting from a boat in the Chitina Subdistrict.*

*-Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.*

Regulation was written before the growing efficiency of this personal use fishery. We need to adapt regulation now to account for drastic changes in harvest and increased commercialization of the personal use fishery in recent years brought through guided express boat charters. Our Copper River king and sockeye resources simply cannot handle the impacts of an increased style of fishing prevalent in the Chitina subdistrict. The efficiency of the guided boat personal use dip net fishery has driven this gear group to be above their allocation.

**OPPOSE this proposal with CDFU**

**Proposal 70 - OPPOSE**

*Extend the lower boundary of the Chitina Subdistrict.*

The personal use dip net fishery has been exceeding its allocation in recent years. Instead of relieving pressure on the resource, this proposal to move a boundary would simply move pressure downriver: more area for the Chitina subdistrict will only increase effort by dipnetters and lead to more boats and pressure on the resource. There is a finite resource that is fully allocated, and we cannot continue to give more.

**SUPPORT this proposal with CDFU**

**Proposal 71 - SUPPORT**

*Prohibit guiding in the Chitina Subdistrict.*

We are in support of this proposal that addresses the increased commercialization of the personal use fishery. A commercial gillnet fishery for Copper River salmon already exists: the Area E commercial gillnet fishery at the mouth of the Copper River. Anyone who would like to commercialize the harvest of fish can purchase an Area E gillnet permit.

Personal use only makes sense if Alaska residents are getting access to a resource for less than it would cost to purchase the resource. The commercialization of the personal use fishery through private guiding increases the cost to the average participant, as each fisherman is forced to either compete with skilled guides in powerful boats or pay upwards of \$400 dollars a day to ride along. When personal use fishermen invest in expensive guide services to harvest their fish, it easily equates to \$20 per fish or more. This is more than someone might pay purchasing fish at Costco! Obtaining fish by paying money in the personal use fishery more closely resembles sport, because it is a joke, one where commercial fishermen are a punchline.

Prohibiting guiding in the Chitina subdistrict is a straightforward and fair way to alleviate congestion and pressure on the resource.

### **SUPPORT this proposal with CDFU**

#### **Proposal 72 - SUPPORT**

*Close sport fishing for salmon based on water temperature in the Gulkana River.*  
Heat stress on salmon is well-studied. Similar practices are being put in place throughout the US.

### **OPPOSE this proposal with CDFU**

#### **Proposal 83 - OPPOSE**

*Allow a resident sport angler to use two rods when fishing for salmon.*

There is already reasonable access in this fishery. The suggested regulation change could cause enforcement issues. How would enforcement know that only salmon are being retained while fishing with two rods?

### **SUPPORT this proposal with CDFU**

#### **Proposal 84 - SUPPORT**

*Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.*

Sport harvest of saltwater kings and rockfish has been significantly increasing over the last ten years. This is increasingly concerning for our region which is vested in the conservation of Chinook salmon and rockfish. With a growing sport fish charter industry,



it is not sustainable to continue to allow charter captains and crew to retain their bag limit while clients are on board. ADFG is already moving in this direction in Proposal 29, and the precedent is already set in Kodiak, Southeast, and federally for halibut. This would bring PWS into alignment.

**OPPOSE this proposal with CDFU**

**Proposal 85 - OPPOSE**

*Modify the bag and possession limit for coho salmon.*

This proposal is an allocative grab by the author to take a larger portion of the resource for the benefit of their company and clients. This year, ADFG reduced the bag limit to one coho salmon. This is not the time to double the bag limit from three fish to six fish.

The author also suggests this regulation change to target hatchery-bound coho salmon. There is already an expanded coho take in Valdez Arm to target these hatchery fish. Increasing the bag limit across the region has the potential to negatively impact many small wild coho streams around PWS.

**SUPPORT this proposal with CDFU**

**Proposal 86 - SUPPORT**

*Modify the sport fishing area and season dates in Ibeck Creek.*

With increased effort later in the season on Ibeck Creek, we support this proposal to protect spawning coho salmon. It does not make sense to allow fishing in spawning beds. These fish have already been counted as escapement by ADFG aerial surveys, and should be left to spawn and ensure future runs.

**SUPPORT this proposal with CDFU**

**Proposal 87 - SUPPORT**

*Modify the sport fishing area and season in a Copper River Delta system.*

We firmly support protections for spawning coho salmon in the Copper River Delta.

**SUPPORT this proposal with CDFU**

**Proposal 88 - SUPPORT**

*Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.*

We support this proposal that addresses a shared burden of conservation to protect our salmon fisheries. If the commercial fleet is restricted to protect coho salmon during years of low run entry and low aerial survey counts, the sport fishery should be similarly restricted to protect coho in the Copper River Delta. During years of low returns, we must all work together to reach escapement goals and ensure future healthy salmon runs.

**Submitted by:** Dadrian Blythe

**Community of Residence:** Anchorage

**Comment:**

I believe proposals 14,15,16,17, and 18 need to be edited. We need more regulations on trawling or to abolish it completely. The well being and food security of the Alaska people's now and future depend on it.

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**Submitted by:** Geri Boney

**Community of Residence:** Tok

**Comment:**

Prop. 67-

oppose

Prohibit removing king salmon from the water if it is to be released in the CPUDF.

This proposal is not practical in many of the back eddies where shore based dipnetters are tied off short to prevent falling into the turbulent water of the Copper River in Woods Canyon. When releasing a king after already harvesting their 1 annual king or because king harvest is prohibited, most dipnetters will try release kings unharmed in the water.

Prop. 69 –

oppose

Place restrictions on dipnetting from a boat.

Chitina P.U. dipnetters have a set annual family bag limit and once filled they are done for the year. Boat dipnetting just affords users another means of filling their finite family bag limit and should not be burdened with unneeded restrictions. This would only make shore dipping more congested.

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**Submitted by:** Joseph Boney

**Community of Residence:** Tok

**Comment:**

Prop. 58 –

support

Amend the Copper River king salmon management plan

The Copper River king salmon escapement goal is 21,000-31,000. Previously this escapement goal had no upper bound and no mechanism existed for the F&G commissioner to raise the king salmon bag limit for the Chitina Personal Use Dipnet Fishery (CPUDF). If in the future the Copper River king escapement is predicted to pass the 31,000 upper bound, this proposal could allow harvest of more than the one king permitted in the dipnetter bag limit. Something the Chitina Dipnetters Association (CDA) has been for years advocating.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial fisherman in Prince William Sound and the hatcheries play an integral role in our salmon returns. Hatcheries provide the majority of salmon harvests to us in Prince William Sound. We need to preserve and improve our hatcheries, not downsize them! I can only assume Proposal 78 would make my job as a commercial harvester 25% less economically viable with 25% less fish in the water.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover,

Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Rowan Borden-Deal

A solid black rectangular box used to redact the signature of Rowan Borden-Deal.

Cordova, Alaska

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am from Kasilof, Alaska, and I am tied to commercial, sport, and subsistence fishing. As a third-generation Alaskan fisherman, Alaska's hatcheries have provided my family with careers and put food on our table for 75 years. If we continue to steward this resource responsibly, this legacy will continue seven generations from now. A 25% decrease in egg take would harm my family even in the best of years, but especially this year, as we come off a disastrously low return. Decreasing the egg take in a year when the vast majority of fishermen couldn't even make payments is a blow that will negatively impact thousands.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices,

ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Impacts of Proposal 78: Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
Gregory Bosick

[REDACTED]

Kasilof, Alaska

**Submitted by:** Richard Bottass

**Community of Residence:** Eagle River

**Comment:**

Support : 48/58/59/70

Oppose: 44/45/46/47/49/50/54/55/56/57/60/61/62/63/64/65/66/67/68/69/71/72

Dip netting off a boat in the Copper is the way I feed my family each year. The annual limits currently set are not quite enough for us .An increase would actually help us. We are in a household with two Disabled Veterans, and we rely on this fishery for our annual subsistence to get by on. We can't afford not to have this opportunity/ option.

Richard Bottass

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Wasilla, Alaska, and I have been gillnetting in Prince William Sound since 2006. Most of the fish I catch are hatchery fish, so reducing production by 25% would directly affect my livelihood. I am all for managing to sustain returns, but I don't see the necessity of reducing production to accomplish that. Please don't negatively impact so many people's income by acting prematurely on unfounded speculation. As I age, I am unable to fish as aggressively as I could in my younger years, which results in less income. If hatchery production is cut by 25%, my catch and income will drop enough that I may not be able to continue fishing.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

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**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska

Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Robert Bottoms

[REDACTED]

Wasilla, Alaska

**2024 Board of Fish Written Comments**

**#5 I strongly oppose this proposal. The halibut fishery is federally managed. There have been no surveys done on rockfish in PWS in a number of years. Currently the state as laws in place that make it illegal to fish for halibut in both PWS and federal waters during the same trip**

**#18-24 I support theses proposals**

**#45 I support this proposal because there is no conservation benefit from restricting area in a catch limit subsistence fishery.**

**#47 I support.**

**#48 I strongly oppose this proposal because I believe guiding subsistence dip netters from a boat is not subsistence. It is not C&T and i feel the practice should be outlawed for all upper river fisheries.**

**#56-57 I strongly support this proposal. Something needs to be done to make this fishery more viable,stacking permits mean less nets in the water, I agree more with all points in proposal 56 If stacking aloud it must be legal for one individual to own and fish two permits**

**#78 I strongly oppose this proposal, this has no science behind it**

**I also support any proposal that would help open up crab,herring and octopus fisheries in PWS They are need to help support the economy of towns like Cordova**

**Chris Bourgeois**

November 24, 2024

Chairwomen Märit Carlson-Van Dort  
Alaska Board of Fisheries  
Board Support Section  
PO Box 115526  
Juneau, AK 99811

**RE: Michael Bowen Comments on 2024 Prince William Sound Finfish and Shellfish Meeting  
Proposals 75, 76 and 77**

My name is Michael Bowen. I am a second generation PWS commercial fisherman. I have been involved with most PWS fisheries during my career for the last 55 years. I have served on the PWS/CR advisory committee, BOF working groups, PWSAC Board of Directors for 18 years and participated in the BOF process for the last 44 years. My main source of income is the PWS Drift Fishery. Thank you for the opportunity to participate in the BOF public process to help formulate regulations that result in healthy fisheries.

Hopefully the spreadsheets I have provided will give you a clearer picture of the state of the drift fishery and PWS enhanced salmon allocation and to what degree who is benefiting from it.

The PWS Drift Fishery has been in decline these last five years. It's been a "slow death by 1000 cuts" over the years and due to several factors. Two of the biggest factors regarding enhanced salmon is the decisions of the BOF to not address the disparity in enhanced salmon allocations that the current plan contains. Another major factor was the Esther chums that were produced for the benefit of the drift fishery and PWSAC reallocating them to the seine fishery by removing them out of Esther Subdistrict and to the remote release sites at Port Chalmers and AFK hatchery. This was done in violation of the PWSAC Allocation Policy that was in effect at the time.

**PROPOSAL 75**

**5 AAC 24.370. Prince William Sound Management and Salmon Enhancement Allocation Plan.**

Change the allocation trigger from less than 45% to less than 50% and remove the five-year rolling average and the Esther Subdistrict chum fishery to allow for one piggy bank at the Port Chalmers chum fishery.

As the author of the proposal, I **Support** it.

The language in Proposal 75 and the ADF&G comments in RC2 on pages 195 & 196 cover the proposal very well. But I would add to please see the included spreadsheet on PWS Salmon Enhancement Allocation Totals Since Adopted 2006 to 2023. If the goal is to deliver 50% to a user group, then it makes sense to set the trigger at 50%. Especially when the drift fishery is



behind by 5% on the PWSAC only calculation and behind by 67% on all enhanced salmon. The 68 million PWSAC calculation that drift fishery is behind comes to an average of 3.8 million a year in lost revenue which comes to an average of \$7,500.00 a year per drift permit. It may not seem like much but with the state of the drift fishery it would have been very helpful.

#### **PROPOSAL 76**

**5 AAC 24.370. Prince William Sound Management and Salmon Enhancement Allocation Plan.** Change the allocation trigger from less than 45% to less than 50% and remove the Esther Subdistrict chum fishery to allow for one piggy bank at the Port Chalmers chum fishery.

These two proposals 75 and 76 are similar except proposal 75 removes the five-year rolling average. The language in Proposal 76 and the ADF&G comments in RC2 on pages 204 & 205 cover the proposal very well.

I would **support proposals 75 and 76 as amended**

I would propose to amend **proposal 75 and 76** to change the allocation triggers to 52% Drift and 48% Seine. The reason is that the set net allocation is 4% that comes off the top of the enhanced salmon allocation. The drift and setnet fishery share and compete for the same enhanced salmon resource at the Main Bay Hatchery. So, for every fish the set netters catch that one less available to the drift fishery. The seiners and set netters do not share or compete with the same enhanced salmon resource so in essence the seine fleet has no skin in the game. It's only fair that the seiners cover half of the 4% setnet enhanced salmon allocation.

#### **PROPOSAL 77**

**5 AAC 24.370. Prince William Sound Management and Salmon Enhancement Allocation Plan.** **Repeal the definition of enhanced salmon stocks by removing ["ENHANCED SALMON STOCKS" MEANS SALMON PRODUCED BY THE PRINCE WILLIAM SOUND AQUACULTURE CORPORATION"] or change the name of the plan to the PRINCE WILLIAM SOUND AQUACULTURE CORPORATION MANAGEMENT AND SALMON ENHANCEMENT ALLOCATION PLAN**  
As the author of the proposal, I **Support** it.

The language in Proposal 77 and the ADF&G comments in RC2 on pages 206 & 207 cover the proposal very well.

This proposal asks that the value of all enhanced salmon produced in PWS/CR to be included in the allocation plan. The current plan is based on value and by excluding the most successful pink salmon hatchery in the Western Hemisphere that produces 42% of the enhanced pink salmon by value in PWS. This completely distorts the value and the plan in favor of one commercial user group over the other commercial user groups. Since the adoption of the current plan in 2006 the seine fishery harvested 67.66% of the enhanced salmon value compared to the drift fisheries at 33.34% in PWS. (Please see attached spreadsheet produced by

Michael Bowen utilizing ADF&G Prince William Sound Area Finfish Management Reports from 2006 through 2023).

When you factor in these numbers the current plan does not meet its intended purpose to provide a fair and reasonable allocation of the harvest of enhanced salmon. It completely fails to allocate enhanced salmon stocks in the Prince William Sound Area to maintain the long-term historic balance between competing commercial users that has existed since statehood. When PWSAC, State of Alaska and VFDA started building hatcheries in PWS, pink salmon was the quickest and easiest to produce which benefited the seine fishery. The gillnet and setnet gear groups were asked to be patient and when the production of other species came online enhanced salmon production would "float all boats equally based on historic values prior to enhancement"

The drift fishery deserves a fair allocation plan that includes all enhanced salmon produced in Area E. The drift fishery pays a mandatory 2% enhancement tax on every dollar and fish that they catch including wild stocks. Before the vote on the mandatory 2% enhancement tax there was a voluntary 1% percent enhancement tax that was matched by the processors. I voluntarily paid this tax under the expectation that drift fishery would receive a fair share of the enhanced salmon resource once the programs were up and running.

This proposal is my preferred change to the plan as it will bring the value of the VFDA program out into the light of day. It took me several days to collect the value from the **PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORTS 2006 -2023.**

The result of passing any of these proposals is that the drift fishery will get to fish Port Chalmers on steady basis which will result in the drift fishery getting a portion of their chums returned to them. It won't get them 50% but it will be a move in the right direction. Getting all the enhanced salmon into the plan will be a moral victory.

Thank you,

Michael Bowen

Attachments included: Spreadsheets produced by Michael Bowen  
PWS Salmon Enhancement Allocation Totals Since Adopted 2006 to 2023 and CFEC – PWS  
Salmon and Permit Values 2006 - 2023



**PWS Salmon Enhancement Allocation 5AAC 24,370**  
**Totals Since Adoption 2006 to 2023**

<b>Year</b>	<b>Seine - PWSAC</b>	<b>Drift Gillnet - PWSAC</b>	<b>PWSAC %</b>	<b>45% Allocation Triggered</b>	<b>VFDA Value</b>	<b>PWSAC + VFDA %</b>	<b>Port Chalmers Value</b>
<b>2006</b>	<b>\$5,851,983.00</b>		<b>45.50%</b>	<b>Seine</b>	<b>\$3,870,706.00</b>	<b>58.10%</b>	<b>\$1,260,827.00</b>
<b>2007</b>	<b>\$16,394,816.00</b>	<b>\$7,010,574.00</b>	<b>54.50%</b>		<b>\$0.00</b>	<b>41.90%</b>	
			<b>66.20%</b>		<b>\$12,087,707.00</b>	<b>77.30%</b>	<b>\$1,897,529.00</b>
<b>2008</b>	<b>\$36,411,663.00</b>	<b>\$8,365,677.00</b>	<b>33.80%</b>		<b>\$0.00</b>	<b>22.70%</b>	
			<b>66.80%</b>		<b>\$14,175,440.00</b>	<b>73.69%</b>	<b>\$5,471,892.00</b>
<b>2009</b>	<b>\$9,722,045.00</b>	<b>\$18,059,466.00</b>	<b>33.20%</b>		<b>\$0.00</b>	<b>26.30%</b>	
			<b>38.50%</b>		<b>\$22,142,977.00</b>	<b>67.20%</b>	
<b>2010</b>	<b>\$64,975,204.00</b>	<b>\$15,553,269.00</b>	<b>61.50%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>32.80%</b>	
			<b>64.00%</b>		<b>\$20,135,956.00</b>	<b>69.95%</b>	
<b>2011</b>	<b>\$13,464,746.00</b>	<b>\$36,546,803.00</b>	<b>36.00%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>30.05%</b>	
			<b>34.80%</b>		<b>\$15,657,814.00</b>	<b>55.63%</b>	
<b>2012</b>	<b>\$21,361,107.00</b>	<b>\$23,236,219.00</b>	<b>65.20%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>44.37%</b>	
			<b>41.30%</b>		<b>\$15,699,127.00</b>	<b>54.95%</b>	
<b>2013</b>	<b>\$55,194,763.00</b>	<b>\$30,375,938.00</b>	<b>58.70%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>45.05%</b>	
			<b>68.80%</b>		<b>\$24,551,057.00</b>	<b>76.09%</b>	
<b>2014</b>	<b>\$14,894,564.00</b>	<b>\$25,052,932.00</b>	<b>31.20%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>23.91%</b>	
			<b>42.30%</b>		<b>\$24,930,441.00</b>	<b>66.14%</b>	<b>\$987,289.00</b>
<b>2015</b>	<b>\$23,835,054.00</b>	<b>\$20,380,294.00</b>	<b>57.70%</b>		<b>\$0.00</b>	<b>33.86%</b>	
			<b>64.40%</b>		<b>\$18,988,840.00</b>	<b>76.46%</b>	
<b>2016</b>	<b>\$2,279,055.00</b>	<b>\$13,178,132.00</b>	<b>35.60%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>23.54%</b>	
			<b>14.00%</b>		<b>\$6,376,720.00</b>	<b>38.30%</b>	
<b>2017</b>	<b>\$24,231,312.00</b>	<b>\$13,947,405.00</b>	<b>86.00%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>61.70%</b>	<b>\$2,533,190.00</b>
			<b>56.40%</b>		<b>\$15,521,100.00</b>	<b>67.95%</b>	
<b>2018</b>	<b>\$17,232,200.00</b>	<b>\$18,746,118.00</b>	<b>43.60%</b>		<b>\$0.00</b>	<b>32.05%</b>	
			<b>41.40%</b>		<b>\$12,256,592.00</b>	<b>54.73%</b>	<b>\$3,062,618.00</b>
<b>2019</b>	<b>\$22,101,479.00</b>	<b>\$24,386,998.00</b>	<b>58.60%</b>		<b>\$0.00</b>	<b>45.27%</b>	
			<b>55.70%</b>		<b>\$9,328,394.00</b>	<b>64.11%</b>	
<b>2020</b>	<b>\$9,265,912.00</b>	<b>\$17,589,144.00</b>	<b>44.30%</b>	<b>Drift</b>	<b>\$0.00</b>	<b>35.89%</b>	
			<b>60.40%</b>		<b>\$7,618,407.00</b>	<b>73.53%</b>	<b>\$1,968,529.00</b>
<b>2021</b>	<b>\$27,566,130.00</b>	<b>\$6,078,011.00</b>	<b>39.60%</b>		<b>\$0.00</b>	<b>26.47%</b>	
			<b>67.50%</b>		<b>\$18,673,454.00</b>	<b>77.67%</b>	<b>\$1,567,317.00</b>

PWS Salmon Enhancement Allocation 5AAC 24.370

Totals Since Adoption 2006 to 2023

	\$13,292,185.00	32.50%	\$0.00	22.33%	
2022	\$8,631,964.00	37.80%	\$25,313,247.00	70.49%	\$5,834,595.00
	\$14,208,932.00	62.20%	\$0.00	29.51%	
2023	\$12,971,573.00		\$11,787,732.00		\$28,749.00
	\$12,198,865.00		\$0.00		

Drift

Port Chalmers Seine  
Value  
\$24,612,535.00

45% Allocation Triggered  
Seine - 1 Drift - 9

	PWSAC Total Value	PWSAC Percentage	VFDA Total Value	PWSAC/VFDA Value
Seine	\$386,385,570.00	54.83	\$279,115,711.00	\$665,501,281.00
Drift	\$318,206,962.00	45.17		
Drift Shortfall	\$68,178,608.00		Drift Total Enhanced Shortfall	\$347,294,319.00
PWSAC Only - Drift			PWSAC/VFDA Percentage PWSAC + VFDA Drift	
Average Shortfall		Seine - 67.66%	Average Shortfall	
Per Year	\$3,787,700.00	Drift - 32.34%	Per Year	\$19,294,128.00



CEFC - PWS Salmon and Permit Values 2006-2023  
Compiled by Michael Bowen

Year	Gear Type	Fishery Total Gross Earnings	Average Gross Earnings	Average Permit Value	Lowest Value
2006	Seine	\$11,413,062	\$102,820	\$26,100	Lowest Value
	Drift	\$27,497,718	\$55,890	\$51,600	Lowest Value
	Set	\$849,458	\$32,671	\$61,500	
2007	Seine	\$35,955,115	\$299,626	\$30,900	
	Drift	\$34,903,708	\$69,529	\$52,000	
	Set	\$1,365,898	\$54,636	\$61,500	
2008	Seine	\$52,047,970	\$369,135	\$70,200	
	Drift	\$33,038,463	\$65,165	\$90,300	
	Set	\$1,498,602	\$59,944	\$59,500	Lowest Value
2009	Seine	\$10,451,033	\$67,864	\$75,300	
	Drift	\$32,395,561	\$63,396	\$110,900	
	Set	\$1,704,971	\$63,147	\$59,500	
2010	Seine	\$82,212,876	\$472,488	\$100,500	
	Drift	\$47,761,055	\$92,025	\$128,100	
	Set	\$4,085,598	\$145,914	\$59,800	
2011	Seine	\$37,692,355	\$205,969	\$140,000	
	Drift	\$50,157,831	\$97,774	\$162,100	
	Set	\$3,215,004	\$110,862	\$59,800	
2012	Seine	\$48,550,227	\$216,742	\$168,700	
	Drift	\$60,292,098	\$115,502	\$180,200	
	Set	\$3,541,396	\$122,117	\$61,000	
2013	Seine	\$100,114,877	\$476,738	\$168,000	
	Drift	\$52,020,635	\$99,087	\$195,200	
	Set	\$2,751,729	\$98,276	\$119,300	
2014	Seine	\$39,955,914	\$179,982	\$204,600	
	Drift	\$54,567,982	\$104,137	\$224,100	
	Set	\$3,094,233	\$106,698	\$190,800	

## CEFC - PWS Salmon and Permit Values 2006-2023

Compiled by Michael Bowen

Year	Gear Type	Fishery Total Gross Earnings	Average Gross Earnings	Average Permit Value
2015	Seine	\$67,352,063	\$311,815	\$186,700
	Drift	\$37,828,639	\$72,747	\$224,200
	Set	\$2,038,046	\$70,277	\$190,800
2016	Seine	\$14,547,157	\$69,272	\$147,900
	Drift	\$36,830,697	\$71,239	\$155,400
	Set	\$1,921,953	\$66,274	\$190,800
2017	Seine	\$81,625,986	\$354,896	\$154,500
	Drift	\$41,765,301	\$82,868	\$147,800
	Set	\$1,831,722	\$63,163	\$190,800
2018	Seine	\$41,249,462	\$176,280	\$165,000
	Drift	\$36,968,639	\$72,773	\$153,900
	Set	\$1,956,120	\$75,235	\$190,800
2019	Seine	\$56,042,219	\$235,472	\$173,300
	Drift	\$46,680,112	\$92,619	\$141,400
	Set	\$2,665,334	\$102,513	\$193,000
2020	Seine	\$27,885,260	\$127,914	\$162,600
	Drift	\$12,712,062	\$26,049	\$135,700
	Set	\$942,215	\$36,239	\$186,700
2021	Seine	\$79,022,563	\$372,748	\$155,700
	Drift	\$26,555,324	\$55,672	\$114,100
	Set	\$864,969	\$36,040	\$236,500
2022	Seine	\$48,729,436	\$236,551	\$194,700
	Drift	\$30,186,672	\$66,490	\$111,700
	Set	\$2,209,490	\$84,980	\$230,100
2023	Seine	\$36,654,097	\$172,085	\$247,400
	Drift	\$27,362,528	\$61,627	\$99,100
	Set	\$1,102,110	\$50,096	\$227,600

Peak Value - Up 334.49% Since 2006

Peak Value - Up 297.47% Since 2008

Peak Value - Up 847.89% Since 2006

Down 55.79% Since 2015

**Submitted by:** L.Bruce and Judy Bowler

**Community of Residence:** Juneau

**Comment:**

We fully support AOC's position on industrial Trawl fishing

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**Submitted by:** Steve Box , Worthy Seafoods      Family run commercial fishing business in Alaska

**Community of Residence:** Juneau

**Comment:**

proposal 14-17

Preserving Alaska's fishing future should be a top priority for all Alaskans. The amount of trawl waste is truly unbelievable. While the industrial trawl fleet continues to throw over massive quantities of high end seafood, like halibut, salmon, crab, rockfish and other important species, the rest of Alaska (commercial, sport and subsistence) pays for it with reduced catch limits and closed seasons. The future depends on solid management decisions and far less waste. As a 40+ year commercial fisherman I support proposals 14-17 and any measures to control the trawl waste and protect the fisheries habitat. My 2c halibut quota has been reduced approximately 65% over the last 15 years and continues on a downward trend. We all need to protect our valuable Alaska fisheries resources and quit throwing them overboard as waste.

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**Submitted by:** David Bragg

**Community of Residence:** Fairbanks

**Comment:**

Hello, I have a family with 4 Alaska resident adults and 2 children. With respect to the proposals and in the best interests of my family please take into account the following:

OPPOSE Proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71

SUPPORT Proposals 48,51,52,53,58,59,70

---

**Submitted by:** David Branshaw

**Community of Residence:** Cordova

**Comment:**

I support proposal 14,15,16,17. Trawl fisheries are destroying habitat and fishery resources wherever they occur. Please stop all trawling in state waters thank you.

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**Submitted by:** Doug Bratten

**Community of Residence:** North Pole

**Comment:**

I am writing to express my SUPPORT for;

Proposals 48,51,52,53,58,59,70

Also, I am writing to express my OPPOSITION for;

Proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71

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**Submitted by:** Douglas Bratten

**Community of Residence:** North Pole

**Comment:**

I OPPOSE Proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71.

I SUPPORT Proposals 48,51,52,53,58,59,70

Every year, we Alaskan Residents lose more and more Personal Use rights and/or have more restrictions put upon us, while Outside commercial interests seem to always gain.

It's time our State officials stick up for Alaskan Residents and preserve our Personal Use rights. Tell the Lower-48 commercial interests to go pack sand.

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**Submitted by:** Gregory Bratten

**Community of Residence:** Fairbanks

**Comment:**

Prop 60,61,62,63,65,66,67,68,69,71

More restrictions on Alaskans putting up food should not be considered.

Commercial fishing industry should not have a say in bag limits and regulations on residents. Many of the commercial fishermen are not even residents.

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**Submitted by:** James Brennan

**Community of Residence:** Sitka Borough

**Comment:**

I support Proposal 14, which I understand would ban any pelagic trawl which either touches the bottom--even once--or catches king salmon--even once. This is a reasonable compromise from Proposal 16, which would simply ban all pelagic trawling in PWS.

Bottom trawling is already banned in state waters, because the long term harm to benthic habitat done by trawls contacting the bottom is well documented, in Alaska and elsewhere. The Board should not close its eyes to the fact that so-called "pelagic" trawls come in frequent contact with the bottom, 85% of the time by some estimates.

Prohibiting bottom trawling while allowing de facto "pelagic" bottom trawling is rank hypocrisy, a political strategy which has no place in a science-based regulatory system. At stake here are both the PWS fisheries and ecosystem, and Alaska's reputation for sound resource management.

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**PC78**

**Submitted by:** Anthony Brenner

**Community of Residence:** Lake Louise

**Comment:**

Proposal 89. Disagree with upping the limit.

Not a good idea. These fish take a long time to grow.

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**PC79**

**Submitted by:** Christopher Brewster

**Community of Residence:** Anchorage

**Comment:**

I think it's obvious that the majority of residents and users of Alaska have felt the effects of trawling in this state and would like to see our government step in. Let's protect some of our recreational areas where the public frequents and preserve some of this space for future generations. The fact that trawling occurs within PWS is a complete failure and just wrong.

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**PC80**

**Submitted by:** Bittner Brooks

**Community of Residence:** Fairbanks North Star Borough

**Comment:**

I am tied up supporting my family at work however I have read through the proposition's and used my personal lens of the following:

-Alaskans need to be fed first

-Trawlers are destructive to the ecosystem and the money leaves Alaska

-Commercial fishing is second to Alaskans being fed

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**Submitted by:** David Brown

**Community of Residence:** North pole

**Comment:**

OPPOSE Proposals 44, 45, 46, 47, 54, 55, 56, 57, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, and 71. I'm SUPPORT Proposals 48, 51, 52, 53, 58, 59 and 70.

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Dear Chairman Märit Carlson-Van Dort and Members of the Board of Fisheries,

My name is Ezekiel Brown. I am a lifelong resident of Cordova, AK where I sport, subsistence and Commercial fish. I have run my own boat since 2011 with which I participate in commercial fisheries for PWS salmon seine, Tanner crab, shrimp, Black Cod pot, Halibut longline and tender for the Copper River Gillnet fleet.

**Proposal 1,25,26: OPPOSE *Establish subsistence, sport, and personal use fisheries for sablefish in PWS***

The area in which the majority of black cod harvest occurs in prince william sound is relatively small and even with only two commercial fishermen working at the same time communication is key to prevent tangling gear. Putting more fixed gear for personal use and sport in this small area will result in gear loss and added danger to myself and crew dealing with tangled lines. The majority of boats are not equipped to set pots in 2000+ feet of water. I use 2700' of buoy line and two 30-50 lb anchors on each end of my pot strings as well as weights between the pots. I struggle to imagine where an average sport boat will find space or hydraulic power to fish so deep. I have heard from sport fishermen that they are having good success targeting black cod with electric reels which seems much more attainable than pot fishing.

**Proposal 2: SUPPORT *Reopen waters closed to pot gear harvest of groundfish***

I fish Halibut and black cod in Prince William sound with hooks and pots. This closure area forces me to use hooks when fishing in the closed area of the sound. I understand that the reason for this closure is to limit incidental catch of Crab. This makes no sense to me as I have very rarely caught crab in my groundfish pots and when I do they are returned to the water unharmed. However, I do notice much less rockfish harvest when using pots vs hooks.

**Proposal 3: SUPPORT *Modify Prince William Sound groundfish pot specifications***

While participating in the PWS Black Cod pot fishery I often catch halibut in my pots however most of them are under the legal size limit. I imagine a larger tunnel eye may allow me to catch more halibut of legal size in my pots. The more halibut I can catch in pots the less hooks I need to set to catch my quota. Catching halibuts in pots would have the added benefit of reducing whale depredation and lowering rockfish bycatch vs using hooks.

**Proposal 5: OPPOSE *Adopt a provision to close waters to specific groundfish gear types***

I have serious concerns that the department will use this authority to push small boat halibut fishermen into the outside waters of Prince William Sound particularly towards the end of the season when the weather is the worst. This is exactly what they did when given this authority last year. There are many proposals in front of you that would help limit rockfish harvest that are preferable to this blanket closure ability. The department currently does not enforce the rockfish management plan in regulation, allowing people to exceed the 3000lb trip limit without repercussion. I believe the department needs to use the tools at its disposal before asking for more authority.



**Proposal 6: SUPPORT *Allow for release of rockfish in fisheries***

I would like to see this proposal expanded to allow for use of deep water releases in pot and longline fisheries as well. Often while longlining when fishing is slow it would not be hard for a deckhand to return rockfish to the water using a deepwater release.

**Proposal 7: OPPOSE *Establish gear specifications for directed lingcod fisheries***

When longlining for halibut in PWS I often catch lingcod. I get a lingcod permit and then I can retain and sell the lingcod I catch while halibut fishing. I have no interest in purchasing jig or troll equipment so this proposal would exclude me from the lingcod fishery.

**Proposal 8: SUPPORT *Modify the Prince William Sound pacific cod fishery ghl***

There seems to be a large population of cod in PWS. I catch a lot of them when I am out fishing for halibut. The winter cod fishery is an important fishery economically throughout Alaska. With some more quota assigned to it the PWS fishery could support more boats and would provide a much needed winter fishery for myself and others.

**Proposal 9,11: SUPPORT *Combine the Pacific cod longline and pot gear allocations***

Having a longline cod fishery open when halibut fishing is closed never made any sense to me. Fishermen go out in January and February and target cod and release a bunch of halibut and then they go back out once the halibut fishery is opened and catch those same halibut again. Pot fishing cod is much less labor intensive and has much lower bycatch of rockfish and halibut. Lightweight collapsible cod pots can be fished off any size boat and will result in a better fishery. Keeping a separate allocation for Jig will allow for small boat new entrants to participate in the fishery.

**Proposal 10: SUPPORT *Modify pot limit in the Prince William Sound Pacific cod fishery***

This will help encourage the switch to pots from longlining. The light weight pots can fit on almost any size boat. On my boat I can fit 30 conventional 6'x6' 500lb cod pots or 300+ lightweight slinky pots.

**Proposal 13: SUPPORT *Increase bycatch limits for skates***

There are a lot of skates in PWS it would be nice to be able to retain enough of them to develop markets.

**Proposal 15: SUPPORT with amendments *Modify bycatch limits in the Prince William Sound pelagic trawl fishery***

Bycatch limits are set as % of catch of target species in part to prevent targeting of the bycatch species. I would not support modification to the bycatch levels without setting species specific bycatch amounts and including language that bycatch can not exceed a set % of pollock aboard the vessel.

**Proposal 19,20: SUPPORT *Modify the commercial fishing season for sablefish***

I am a permit holder in the PWS sablefish fishery. The Current management strategy's restrictive season dates and lack of mechanism to allow full utilization of the ghl is costing me and other permit holders with no biological justification. I would like to see the season dates expand earlier in the spring to coincide with the federal halibut fishery. The implantation of a B season would allow those permit holders who continue fishing in the fall months to sweep up unharvested quota. Anything the board can do to encourage fisheries to operate outside of the summer salmon season should be done as it will be a great help to fishermen, processors and communities in need of diversification.

**Proposal 21, 22: SUPPORT *Allow the concurrent use of longline gear and pot gear***

The board and the department should be doing everything they can to encourage the adoption of pots in groundfish fisheries. Current regulation prevents the use of pots and hooks at the same time is preventing me from experimenting with pots in the halibut fishery. This regulation is also extremely frustrating when making trips out of a port that is not my homeport. Often when the cordova processors are closed we will deliver to whittier or seaward. Under current regulation if I am going to do a couple trips out of Whittier one for halibut with hooks and one for black cod with pots I have to go back to home port between trips to switch gear. In the federal halibut and sablefish fisheries it is allowed to fish hooks and pots on the same trip. This mismatch is confusing to fishermen and creates enforcement difficulties when boats fishing federal waters with both gear types are transiting state waters.

**Proposal 23: SUPPORT *Prohibit the retention of sablefish from state waters***

This regulation was poorly worded when put into place and is causing issues for fishermen I know attempting to follow the rules. It is hidden in the regulation book under PWS sablefish fishery but it impacts federal sablefish and state waters halibut fishermen.

**Proposal 27: SUPPORT *Modify rockfish bag and possession limits***

The growth in the charter fishing fleet and their targeting of rockfish is very apparent to anyone who spends time in PWS. Something needs to be done to limit their harvest. I fear this does not go far enough. The commercial fishing fleet has had a GHL set of 150,000lbs of rockfish for decades and has stayed under this harvest limit almost every year. I ask the board to use this proposal to set a hard cap/ GHL for sport fish rockfish and prevent the continued growth of this fishery.

**Proposal 28: OPPOSE *Modify the rockfish area, bag and possession limit***

If the board wishes to create outside and inside districts for rockfish the commercial ghl should also be split.

**Proposal 29: SUPPORT *Create additional provisions for yelloweye rockfish management***

Rockfish are a limited resource and can not support unlimited fishing pressure. The board should expand this proposal to apply to all sport caught rockfish.

**Proposal 31 - SUPPORT Repeal closed waters for the Prince William Sound Tanner crab.**

I do not understand why these bays are closed when so many other bays on the west side of the sound are open. Closure areas do not make sense for crab fisheries as the biomass is constantly moving. During the 2022 commercial crab fishery in the eastern district these closure areas severely limited the waters available to fish in even though the department's trawl survey used a healthy population of legal crab inside the closure area to create the biomass estimate.

**Proposal 32 - SUPPORT Reopen the Dungeness crab fisheries.**

I have seen plenty of evidence of a healthy dungeness crab population in area E. While gillnetting in front of the copper river I have caught many dungeness crab and also while participating in the subsistence and commercial tanner crab fishery. I believe the department and the board have no justification for the continued closure of this fishery and there is very little risk to opening a fishery where only large males can be harvested. Commercial dungeness fisheries occur every year from California to King cove with no surveys. Why continue to close this fishery waiting for a survey the department will never fund?

**Proposal 33 - OPPOSE Adopt community-based subsistence harvest permits**

A small scale commercial fishery is what this community needs to provide crab for the locals. Dock sales have happened every year there has been a commercial tanner crab fishery and provide crab for the community. Additionally during the 2022 commercial season a boat went out with the sole purpose of bringing crab in to the native elders. Who would be eligible for Community harvest permits?

**Proposal 34 - SUPPORT Repeal the Registration Area E Tanner crab harvest strategy.**

The tanner crab harvest strategy for area E is unacceptable and will never result in a worthwhile fishery. The area designations are totally without logic in many cases the boundary lines are right in the middle of crab habitat and the crab move back and forth between districts. The reliance on trawl surveys that are unaffordable for the department to carry out and catch ridiculously low numbers of tanner crab that then are extrapolated to produce population estimates. The department is also keeping closed the northwest area where the highest density of crab was found in the test and commissioners permit fisheries. It does not have to be this hard to have a crab fishery in PWS, just open a fishery. If there's not a lot of crab around we won't go crabbing. We had a fishery for three years in part of the area under the commissioners permit and it was working fine until the department decided to enact this overly complex management strategy.

**Proposal 35 - SUPPORT harvest strategy for Prince William Sound Tanner crab.**

This proposal would result in a small scale tanner crab fishery which is what we need. The Tanner crab fishery in PWS is much more like the southeast exploratory areas or the semidi Island overlap between Kodiak and Chignik. In both of those areas the board of fish and department allow for fisheries despite a lack of surveys or harvest strategies. Pass this proposal and allow a fishery in area E and as it develops we will work with the department to refine harvest strategy and GHLS.

**Proposal 36 - SUPPORT Increase the pot limit in the Tanner crab fishery.**

I do not remember when this pot limit was reduced and am sure I did not have an opportunity to comment on it. This small pot limit has been extremely frustrating when attempting to prospect

PWS forcing at times to space pots .5-1 mile apart. It is easy to miss the biomass of tanner crab when prospecting, sometimes 100 yards makes a huge difference in catch rates. I have also participated in the Kodiak fishery with a 20 pot limit and I understand the reasoning for that pot limit over there where there are 100+ participants and the crab are extremely condensed. This is not the case in PWS. Often in PWS I see maybe one other crab boat fishing near me and the crab are very spread out over large areas. The small pot limit makes the only option to try to cover the area running the pots twice a day. This results in less soak time and does not give the female and undersized crab a chance to escape causing increased handling. It also increases bait and fuel usage. This arbitrarily low pot limit is a lose-lose for the fishermen and the resource. With the daily reporting requirement already in regulation there is no risk of too rapid of harvest rate in this fishery.

**Proposal 37 - SUPPORT *Establish a static pot limit in the Tanner crab fishery.***

Adjusting pot limits on a year to year basis makes planning very difficult. Tanner pots are expensive and built in matching sets same with all the line and buoy setups. I have no idea how many pots I should have ready if this fishery is to open until right before the season and it is doubtful I'll have time to find matching pots that safely fit my boat. I would err on the side of just owning the maximum allowed in regulation except adfg might never allow that and I'll just have thousands of dollars worth of gear to store. Additionally this regulation seems to infer that pot limits should be lowered if the GHL is low which is ridiculous. If the GHL is low that would be because there is a low abundance of crab so you would have a corresponding low catch rate per pot. Adjusting the pot limit on a season by season basis is just another example of a poor management practice in PWS that do not exist anywhere else in the state.

**Proposal 38 - SUPPORT *Allow vessels in the PWS Tanner crab fishery to also tender.***

This would be very helpful to get the crab to markets. During the 2020 crab season the only market was in Seward which required a long run through the gulf of Alaska. This is dangerous and difficult for smaller boats to have to leave the protected waters of PWS. With the further consolidation of processors across the state I would not be surprised if in future years crab will need to be taken to Kodiak or further for processing. Allowances for fishing boats to also act as tenders are available in every salmon fishery in the state under the transporter section of regulation as well as in the Kodiak dungeness fishery.

**Proposal 39,40 - SUPPORT *Establish a commercial Golden King crab fishery.***

There is a commercially viable population of Golden king crab in PWS. During the tanner crab test fisheries and commissioners permit fishery I caught golden king crab in the deep waters of western PWS. Golden king crab tend to live much deeper than tanner crab so seeing the amount I did while tanner crab fishing makes me believe there is a healthy population.

**Proposal 42 - OPPOSE *Open a sport king crab fishery***

Crab should not be fished during the summer months when molting

**Proposal 43 - SUPPORT *Establish a directed octopus fishery in Prince William Sound.***

I would like to participate in this fishery. There is a market at the very least locally for octopus.

**Proposal 46, 47 - SUPPORT *Require harvest reporting within seven days of harvest***

I participate in the lower river subsistence fishery almost every year. Having to report weekly would not be difficult and would increase the accuracy of reports.

**Proposal 48 - OPPOSE *Repeal the prohibition of subsistence guide services***

The board had sound reasoning when it passed this prohibition just three years ago.

**Proposal 49 - SUPPORT *Prohibit transport services in the Glennallen Subdistrict.***

This seems like a loophole that should be closed.

**Proposals 51, 52, 53 - OPPOSE *Reduce commercial salmon fishing opportunity.***

Anyone who has been involved in wild salmon fisheries knows that there is no average run and attempting to force management to manage every year as if there is is bound to fail. Being the first salmon run of the year the copper river salmon run timing is based on when spring finally comes and the river ice breaks; this varies wildly every year and is the primary reason managing to the run timing curve is hopeless. Attempting to force fish to follow a calendar will not work and we can only expect further departures from historic run timing and distribution as the environment continues to change. If these proposals pass they will have an immediate impact on my livelihood and will not result in healthier runs of salmon.

**Proposal 55 - SUPPORT *Restrict commercial guide services in the Upper Copper River***

**Proposal 58, 59 - OPPOSE *Amend the Copper River Salmon Management Plan***

The Copper river salmon run is fully allocated.

**Proposal 60, 61, 62, 64, 65, 66, 67, 68, 69, 71, 72 - SUPPORT**

The board needs to act to put some guardrails on this ever expanding inriver fishery.

**Proposals 73, 74 -OPPOSE *-Permit stacking by single salmon purse seine permit holder***

I was one of the proposers of the original permit stacking proposal that passed in 2021. Part of the reasoning behind that proposal was to provide another entry path into the fishery for crew members who could buy a permit and lease it to the captain of the boat they are fishing on as the second permit holder. If these proposals pass and a captain is allowed to just buy his own second permit that pathway for new entrants will get more difficult. The permit stacking regulation on books has only been in place for 3 seasons and already over 10% of the boats are fishing dual permits. Let the current regulation go for a few more years unchanged and if more consolidation is needed then we could talk about a proposal such as this.

**Proposals 75, 76, 77 - OPPOSE *Amend the Salmon Enhancement Allocation Plan***

The current salmon allocation plan has been in place my entire adult life. I have built my business and life based on this regulation. There is no reason to change it.

**Proposal 78 - OPPOSE *Reduce hatchery permitted pink salmon egg take level by 25%.***

The hatchery system in Prince William sound is one of our greatest achievements in food production. For going on 50 years these hatcheries have increased the salmon runs creating billions of lbs of food and an entire economy that would not exist without them.

Those opposed to the hatchery system will often point to cycles attributed to the large odd year pink salmon returns. Any even/odd year cycle can not be attributed to hatcheries as they release the same number of fry every year.

In the last decade i've seen record returns of both wild and hatchery salmon to Prince William Sound which have allowed me to buy my own boat and start a family. If the board chooses to adopt a reduction in the egg take goal it will have an immediate impact on my livelihood and will impact my ability to continue to be a commercial fisherman and live in Alaska.

**Proposals 79,80,81 - Support Close Main Bay during hatchery cost recovery operations**

Something needs to be done to address fishing in the head of main bay during cost recovery efforts. It should not be controversial to ensure adequate space for the hatchery to achieve its brood stock and cost recovery goals. There are plenty of areas around main bay that have large build ups of sockeye that subsistence, sport, and commercial fishermen can and do target that do not interfere with hatchery operations.

**Proposal 83 - OPPOSE Allow a resident sport angler to use two rods when fishing**

**Proposal 84 - SUPPORT Prohibit charter operators from retaining kings and rockfish**

This is a loophole that is used to allow clients to harvest additional fish while on a charter and should be closed.

**Proposals 86,87,88 - Support Modify sport coho salmon fishery**

Growing up in Cordova it seems like every year there is more and more sport fishing effort on the delta targeting coho and it continues on later into the year past when new fish are still entering the rivers. Closing fishing in some spawning beds after September 21st is a logical protection to put into place. Oftentimes these fish are already counted by the department as escapement and yet do not get to spawn as they are caught by sport fishermen.

**Proposals 96,97,98,99,100,102 - Support Modify PWS Herring Management**

Modifying the PWS herring fishery management to align with the numerous changes over the last 30 years in PWS herring population size, location and markets available is very much needed.



Franke L Brown  
Vanguard Fisheries  
[REDACTED]  
Kodiak, AK. 99615

November 26, 2024

Re: **Oppose Proposals 14, 15, 16 & 17** — PWS Pollock Fishery

**Dear Chairwoman Carlson-Van Dort and Board Members,**

My name is Franke Brown, owner of the Fishing Vessel *Vanguard* based out of Kodiak, Alaska. I have been part of this vessel's journey since 1990, serving as a crew member, captain, and now owner, for over 34 years.

I have been a proud resident of Kodiak since 1987, where I raised five children. The *Vanguard* is owned in partnership with individuals who, like me, have deep ties to Alaska through family and community. Our vessel directly employs eight fishermen, most of whom are Alaska residents, along with their families. Beyond our crew, the *Vanguard* supports hundreds of jobs in Kodiak through the services it requires.

The *Vanguard* is a 90-foot trawler that serves the communities of Kodiak and Dutch Harbor. In the past, it supported a pollock buying plant in Seward through the Prince William Sound pollock fishery, and it has the potential to support establishing a new local plant in the future.

For nearly 30 years, we have participated in the Prince William Sound fishery. My experience is the fishery is a carefully managed operation, conducted at a slow pace with observers provided by the state, when they have the resources to deploy them. No more than 6–8 vessels operate in the Sound at any given time, and strict reporting requirements are in place. My experience has shown this fishery to be well-regulated, requiring effective management tools to participate.

This fishery plays a crucial role in creating opportunities for our crew, processing facilities, and communities. The seafood industry is facing significant challenges, and small vessels like mine are struggling. Losing this fishery would be devastating to my operation, which has taken over three decades to build.

**Opposition to Proposals 14, 15, 16, and 17**



I strongly oppose Proposals 14, 15, 16, and 17. Proposals 14 and 16 aim to close the fishery entirely, while Proposals 15 and 17 would modify bycatch limits and change monitoring requirements.

The Alaska Department of Fish and Game (ADF&G) staff also oppose these proposals, stating they have the necessary management authority to ensure sustainable fisheries.

**Bycatch:**

The ADF&G has Emergency Order (EO) authority to adjust bycatch limits. This fishery operates under strict bycatch caps:

- Bycatch is limited to no more than 5% of the total round weight of pollock harvested.
- Rockfish bycatch is capped at 0.5%, and salmon at 0.04%.

Between 2021 and 2023, the average bycatch consisted of 759 rockfish and 888 salmon annually, compared to an average pollock harvest of 6 million pounds.

**Monitoring:**

ADF&G has the authority to deploy observers, and my vessel complies with rigorous monitoring requirements. We participate in the federal Electronic Monitoring (EM) Program, where cameras operate continuously, and we are accustomed to being heavily monitored.

**Sustainable Practices:**

We use advanced trawl nets specifically designed to target pollock while minimizing bycatch. Tools such as salmon and small-fish excluders, developed through 30 years of experience, ensure sustainable practices. Our operations are mid-water trawling, meaning our nets do not touch the ocean floor, reducing environmental impact.

**Ecosystem Impact:**

Ending the Prince William Sound pollock fishery could disrupt the ecosystem by increasing predation on salmon and herring fry. I have witnessed this in other regions where trawlers were removed, leading to the collapse of fisheries due to unchecked predation. While this observation is anecdotal, it highlights potential unintended consequences.

**Conclusion**

This fishery is a cornerstone that supports crews, cannery workers, families, communities, and the State of Alaska. I urge you to reflect deeply on the purpose of these proposals and their potential impact. Are we here to sustain and support responsible fisheries and hardworking fishermen, or to jeopardize their livelihoods? The *Vanguard* and other trawlers play a critical role in Alaska's seafood industry and deserve to have those contributions recognized as vital in many ways. Let us take this opportunity to consider what we want to create moving forward. What brought us to this table, and how can we foster a solution that benefits all stakeholders involved?

Thank you for the opportunity to comment.

Sincerely,

Franke L Brown

**Submitted by:** Franke Brown

**Community of Residence:** Kodiak

**Comment:**

14, 15, 16, 17

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**Submitted by:** Josiah Brown

**Community of Residence:** Cooper Landing

**Comment:**

14-17

Supporter

We have watched other fisheries get destroyed with people doing nothing to stop it. We still have a chance to save Alaska fisheries from being destroyed by trawlers.

---

My name is Loretta Brown and I reside in Homer. I am writing to you today to express my support for a Proposals 14, 15, 16, and 17 regarding the Prince William Sound pollock pelagic trawl fishery.

I urge you to pass Proposals 14-17, which would alter the management of the PWS pollack pelagic trawl fishery. Trawling is an indiscriminate method of fishing, which hauls huge nets through the water and often scraps the ocean floor. While fishing, these nets catch everything in their path, whether it's the target fish or not. On average, 1,035 rockfish, 389 Chinook salmon, 76,000 pounds of squid, 2,214 pounds of shark, and 10,499 pounds of other species are bycaught annually.

Under Alaska regulations, pelagic trawl nets are not allowed to contact the seabed. Regulations read: "a pelagic trawl is a trawl where the net, or the trawl doors or other trawl-spreading device, do not operate in contact with the seabed." However, the PWS pollock pelagic trawler's bycatch indicates these nets are, in fact, dragging the seabed. Annually, 902 Shortraker rockfish and 133 Rougheye rockfish, both demersal or bottom-dwelling rockfish species, are caught. Additionally, other bottom-dwelling species brought in by the trawlers include: halibut, black cod, lumpsuckers, skates, sole, flounder, octopus, prowfish, and other rockfish species. This bycatch and the dragging of seabed from trawl nets is unacceptable destruction of the highly productive ecosystem of PWS that supports a multitude of commercial, sport, and subsistence fishing as well as robust residential and migratory marine biodiversity.

In the PWS trawl fishery, the fishers self-report their bycatch. There are currently no observers on-board the vessels while fishing, and the catch is offloaded at a processor in Kodiak, a trip of over 200 nautical miles. This lack of direct oversight begs the question of the accuracy of bycatch numbers and is a regulatory loophole that needs to be closed.

Climate change and changing ocean conditions are taking a toll on Alaska's ocean and freshwater species and habitat. Salmon species such as chinook salmon have been hit particularly hard, and we have seen declines throughout the state. Chinook salmon runs in PWS are not immune from declining populations. In fact, this June, ADF&G closed the Upper Copper River and its tributaries for both sport and subsistence fishing of Chinook Salmon. At that time, it was clear that the Copper River would not meet the lower bounds of the management escapement goals (21,00-31,000) and the king salmon passage on the Gulkana River counting tower was less than 55% of the historical average. By the end of the run in August 2024, only 4,065 Chinook were counted passing the Gulkana River station. Every Chinook salmon that returns to the Copper River drainage is one more spawning salmon that can help recover this vital run. However, each salmon caught as bycatch in the pollock fishery in PWS is one less that has that chance. Each salmon counts.

I strongly urge you pass the proposals 14-17, and update the management of the pollock pelagic trawl fishery in a manner that protects the PWS ecosystem and local communities from the destructive impacts of trawl fishing. Thank you again for your time and consideration of these proposals. I will be in attendance at the Board of Fisheries meeting in December in Cordova and look forward to futher discussion regarding these Proposals

Sincerely,  
Loretta Brown

**Submitted by:** Kevin Brown

**Community of Residence:** Fairbanks

**Comment:**

Life long Alaskan That depends on hunting and fishing to provide food for my family.

I believe any infringement on Alaskans to provide food for their family is against what we stand for as Alaskans and should be taken seriously. The fish and game want to impose rules on struggling family's and villages on how we feed our family's while not giving one thought into commercial fisheries raping the seas with enormous bycatch and doing nothing about it all you see is money from big corporations. Quit restricting Alaskans from providing for their family's. Alaskans first outside demand second

**Submitted by:** Mike Bugni

**Community of Residence:** Valdez

**Comment:**

I rely solely on the Copper River dipnet fishery to supply my family with sockeye salmon.

**Submitted by:** Conley Bunde

**Community of Residence:** Anchorage

**Comment:**

These are poorly thought out attempts by a small group to limit the majority of Alaskans access to our shared salmon resources.

**Submitted by:** William Burke

**Community of Residence:** Palmer

**Comment:**

I support proposal #16. Utilizing bottom or mid-water trawl gear that may come in contact with the sea floor has been proven to be a very destructive on sea floor habitat. Also using a 5% bycatch by total weight of harvest and established caps reduces other non-target species significantly and is essentially wonton waste. Given potential rock fish and king salmon declines this fishery should not be allowed to continue as I believe it is not sustainable.

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

Re: **Oppose** Proposals 14, 15, 16, and 17 – PWS Pollock  
Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

My name is Simon Burn and I am one of the captains of the F/V Bay Islander, which is an 88-foot, family owned and operated trawl vessel. I have been immensely grateful to have fished the waters of Alaska in multiple fisheries for forty years, including PWS pollock for the last twenty years. Being a fisherman is the only thing I have ever known, and it's not just a job for me, it is my way of life. My earliest memories as a child are of being on the ocean with my father, who was also a commercial fisherman.

After years of working on deck, when I became a mate and was learning to tow, my good friend and mentor taught me that besides safety, fishing clean was the most important thing I needed to do. When I am at the wheel, my mind is constantly churning with weather, tides, pollock catch rates, where there might be salmon or too many rockfish, all of the tradeoffs that help me decide where the cleanest, safest, most efficient place to fish is. My fellow fishermen and I are constantly checking in and sharing information to make sure we are staying clean while we fill the boat.

In the four decades that I have been on the water, I have only seen trawl fisheries get better, cleaner, and more efficient. I do not understand the negativity and hurtful words spoken about trawl fisheries, because it is not our lived experience; my fellow fishermen and I take great pride in what we do to provide for our families and feed the world healthy, affordable fish.

It is my understanding that the State has the authority to deploy observers at any time when boats are fishing in PWS pollock. While they don't usually do that, sometimes we end up carrying an observer anyway if we aren't sure whether we'll fish in the

federal fishery in Middleton or in PWS. We aren't afraid of monitoring and have nothing to hide. When we are doing EM for pelagic pollock we have cameras on 100% of our trips. As trawl fishermen, we know that good data is important for managing our fisheries; the Bay Islander is even a pilot vessel to help build a new EM program for CGOA rockfish. We want to preserve our fisheries for future generations.

Making the long trip from Kodiak to PWS is worth it because we find large schools of clean pollock there in January and early February while we wait for pollock to aggregate to spawn in the Shelikof. It's often the first paycheck of the year for myself and my crew, which is important for each of our wives and families back at home, especially now as we are about to start our second full year of rock bottom prices and market issues. Everyone in Alaska's fisheries are hurting right now, and we need to keep as many opportunities available for everyone as we can. Making changes to PWS pollock will only make the situation worse.

I strongly oppose Proposals 14, 15, 16, and 17. Thank you for the opportunity to comment.

Sincerely,



Simon Burn  
F/V Bay Islander

**Submitted by:** Jeffrey Burrell

**Community of Residence:** Fairbanks

**Comment:**

OPPOSE Proposals 44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66, 67,68,69,71,72

SUPPORT Proposals 48,51,52,53,58,59,70

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James R. Burton  
F/V Cricket  
PO Box 41  
Cordova, Alaska 99574

November 23rd, 2024

Marit Carlson-Van Dort  
Alaska Board of Fisheries  
PO Box 115826  
Juneau, AK 99811-5526

RE: Public Comments for Prince William Sound / Copper River Proposals

Dear Madam Chair and Board of Fisheries Members, I am a third generation Fisherman from Cordova, Alaska. I have fished for herring, salmon, crab and ground fish from Southeast Alaska to the Bering Sea for the majority of my life. I have been a sport and subsistence user for fish and game resources in Alaska for all of my life. I have served as a Fish and Wildlife Aide and an Alaska State Trooper in the Division of Fish and Wildlife Protection with duty stations in Kodiak, Fairbanks, Sitka and Anchorage. I served the community of Cordova, seated for two terms on Cordova City Council in addition to other various roles including the Harbor Commission and Health Services Board. I hold permits for herring seine and gillnet fisheries in Southeast Alaska and Prince William Sound, salmon seine and gillnet permits in PWS, and sablefish quota. I have a vested interest in the proposals before you.

I am married and the father of four children. My oldest daughter has fished with me for 7 years as a full time crewman, and participates in the multiple fisheries. She is a 4th generation fisherman, recently completing her first drift gillnet season as a permit holder and vessel owner. Commercial Fishing is critical to my family, not only as income, but a skill and tradition to be passed down. The idea that the commercial fishing industry would be willing to sacrifice the future of our fisheries for a fish ticket today couldn't be further from the truth. We are not only fishermen, but stewards of the resource with the goal to pass this industry down to the next generation. I have every intention to introduce the rest of my children to this life in hopes that they will someday have an opportunity to feed the world. That opportunity relies on sound decisions by you, the Alaska Board of Fisheries, today and in the future.

I will start my written public comments with a run down of proposal numbers and a simple statement of opposition or support followed by my arguments. If the proposal is not enumerated in this letter, I am neutral.

Proposal 2: Support.

Proposal 4: Oppose.

Proposal 6: Support

Proposal 7: Oppose

Proposal 9: Support

Proposal 11: Support

Proposal 12: Oppose

Proposal 14: Oppose - As a salmon fisherman, I am vehemently opposed to shutting down the pollock trawl fishery in PWS. This fishery, if anything, should see a doubled quota. Pollock are a natural predator for salmon in both the fry and juvenile stages. As we consider ocean survival rates between different stocks, whether wild, hatchery, or species differentiated, one thing we know for certain is predator stocks are on the rise. Rising quotas under the North Pacific Fisheries Management Council in areas 610-630 are indicative of this. Pollock are only one species in that group of predators - and one that has both an economic benefit in the directed fishery for those fisherman, and an indirect benefit for over a thousand salmon fishermen and crew in PWS.

Proposal 15: Oppose due to vagueness. There's nothing saying ADF&G can't just revert to 5% which makes the entire proposal moot.

Proposal 16: Oppose - see reasoning for 14.

Proposal 17: Oppose

Proposal 18: Support with modification. Mirror the federal season closure dates to take advantage of a longer season and fresh markets. Why should the State fishery end in August, or October, when the federal IFQ season ends (this year) December 7th?

Proposal 21: Support

Proposal 22: Support

Proposal 32: Support

Proposal 38: Oppose

Proposal 42: Oppose

Proposal 44-47: Support

Proposal 48: Oppose - I would argue that guides and transporters are not customary and traditional for subsistence fishing.

Proposal 49: Support

Proposal 50: Support - This would mirror federal regulation

Proposal 51-53: Oppose - ADF&G has done the best they can at managing for escapement when there's a 7-10 day lag in sonar data. We've sent more fish upriver every year, for years, than required for escapement and upriver users. These proposals would exacerbate the issue dramatically.

Proposal 54: Support

Proposal 55: Support

Proposal 56 and 57: Support - permit stacking is a great tool to allow a commercial fleet the ability to perform several functions. 1) It provides an apprentice type of scenario where a crewman or permit holder without a boat can either purchase or receive an EMT permit. This function allows a person to learn the fishery without getting thrown to the wolves - especially on the Copper River Flats which are notoriously dangerous. 2) It allows the industry to essentially perform a buyback without the use of State or Federal funds as has been done in other fisheries. 3) It stabilizes permit values at a time where we're watching values of both fish and permits struggle. 4) It is unique in its ability to benefit those who don't want to participate in owning or operating a second permit. Reducing congestion in these fisheries is critical because CFEC, in all of its greatness, designed limited entry for an entirely different era. Today's fishery is nothing like the 1970's.

A common argument I have heard opposing stacking proposals have been that they don't want to have to buy a second permit to compete - I agree that it is an added expense. However, the additional length of gear will eventually provide a full return on the investment and secondly, even those who don't choose to make the leap will benefit by an overall reduction of gear in the water.

The second most common argument that is brought up, is increasing permit values and creating a barrier to entry. First of all, stabilizing permit values is a stated goal of the proposal. Secondly, there is no larger driver of permit value than the value of the fishery. If you can't make money in the fishery, the permit value reflects it. We can look back to 2014/15 and see time weighted permit values exceeding \$300,000 in the S03E fishery compared to \$74,900 for last month (10/24). See the table in this link [https://cfec.state.ak.us/pmtvalue/X\\_S03E.HTM](https://cfec.state.ak.us/pmtvalue/X_S03E.HTM). I can name a number of younger generation fishermen who bought S03E permits in excess of \$200,000 who were just starting out, refuting the barrier to entry argument.

Proposal 58 - Oppose. If we exceed escapement on king salmon, let's build a larger run for all user groups. After all, by the time there are "extra" king salmon, the commercial fleet has usually been punished by reduced time and area - and it rewards upriver groups for that sacrifice. If there's a shared burden of conservation, leave those kings in excess of 31,000 to hopefully increase the size of the run in future years so every user group can benefit.

Proposal 60 Support

Proposal 61 Support

Proposal 62 Support

Proposal 64 Support

Proposal 65 Support

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Proposals 66 - 69 Support

Proposal 70 Oppose

Proposal 71 Support - I believe this is already prohibited federally as I testified to during the 2009 or 2010 BOF meetings but I may be mistaken. I will try to find that regulation before committee of the whole.

Proposal 72 Support

Proposals 73 & 74 - Support. I am the author of proposal 73. I used the language from the BOF's recent stacking proposal passage for Cook Inlet and modified it to fit the PWS seine fishery. If it pleases the board we can work on substitute language for 73 or 74 to satisfy what we are attempting to do. Please refer to my comments for 56 and 57 for an overall belief in supporting industry-led stacking initiatives.

Additionally, we've already seen the effect of stacking seine permits in PWS but I believe we've reached the saturation point under current regulations. In order to further reduce congestion in this fishery, we need additional regulatory tools. According to the 2024 ADF&G post season summary, there are approximately 28 dual permit vessels.

Time weighted values found here: [https://cfec.state.ak.us/pmtvalue/X\\_S01E.HTM](https://cfec.state.ak.us/pmtvalue/X_S01E.HTM) show that we are relatively flat with permit values before the first stacking proposals were passed in 2021. We did see an uptick in values short term, however as I alluded to in my 56/57 comments - the value of the permit is more closely tied to the value of the fishery rather than the scarcity of the permits. In fact, looking at time weighted values, the value of a PWS seine permit was higher for the entire decade (and longer) preceding the 2021 stacking proposal passage.

As salmon processors continue to fail or withdraw, it's becoming evident that our industry is in challenging if not dire times. Consolidation, is unfortunately what appears to be a survival mechanism for all of us. Look at Trident Seafoods downsizing or complete regional withdrawals, the bankruptcy of Peter Pan Seafoods, bankruptcy of Whittier Seafoods, OBI Seafoods latest news, etc.

I operate one of the 28 dual permit vessels; there is no allure to buying another if this passes, but I want to see more fishermen make this move. Short of abusing the CFEC transfer process,

many people struggle to find a crew member with a second permit. Loosening the regulation is the only tool we have left in this toolbox.

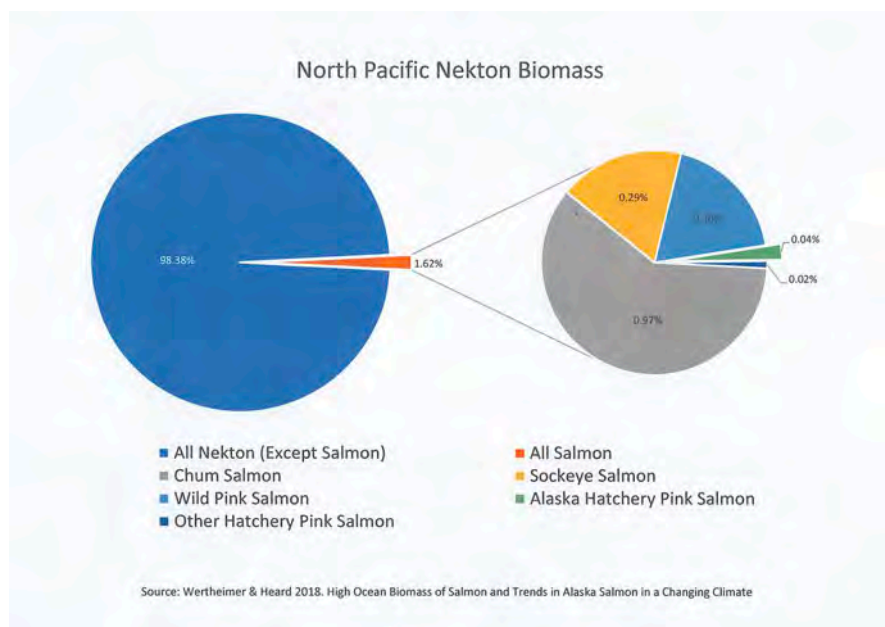
Proposal 75-77: Oppose. I am a permit holder for both the drift gillnet fishery and seine fishery. There's no reason to change the allocation plan at this point.

Proposal 78. Oppose.

This is the same proposal the author has submitted either under their own name or others for several cycles. **I urge you to reject Proposal 78 and all similarly worded proposals** and offer the following personal comments -

Even if the Board of Fisheries has the authority to alter or regulate egg take numbers, it circumvents a larger process by which these numbers are arrived at - utilizing the best available science. Why would it be appropriate to remove the role of egg take permitting from scientist with the Alaska Department of Fish and Game and politicize it through the Board?

Proposal 78 suggests that there is an ocean carrying capacity issue exacerbated by hatchery-produced salmon. If this is true, I ask how have we seen - in the last ten years - some of the largest sockeye and pink salmon returns (sometimes simultaneously) in Alaska? How do we explain the last handful of record-breaking Bristol Bay returns that occurred at the same time that North Pacific aquaculture productions were at their current and probably record levels if you consider Russia and Asian hatchery production? The answer is you can't. Please see the following chart which was previously introduced as RC070.



Continuing that thought, Russia produces pink salmon at a rate that is greater than 2:1 compared to Alaska. It's unclear what the split is between wild production and hatchery, but the information I have suggests it's at least 50% hatchery production. What number of eggs that takes and

how many fry are released into the North Pacific Ocean I don't think we'll ever know. Which brings me to my next question for the Board:

Why is the onus placed on Alaska hatcheries to bear the entire burden of the North Pacific? Salmon fry released into the ocean is in the *billions* yet this proposal takes zero consideration into the fact that this is a multinational industry, of which the State of Alaska is honestly *at least* a very distant second - to other countries over which the BOF has no control or jurisdiction.

Here's a link to a recent article in National Fisherman: <https://www.nationalfisherman.com/scientists-warn-pink-salmon-boom-threatens-other-species>

ADF&G's very own chief fisheries scientist Dr. Bill Templin is quoted in the article saying: *"While hatchery pinks may make up 10 percent of the adult pink, chum, and sockeye stocks in the North Pacific, that doesn't take into account the abundance of all the immatures and juveniles. If you add those to the numbers, the percentage of hatchery pinks becomes so small that it's not clear to me how reducing production will have any effect at all."*

Just as Dr. Templin referred to in the article I do not see any evidence presented in Proposal 78 to effectively quantify what benefit wild salmon would see, given a significant reduction in hatchery salmon. The lack of quantifiable, defensible data is arguably the biggest concern with this proposal when considering the economic fallout it will no doubt induce.

In furtherance of my argument, here is an excerpt from Steve Reifentstahl's PC174 from the spring 2024 board meetings:

*To speak to the attack on pink salmon hatcheries based on papers such as the Ruggerone et al (2023) review, we need some basic understanding of the scale of pink salmon biomass in relation to North Pacific food webs, and how much hatchery pink salmon contribute to this biomass. The correlation leap is quickly made in the Ruggerone and McMillan papers that high abundance of pink salmon somehow equates to hatchery impacts because hundreds of millions of hatchery fish are released into the ocean. First and foremost, hatchery pink salmon (all Pacific Rim countries) make up only 15% on average of the pink salmon in the North Pacific Ocean; any impacts of pink salmon on oceanic food webs are predominately driven by wild pinks and other salmonids. Second, while pink salmon are typically the most abundant salmon in terms of numbers of adults each year, they make up only 22% of the total wild and hatchery biomass of salmon in the ocean, all countries combined. Chum salmon and sockeye salmon, which have multiple year classes, make up 60% and 18% respectively of oceanic salmon biomass. Third, while there are billions of salmon entering the North Pacific to rear and compete for food resources, there are trillions of other zooplanktivores such as herring, walleye pollack, cod, myctophids, and Japanese pilchards. Salmon have been estimated to make up 4-7% of the biomass of nekton feeding on zooplankton in the North Pacific. Pink salmon would thus compose 1-2% of this biomass, and hatchery pink salmon < 0.5%. The speculation that this small amount of biomass is causing the basin scale effects proposed by Ruggerone et al. (2023) is truly a case of the tail wagging the dog.*

Proposals 79-81 SUPPORT

Proposals 86-88 SUPPORT

Proposal 95 - Oppose as written. I am not in favor of reducing the spawning biomass threshold; unless this is removed I cannot support this proposal.

Proposal 97 - Oppose - same as 95.

Proposal 101 - Support

Proposal 102 - Oppose as written. I think there are good intentions with this regulation but the proposal language could use some additional work.

Proposal 103 - Support in part. I support the stacking initiative like I do all others. However knowing how many tons can be caught in a 200 fathom long, 1700 mesh deep herring seine, I have to oppose the depth increase. Shoal Point 2008 yielded multiple sets using deep seines in shallow water and a 10,000 ton opening take. PWS does not have the available quota to increased seine depths without risking over harvest. I would support the proposal if the language only increased the seine length.

I will attached pdf copies of the links I referred to in this letter as attachments.

Thank you for your time and dedication to this process.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Burton", with a stylized, cursive script.

James R. Burton

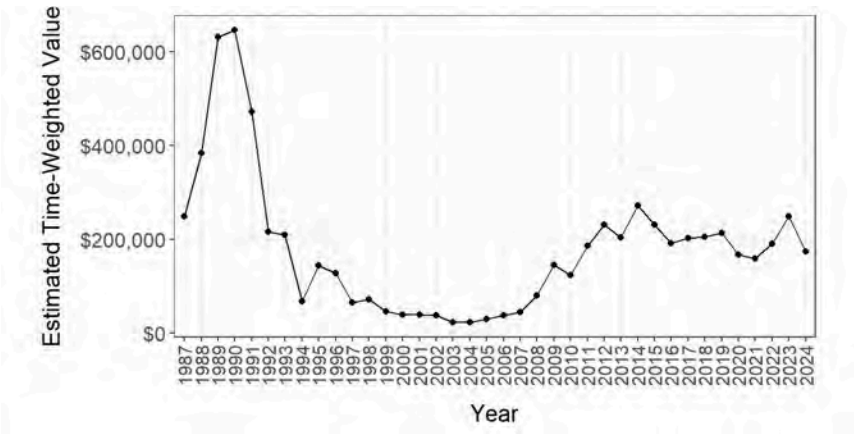
# Alaska Commercial Fisheries Entry Commission

## Estimated Permit Value Report

### (S01E) Salmon, Purse Seine, Prince William Sound

Click here (<https://www.cfec.state.ak.us/pmtvalue/RPTDESC.html>) for an explanation of this report. All values are given in 2024 dollars. To download data as a CSV file, click here ([https://www.cfec.state.ak.us/pmtvalue/permit\\_value\\_data.csv](https://www.cfec.state.ak.us/pmtvalue/permit_value_data.csv)). For pre-1987 data, click here ([https://www.cfec.state.ak.us/pmtvalue/pre1987\\_main.html](https://www.cfec.state.ak.us/pmtvalue/pre1987_main.html)).

### Estimated time-weighted permit value in June of each year



### Historical estimated permit values

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2024	Mean	\$172,500	\$22,700	\$172,500	Mar 2024	Jul 2024
2024	Oct	\$165,000	\$22,900	\$165,000	Apr 2024	Jul 2024
2024	Sep	\$165,000	\$22,900	\$165,000	Apr 2024	Jul 2024
2024	Aug	\$165,000	\$22,900	\$165,000	Apr 2024	Jul 2024
2024	Jul	\$165,000	\$22,900	\$165,000	Apr 2024	Jul 2024
2024	Jun	\$173,800	\$17,800	\$173,800	Apr 2024	Jun 2024
2024	May	\$194,900	\$38,800	\$194,900	May 2023	Apr 2024
2024	Apr	\$194,900	\$38,800	\$194,900	May 2023	Apr 2024



Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2024	Mar	\$238,400	\$22,300	\$238,400	Apr 2023	Mar 2024
2024	Feb	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2024	Jan	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Mean	\$247,400	\$3,700	\$247,400	Feb 2023	May 2023
2023	Dec	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Nov	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Oct	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Sep	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Aug	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Jul	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Jun	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	May	\$249,600	\$3,600	\$249,600	Apr 2023	May 2023
2023	Apr	\$246,200	\$2,400	\$246,200	Feb 2023	Apr 2023
2023	Mar	\$247,000	\$4,400	\$247,000	Nov 2022	Feb 2023
2023	Feb	\$247,000	\$4,400	\$247,000	Nov 2022	Feb 2023
2023	Jan	\$236,000	\$29,600	\$236,000	Sep 2022	Nov 2022
2022	Mean	\$202,000	\$30,100	\$202,000	Jan 2022	Nov 2022
2022	Dec	\$236,000	\$29,600	\$236,000	Sep 2022	Nov 2022
2022	Nov	\$236,000	\$29,600	\$236,000	Sep 2022	Nov 2022
2022	Oct	\$253,500	\$5,200	\$253,500	Aug 2022	Sep 2022
2022	Sep	\$248,400	\$12,400	\$248,400	Jul 2022	Sep 2022
2022	Aug	\$213,100	\$28,700	\$213,100	May 2022	Aug 2022
2022	Jul	\$197,400	\$18,300	\$197,400	May 2022	Jul 2022
2022	Jun	\$190,600	\$15,300	\$190,600	Apr 2022	Jun 2022
2022	May	\$182,100	\$9,100	\$182,100	Mar 2022	May 2022
2022	Apr	\$190,900	\$13,300	\$190,900	Feb 2022	Apr 2022
2022	Mar	\$185,900	\$22,100	\$185,900	Jan 2022	Mar 2022
2022	Feb	\$185,800	\$24,200	\$185,800	Nov 2021	Feb 2022
2022	Jan	\$179,200	\$23,700	\$179,200	Nov 2021	Jan 2022
2021	Mean	\$171,900	\$20,200	\$171,900	Feb 2021	Dec 2021

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2021	Dec	\$186,700	\$21,300	\$186,700	Oct 2021	Dec 2021
2021	Nov	\$176,800	\$15,200	\$176,800	Aug 2021	Nov 2021
2021	Oct	\$165,400	\$14,100	\$165,400	Jun 2021	Oct 2021
2021	Sep	\$158,200	\$3,700	\$158,200	Jun 2021	Aug 2021
2021	Aug	\$158,200	\$3,700	\$158,200	Jun 2021	Aug 2021
2021	Jul	\$156,100	\$2,500	\$156,100	Apr 2021	Jul 2021
2021	Jun	\$158,900	\$4,700	\$158,900	Mar 2021	Jun 2021
2021	May	\$168,200	\$14,200	\$168,200	Oct 2020	Apr 2021
2021	Apr	\$168,200	\$14,200	\$168,200	Oct 2020	Apr 2021
2021	Mar	\$171,500	\$12,000	\$171,500	Jul 2020	Mar 2021
2021	Feb	\$172,000	\$11,900	\$172,000	Jun 2020	Feb 2021
2021	Jan	\$173,900	\$10,400	\$173,900	Jun 2020	Oct 2020
2020	Mean	\$179,400	\$20,900	\$179,400	Jan 2020	Oct 2020
2020	Dec	\$173,900	\$10,400	\$173,900	Jun 2020	Oct 2020
2020	Nov	\$173,900	\$10,400	\$173,900	Jun 2020	Oct 2020
2020	Oct	\$173,900	\$10,400	\$173,900	Jun 2020	Oct 2020
2020	Sep	\$167,900	\$0	\$167,900	Jun 2020	Jul 2020
2020	Aug	\$169,100	\$2,400	\$169,100	Jun 2020	Jul 2020
2020	Jul	\$166,900	\$5,400	\$166,900	May 2020	Jul 2020
2020	Jun	\$168,000	\$7,000	\$168,000	Mar 2020	Jun 2020
2020	May	\$177,200	\$20,800	\$177,200	Feb 2020	May 2020
2020	Apr	\$195,100	\$25,200	\$195,100	Jan 2020	Apr 2020
2020	Mar	\$199,900	\$20,000	\$199,900	Dec 2019	Mar 2020
2020	Feb	\$206,500	\$16,300	\$206,500	Dec 2019	Feb 2020
2020	Jan	\$207,200	\$16,500	\$207,200	Jun 2019	Jan 2020
2019	Mean	\$210,400	\$8,600	\$210,400	Jan 2019	Dec 2019
2019	Dec	\$204,900	\$13,800	\$204,900	Jun 2019	Dec 2019
2019	Nov	\$214,000	\$2,600	\$214,000	May 2019	Jun 2019
2019	Oct	\$214,000	\$2,600	\$214,000	May 2019	Jun 2019
2019	Sep	\$214,000	\$2,600	\$214,000	May 2019	Jun 2019

<b>Year</b>	<b>Month</b>	<b>Estimated Time-Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
2019	Aug	\$214,000	\$2,600	\$214,000	May 2019	Jun 2019
2019	Jul	\$214,000	\$2,600	\$214,000	May 2019	Jun 2019
2019	Jun	\$214,200	\$2,400	\$214,200	Apr 2019	Jun 2019
2019	May	\$213,300	\$1,100	\$213,300	Mar 2019	May 2019
2019	Apr	\$213,300	\$1,100	\$213,300	Feb 2019	Apr 2019
2019	Mar	\$212,800	\$700	\$212,800	Jan 2019	Mar 2019
2019	Feb	\$213,200	\$1,500	\$213,200	Dec 2018	Feb 2019
2019	Jan	\$212,800	\$2,200	\$212,800	Jul 2018	Jan 2019
2018	Mean	\$203,900	\$7,900	\$203,900	Jan 2018	Dec 2018
2018	Dec	\$208,600	\$6,700	\$208,600	Jul 2018	Dec 2018
2018	Nov	\$205,500	\$5,100	\$205,500	Jul 2018	Jul 2018
2018	Oct	\$205,500	\$5,100	\$205,500	Jul 2018	Jul 2018
2018	Sep	\$205,500	\$5,100	\$205,500	Jul 2018	Jul 2018
2018	Aug	\$204,800	\$5,800	\$204,800	May 2018	Jul 2018
2018	Jul	\$204,800	\$5,800	\$204,800	May 2018	Jul 2018
2018	Jun	\$206,100	\$5,600	\$206,100	Mar 2018	Jun 2018
2018	May	\$206,500	\$3,600	\$206,500	Mar 2018	May 2018
2018	Apr	\$205,600	\$3,500	\$205,600	Mar 2018	Apr 2018
2018	Mar	\$199,600	\$8,200	\$199,600	Jan 2018	Mar 2018
2018	Feb	\$195,500	\$6,300	\$195,500	Dec 2017	Jan 2018
2018	Jan	\$195,500	\$6,300	\$195,500	Dec 2017	Jan 2018
2017	Mean	\$195,700	\$9,400	\$195,700	Jan 2017	Dec 2017
2017	Dec	\$198,300	\$5,700	\$198,300	Sep 2017	Dec 2017
2017	Nov	\$196,100	\$7,500	\$196,100	Jul 2017	Oct 2017
2017	Oct	\$196,100	\$7,500	\$196,100	Jul 2017	Oct 2017
2017	Sep	\$199,300	\$6,900	\$199,300	Jul 2017	Sep 2017
2017	Aug	\$197,200	\$6,200	\$197,200	May 2017	Jul 2017
2017	Jul	\$200,200	\$8,200	\$200,200	May 2017	Jul 2017
2017	Jun	\$203,200	\$5,100	\$203,200	Apr 2017	May 2017
2017	May	\$201,000	\$6,800	\$201,000	Mar 2017	May 2017

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2017	Apr	\$199,400	\$5,500	\$199,400	Mar 2017	Apr 2017
2017	Mar	\$184,900	\$6,200	\$184,900	Jan 2017	Mar 2017
2017	Feb	\$183,900	\$5,300	\$183,900	Dec 2016	Jan 2017
2017	Jan	\$183,900	\$5,300	\$183,900	Dec 2016	Jan 2017
2016	Mean	\$191,200	\$5,900	\$191,200	Feb 2016	Dec 2016
2016	Dec	\$184,100	\$4,100	\$184,100	Dec 2016	Dec 2016
2016	Nov	\$194,900	\$1,700	\$194,900	May 2016	Sep 2016
2016	Oct	\$194,900	\$1,700	\$194,900	May 2016	Sep 2016
2016	Sep	\$194,900	\$1,700	\$194,900	May 2016	Sep 2016
2016	Aug	\$194,900	\$1,700	\$194,900	May 2016	Jul 2016
2016	Jul	\$194,900	\$1,700	\$194,900	May 2016	Jul 2016
2016	Jun	\$192,700	\$2,600	\$192,700	Apr 2016	Jun 2016
2016	May	\$192,400	\$2,800	\$192,400	Apr 2016	May 2016
2016	Apr	\$194,000	\$4,600	\$194,000	Feb 2016	Apr 2016
2016	Mar	\$213,200	\$16,800	\$213,200	Jun 2015	Feb 2016
2016	Feb	\$213,200	\$16,800	\$213,200	Jun 2015	Feb 2016
2016	Jan	\$229,200	\$6,500	\$229,200	Jun 2015	Dec 2015
2015	Mean	\$244,500	\$19,200	\$244,500	Jan 2015	Dec 2015
2015	Dec	\$229,200	\$6,500	\$229,200	Jun 2015	Dec 2015
2015	Nov	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	Oct	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	Sep	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	Aug	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	Jul	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	Jun	\$231,500	\$5,300	\$231,500	May 2015	Jun 2015
2015	May	\$249,500	\$19,000	\$249,500	Jan 2015	May 2015
2015	Apr	\$255,400	\$16,000	\$255,400	Jan 2015	Mar 2015
2015	Mar	\$259,300	\$16,400	\$259,300	Jan 2015	Mar 2015
2015	Feb	\$263,600	\$8,400	\$263,600	Dec 2014	Jan 2015
2015	Jan	\$260,700	\$9,500	\$260,700	Nov 2014	Jan 2015

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2014	Mean	\$268,200	\$15,400	\$268,200	Mar 2014	Dec 2014
2014	Dec	\$259,000	\$9,800	\$259,000	Jun 2014	Dec 2014
2014	Nov	\$270,400	\$20,400	\$270,400	Jun 2014	Nov 2014
2014	Oct	\$280,300	\$17,000	\$280,300	May 2014	Jul 2014
2014	Sep	\$280,300	\$17,000	\$280,300	May 2014	Jul 2014
2014	Aug	\$280,300	\$17,000	\$280,300	May 2014	Jul 2014
2014	Jul	\$276,700	\$16,800	\$276,700	May 2014	Jul 2014
2014	Jun	\$272,100	\$16,800	\$272,100	Apr 2014	Jun 2014
2014	May	\$268,900	\$10,200	\$268,900	Mar 2014	May 2014
2014	Apr	\$265,100	\$3,000	\$265,100	Dec 2013	Apr 2014
2014	Mar	\$266,200	\$3,900	\$266,200	Nov 2013	Mar 2014
2014	Feb	\$258,800	\$11,500	\$258,800	Oct 2013	Dec 2013
2014	Jan	\$258,800	\$11,500	\$258,800	Oct 2013	Dec 2013
2013	Mean	\$221,400	\$29,100	\$221,400	Jan 2013	Dec 2013
2013	Dec	\$251,000	\$18,700	\$251,000	Oct 2013	Dec 2013
2013	Nov	\$250,300	\$18,900	\$250,300	Sep 2013	Nov 2013
2013	Oct	\$237,800	\$22,600	\$237,800	Aug 2013	Oct 2013
2013	Sep	\$235,700	\$26,600	\$235,700	Jun 2013	Sep 2013
2013	Aug	\$205,500	\$5,000	\$205,500	May 2013	Aug 2013
2013	Jul	\$205,700	\$4,500	\$205,700	May 2013	Jun 2013
2013	Jun	\$204,700	\$4,700	\$204,700	Apr 2013	Jun 2013
2013	May	\$201,600	\$3,600	\$201,600	Mar 2013	May 2013
2013	Apr	\$199,700	\$1,700	\$199,700	Feb 2013	Apr 2013
2013	Mar	\$193,100	\$11,600	\$193,100	Jan 2013	Mar 2013
2013	Feb	\$198,600	\$20,700	\$198,600	Oct 2012	Feb 2013
2013	Jan	\$207,200	\$26,700	\$207,200	Jul 2012	Jan 2013
2012	Mean	\$228,000	\$13,100	\$228,000	Feb 2012	Dec 2012
2012	Dec	\$223,100	\$19,700	\$223,100	Jun 2012	Dec 2012
2012	Nov	\$231,500	\$5,600	\$231,500	Jun 2012	Oct 2012
2012	Oct	\$231,500	\$5,600	\$231,500	Jun 2012	Oct 2012

<b>Year</b>	<b>Month</b>	<b>Estimated Time-Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
2012	Sep	\$233,200	\$5,900	\$233,200	Jun 2012	Jul 2012
2012	Aug	\$232,500	\$4,600	\$232,500	Jun 2012	Jul 2012
2012	Jul	\$232,500	\$4,600	\$232,500	Jun 2012	Jul 2012
2012	Jun	\$231,800	\$4,700	\$231,800	Jun 2012	Jun 2012
2012	May	\$229,500	\$10,300	\$229,500	Feb 2012	Mar 2012
2012	Apr	\$229,500	\$10,300	\$229,500	Feb 2012	Mar 2012
2012	Mar	\$229,500	\$10,300	\$229,500	Feb 2012	Mar 2012
2012	Feb	\$218,200	\$18,300	\$218,200	Dec 2011	Feb 2012
2012	Jan	\$213,200	\$18,400	\$213,200	Nov 2011	Dec 2011
2011	Mean	\$193,200	\$14,100	\$193,200	Jan 2011	Dec 2011
2011	Dec	\$206,900	\$18,000	\$206,900	Oct 2011	Dec 2011
2011	Nov	\$201,300	\$16,500	\$201,300	Sep 2011	Nov 2011
2011	Oct	\$197,700	\$12,400	\$197,700	Aug 2011	Oct 2011
2011	Sep	\$194,900	\$7,500	\$194,900	Jul 2011	Sep 2011
2011	Aug	\$195,100	\$7,300	\$195,100	Jun 2011	Aug 2011
2011	Jul	\$190,500	\$4,900	\$190,500	May 2011	Jul 2011
2011	Jun	\$186,200	\$7,100	\$186,200	Apr 2011	Jun 2011
2011	May	\$185,700	\$6,800	\$185,700	Mar 2011	May 2011
2011	Apr	\$183,800	\$5,900	\$183,800	Feb 2011	Apr 2011
2011	Mar	\$186,500	\$4,100	\$186,500	Jan 2011	Mar 2011
2011	Feb	\$192,000	\$4,800	\$192,000	Dec 2010	Feb 2011
2011	Jan	\$195,300	\$4,200	\$195,300	Oct 2010	Jan 2011
2010	Mean	\$140,200	\$36,400	\$140,200	Dec 2009	Dec 2010
2010	Dec	\$200,300	\$8,600	\$200,300	Aug 2010	Dec 2010
2010	Nov	\$185,700	\$25,500	\$185,700	Jul 2010	Oct 2010
2010	Oct	\$185,700	\$25,500	\$185,700	Jul 2010	Oct 2010
2010	Sep	\$167,500	\$34,000	\$167,500	Jul 2010	Aug 2010
2010	Aug	\$162,500	\$32,000	\$162,500	Jun 2010	Aug 2010
2010	Jul	\$130,600	\$11,300	\$130,600	May 2010	Jul 2010
2010	Jun	\$124,300	\$10,700	\$124,300	Apr 2010	Jun 2010

<b>Year</b>	<b>Month</b>	<b>Estimated Time-Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
2010	May	\$121,300	\$8,300	\$121,300	Apr 2010	May 2010
2010	Apr	\$113,100	\$8,400	\$113,100	Feb 2010	Apr 2010
2010	Mar	\$107,100	\$6,000	\$107,100	Dec 2009	Feb 2010
2010	Feb	\$109,000	\$7,000	\$109,000	Dec 2009	Feb 2010
2010	Jan	\$102,000	\$11,300	\$102,000	Nov 2009	Dec 2009
2009	Mean	\$108,900	\$23,200	\$114,000	Dec 2008	Dec 2009
2009	Dec	\$100,400	\$10,600	\$100,400	Oct 2009	Dec 2009
2009	Nov	\$99,400	\$10,700	\$99,400	Apr 2009	Nov 2009
2009	Oct	\$134,300	\$32,600	\$134,300	Dec 2008	Oct 2009
2009	Sep	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	Aug	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	Jul	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	Jun	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	May	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	Apr	\$146,100	\$23,000	\$146,100	Dec 2008	Apr 2009
2009	Mar	\$151,400	\$17,000	\$151,400	Nov 2008	Dec 2008
2009	Feb	\$151,400	\$17,000	\$151,400	Nov 2008	Dec 2008
2009	Jan	\$149,400	\$13,000	\$149,400	Nov 2008	Dec 2008
2008	Mean	\$107,400	\$31,500	\$107,400	Mar 2008	Dec 2008
2008	Dec	\$143,300	\$17,500	\$143,300	Oct 2008	Dec 2008
2008	Nov	\$131,700	\$15,100	\$131,700	Sep 2008	Nov 2008
2008	Oct	\$117,400	\$9,700	\$117,400	Aug 2008	Oct 2008
2008	Sep	\$116,800	\$9,300	\$116,800	Aug 2008	Sep 2008
2008	Aug	\$91,400	\$16,100	\$91,400	Jun 2008	Aug 2008
2008	Jul	\$84,800	\$11,300	\$84,800	Apr 2008	Jun 2008
2008	Jun	\$80,200	\$12,200	\$80,200	Apr 2008	Jun 2008
2008	May	\$78,500	\$11,400	\$78,500	Mar 2008	May 2008
2008	Apr	\$74,000	\$10,900	\$74,000	Mar 2008	Apr 2008
2008	Mar	\$59,200	\$8,100	\$59,200	Oct 2007	Mar 2008
2008	Feb	\$52,400	\$5,300	\$52,400	Aug 2007	Dec 2007

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2008	Jan	\$52,400	\$5,300	\$52,400	Aug 2007	Dec 2007
2007	Mean	\$46,200	\$6,100	\$46,200	Jan 2007	Dec 2007
2007	Dec	\$52,400	\$5,300	\$52,400	Aug 2007	Dec 2007
2007	Nov	\$47,300	\$3,000	\$47,300	Jul 2007	Oct 2007
2007	Oct	\$47,300	\$3,000	\$47,300	Jul 2007	Oct 2007
2007	Sep	\$45,500	\$600	\$45,500	Jul 2007	Aug 2007
2007	Aug	\$45,100	\$1,000	\$45,100	Jun 2007	Aug 2007
2007	Jul	\$44,100	\$2,600	\$44,100	May 2007	Jul 2007
2007	Jun	\$44,700	\$4,000	\$44,700	Apr 2007	Jun 2007
2007	May	\$44,900	\$4,300	\$44,900	Apr 2007	May 2007
2007	Apr	\$42,400	\$7,000	\$42,400	Oct 2006	Apr 2007
2007	Mar	\$40,000	\$4,600	\$40,000	Sep 2006	Jan 2007
2007	Feb	\$40,000	\$4,600	\$40,000	Sep 2006	Jan 2007
2007	Jan	\$40,000	\$4,600	\$40,000	Sep 2006	Jan 2007
2006	Mean	\$40,200	\$2,800	\$40,200	Jan 2006	Oct 2006
2006	Dec	\$42,700	\$3,000	\$42,700	Jul 2006	Oct 2006
2006	Nov	\$42,700	\$3,000	\$42,700	Jul 2006	Oct 2006
2006	Oct	\$42,700	\$3,000	\$42,700	Jul 2006	Oct 2006
2006	Sep	\$42,000	\$3,500	\$42,000	May 2006	Sep 2006
2006	Aug	\$40,000	\$2,700	\$40,000	Apr 2006	Jul 2006
2006	Jul	\$40,000	\$2,700	\$40,000	Apr 2006	Jul 2006
2006	Jun	\$38,500	\$0	\$38,500	Apr 2006	May 2006
2006	May	\$38,200	\$600	\$38,200	Mar 2006	May 2006
2006	Apr	\$38,100	\$700	\$38,100	Feb 2006	Apr 2006
2006	Mar	\$39,300	\$2,300	\$39,300	Jan 2006	Mar 2006
2006	Feb	\$37,200	\$4,200	\$37,200	Dec 2005	Feb 2006
2006	Jan	\$36,800	\$4,600	\$36,800	Dec 2005	Jan 2006
2005	Mean	\$30,600	\$3,700	\$30,600	Feb 2005	Dec 2005
2005	Dec	\$32,400	\$3,600	\$32,400	Jul 2005	Dec 2005
2005	Nov	\$30,700	\$5,200	\$30,700	Jul 2005	Sep 2005



Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2005	Oct	\$30,700	\$5,200	\$30,700	Jul 2005	Sep 2005
2005	Sep	\$30,700	\$5,200	\$30,700	Jul 2005	Sep 2005
2005	Aug	\$29,500	\$4,200	\$29,500	Jun 2005	Jul 2005
2005	Jul	\$29,500	\$4,200	\$29,500	Jun 2005	Jul 2005
2005	Jun	\$30,200	\$1,100	\$30,200	Apr 2005	Jun 2005
2005	May	\$29,000	\$1,300	\$29,000	Feb 2005	Apr 2005
2005	Apr	\$29,000	\$1,300	\$29,000	Feb 2005	Apr 2005
2005	Mar	\$24,800	\$2,200	\$24,800	May 2004	Feb 2005
2005	Feb	\$24,800	\$2,200	\$24,800	May 2004	Feb 2005
2005	Jan	\$24,200	\$1,800	\$24,200	May 2004	Dec 2004
2004	Mean	\$23,000	\$2,300	\$23,000	Mar 2004	Dec 2004
2004	Dec	\$24,200	\$1,800	\$24,200	May 2004	Dec 2004
2004	Nov	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Oct	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Sep	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Aug	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Jul	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Jun	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	May	\$23,000	\$2,600	\$23,000	Mar 2004	May 2004
2004	Apr	\$20,000	\$1,000	\$20,000	Jun 2003	Apr 2004
2004	Mar	\$21,400	\$3,300	\$21,400	May 2003	Mar 2004
2004	Feb	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2004	Jan	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2003	Mean	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2003	Dec	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2003	Nov	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2003	Oct	\$22,900	\$3,600	\$22,900	Nov 2002	Oct 2003
2003	Sep	\$23,100	\$3,400	\$23,100	Jul 2002	Jun 2003
2003	Aug	\$23,100	\$3,400	\$23,100	Jul 2002	Jun 2003
2003	Jul	\$23,100	\$3,400	\$23,100	Jul 2002	Jun 2003

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2003	Jun	\$23,100	\$3,400	\$23,100	Jul 2002	Jun 2003
2003	May	\$27,100	\$4,800	\$27,100	Jun 2002	May 2003
2003	Apr	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2003	Mar	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2003	Feb	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2003	Jan	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2002	Mean	\$33,500	\$8,300	\$33,500	Dec 2001	Nov 2002
2002	Dec	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2002	Nov	\$33,300	\$11,700	\$33,300	Jun 2002	Nov 2002
2002	Oct	\$34,600	\$11,100	\$34,600	Apr 2002	Jul 2002
2002	Sep	\$34,600	\$11,100	\$34,600	Apr 2002	Jul 2002
2002	Aug	\$34,600	\$11,100	\$34,600	Apr 2002	Jul 2002
2002	Jul	\$34,600	\$11,100	\$34,600	Apr 2002	Jul 2002
2002	Jun	\$38,000	\$8,100	\$38,000	Feb 2002	Jun 2002
2002	May	\$33,800	\$1,600	\$33,800	Dec 2001	Apr 2002
2002	Apr	\$33,800	\$1,600	\$33,800	Dec 2001	Apr 2002
2002	Mar	\$35,700	\$1,700	\$35,700	Jun 2001	Feb 2002
2002	Feb	\$35,700	\$1,700	\$35,700	Jun 2001	Feb 2002
2002	Jan	\$37,300	\$2,700	\$37,300	Jun 2001	Jan 2002
2001	Mean	\$39,000	\$4,900	\$39,000	Apr 2001	Dec 2001
2001	Dec	\$37,500	\$2,600	\$37,500	Jun 2001	Dec 2001
2001	Nov	\$37,900	\$2,300	\$37,900	May 2001	Jun 2001
2001	Oct	\$37,900	\$2,300	\$37,900	May 2001	Jun 2001
2001	Sep	\$37,900	\$2,300	\$37,900	May 2001	Jun 2001
2001	Aug	\$37,900	\$2,300	\$37,900	May 2001	Jun 2001
2001	Jul	\$37,900	\$2,300	\$37,900	May 2001	Jun 2001
2001	Jun	\$39,400	\$5,000	\$39,400	Apr 2001	Jun 2001
2001	May	\$40,000	\$5,800	\$40,000	Apr 2001	May 2001
2001	Apr	\$37,500	\$1,400	\$37,500	Apr 2001	Apr 2001
2001	Mar	\$42,400	\$3,700	\$42,400	Dec 2000	Dec 2000

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2001	Feb	\$42,200	\$3,300	\$42,200	Dec 2000	Dec 2000
2001	Jan	\$40,600	\$4,700	\$40,600	Nov 2000	Dec 2000
2000	Mean	\$39,700	\$4,200	\$39,700	Jan 2000	Dec 2000
2000	Dec	\$40,300	\$4,100	\$40,300	Oct 2000	Dec 2000
2000	Nov	\$36,400	\$3,000	\$36,400	Sep 2000	Nov 2000
2000	Oct	\$37,400	\$2,600	\$37,400	Sep 2000	Oct 2000
2000	Sep	\$35,600	\$1,400	\$35,600	Jun 2000	Sep 2000
2000	Aug	\$38,500	\$3,800	\$38,500	May 2000	Jul 2000
2000	Jul	\$38,000	\$3,500	\$38,000	May 2000	Jul 2000
2000	Jun	\$39,800	\$4,300	\$39,800	Apr 2000	Jun 2000
2000	May	\$42,400	\$3,700	\$42,400	Feb 2000	May 2000
2000	Apr	\$42,500	\$2,200	\$42,500	Dec 1999	Apr 2000
2000	Mar	\$40,500	\$2,400	\$40,500	Dec 1999	Feb 2000
2000	Feb	\$40,200	\$2,200	\$40,200	Nov 1999	Feb 2000
2000	Jan	\$38,700	\$2,300	\$38,700	Nov 1999	Jan 2000
1999	Mean	\$42,900	\$4,600	\$42,900	Feb 1999	Dec 1999
1999	Dec	\$37,700	\$1,500	\$37,700	Nov 1999	Dec 1999
1999	Nov	\$42,200	\$5,100	\$42,200	Jul 1999	Nov 1999
1999	Oct	\$45,900	\$1,800	\$45,900	Jun 1999	Aug 1999
1999	Sep	\$45,900	\$1,800	\$45,900	Jun 1999	Aug 1999
1999	Aug	\$45,900	\$1,800	\$45,900	Jun 1999	Aug 1999
1999	Jul	\$46,300	\$2,100	\$46,300	Mar 1999	Jul 1999
1999	Jun	\$46,100	\$2,000	\$46,100	Feb 1999	Jun 1999
1999	May	\$50,900	\$4,000	\$50,900	Dec 1998	Mar 1999
1999	Apr	\$50,900	\$4,000	\$50,900	Dec 1998	Mar 1999
1999	Mar	\$50,900	\$4,000	\$50,900	Dec 1998	Mar 1999
1999	Feb	\$53,100	\$4,400	\$53,100	Sep 1998	Feb 1999
1999	Jan	\$60,500	\$9,400	\$60,500	Jun 1998	Dec 1998
1998	Mean	\$67,800	\$9,600	\$67,800	Jan 1998	Dec 1998
1998	Dec	\$60,500	\$9,400	\$60,500	Jun 1998	Dec 1998

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1998	Nov	\$68,100	\$7,200	\$68,100	Jun 1998	Sep 1998
1998	Oct	\$68,100	\$7,200	\$68,100	Jun 1998	Sep 1998
1998	Sep	\$68,100	\$7,200	\$68,100	Jun 1998	Sep 1998
1998	Aug	\$72,800	\$3,900	\$72,800	May 1998	Jun 1998
1998	Jul	\$72,800	\$3,900	\$72,800	May 1998	Jun 1998
1998	Jun	\$72,800	\$3,900	\$72,800	May 1998	Jun 1998
1998	May	\$71,900	\$8,300	\$71,900	Dec 1997	May 1998
1998	Apr	\$73,400	\$9,400	\$73,400	Nov 1997	Mar 1998
1998	Mar	\$73,400	\$9,400	\$73,400	Nov 1997	Mar 1998
1998	Feb	\$75,800	\$10,400	\$75,800	Oct 1997	Jan 1998
1998	Jan	\$75,800	\$10,400	\$75,800	Oct 1997	Jan 1998
1997	Mean	\$69,300	\$8,300	\$69,300	Jan 1997	Dec 1997
1997	Dec	\$74,800	\$10,300	\$74,800	Oct 1997	Dec 1997
1997	Nov	\$76,200	\$8,200	\$76,200	Sep 1997	Nov 1997
1997	Oct	\$73,100	\$8,400	\$73,100	Aug 1997	Oct 1997
1997	Sep	\$66,000	\$6,900	\$66,000	Jun 1997	Sep 1997
1997	Aug	\$69,100	\$8,300	\$69,100	May 1997	Aug 1997
1997	Jul	\$66,500	\$7,000	\$66,500	Apr 1997	Jun 1997
1997	Jun	\$65,500	\$6,500	\$65,500	Apr 1997	Jun 1997
1997	May	\$67,700	\$5,700	\$67,700	Mar 1997	May 1997
1997	Apr	\$65,300	\$3,500	\$65,300	Mar 1997	Apr 1997
1997	Mar	\$66,300	\$2,500	\$66,300	Dec 1996	Mar 1997
1997	Feb	\$64,300	\$2,300	\$64,300	Nov 1996	Jan 1997
1997	Jan	\$63,300	\$2,900	\$63,300	Oct 1996	Jan 1997
1996	Mean	\$66,900	\$10,400	\$66,900	Feb 1996	Dec 1996
1996	Dec	\$60,800	\$1,600	\$60,800	Aug 1996	Dec 1996
1996	Nov	\$62,300	\$4,100	\$62,300	Jul 1996	Nov 1996
1996	Oct	\$69,300	\$12,100	\$69,300	Feb 1996	Oct 1996
1996	Sep	\$85,000	\$24,000	\$85,000	Dec 1995	Aug 1996
1996	Aug	\$85,000	\$24,000	\$85,000	Dec 1995	Aug 1996

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1996	Jul	\$102,800	\$30,500	\$109,800	Jun 1995	Jul 1996
1996	Jun	\$128,200	\$26,100	\$128,200	Jun 1995	Feb 1996
1996	May	\$128,200	\$26,100	\$128,200	Jun 1995	Feb 1996
1996	Apr	\$128,200	\$26,100	\$128,200	Jun 1995	Feb 1996
1996	Mar	\$128,200	\$26,100	\$128,200	Jun 1995	Feb 1996
1996	Feb	\$128,200	\$26,100	\$128,200	Jun 1995	Feb 1996
1996	Jan	\$141,000	\$13,000	\$141,000	May 1995	Dec 1995
1995	Mean	\$139,900	\$10,700	\$139,900	Feb 1995	Dec 1995
1995	Dec	\$141,000	\$13,000	\$141,000	May 1995	Dec 1995
1995	Nov	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	Oct	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	Sep	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	Aug	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	Jul	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	Jun	\$144,900	\$8,300	\$144,900	Mar 1995	Jun 1995
1995	May	\$121,100	\$30,100	\$121,100	Nov 1994	May 1995
1995	Apr	\$112,200	\$28,300	\$112,200	Aug 1994	Mar 1995
1995	Mar	\$112,200	\$28,300	\$112,200	Aug 1994	Mar 1995
1995	Feb	\$98,800	\$25,700	\$98,800	Aug 1994	Feb 1995
1995	Jan	\$87,900	\$13,200	\$87,900	Jul 1994	Nov 1994
1994	Mean	\$73,900	\$16,200	\$73,900	Mar 1994	Nov 1994
1994	Dec	\$87,900	\$13,200	\$87,900	Jul 1994	Nov 1994
1994	Nov	\$87,900	\$13,200	\$87,900	Jul 1994	Nov 1994
1994	Oct	\$81,100	\$23,800	\$81,100	Jul 1994	Aug 1994
1994	Sep	\$75,500	\$19,400	\$75,500	Jul 1994	Aug 1994
1994	Aug	\$73,900	\$17,500	\$73,900	Jun 1994	Aug 1994
1994	Jul	\$67,200	\$12,900	\$67,200	May 1994	Jul 1994
1994	Jun	\$67,700	\$4,200	\$67,700	Apr 1994	Jun 1994
1994	May	\$75,000	\$15,200	\$75,000	Mar 1994	May 1994
1994	Apr	\$87,600	\$16,900	\$87,600	Dec 1993	Apr 1994

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1994	Mar	\$148,900	\$47,000	\$148,900	Aug 1993	Mar 1994
1994	Feb	\$179,100	\$47,700	\$179,100	Apr 1993	Dec 1993
1994	Jan	\$179,100	\$47,700	\$179,100	Apr 1993	Dec 1993
1993	Mean	\$200,100	\$41,300	\$200,100	Jan 1993	Dec 1993
1993	Dec	\$179,100	\$47,700	\$179,100	Apr 1993	Dec 1993
1993	Nov	\$198,700	\$22,100	\$198,700	Mar 1993	Sep 1993
1993	Oct	\$198,700	\$22,100	\$198,700	Mar 1993	Sep 1993
1993	Sep	\$198,700	\$22,100	\$198,700	Mar 1993	Sep 1993
1993	Aug	\$206,800	\$15,900	\$206,800	Mar 1993	Aug 1993
1993	Jul	\$209,500	\$17,800	\$209,500	Feb 1993	Apr 1993
1993	Jun	\$209,500	\$17,800	\$209,500	Feb 1993	Apr 1993
1993	May	\$209,500	\$17,800	\$209,500	Feb 1993	Apr 1993
1993	Apr	\$219,100	\$25,100	\$219,100	Feb 1993	Apr 1993
1993	Mar	\$217,000	\$24,900	\$217,000	Jan 1993	Mar 1993
1993	Feb	\$220,000	\$24,700	\$220,000	Dec 1992	Feb 1993
1993	Jan	\$199,800	\$18,400	\$199,800	Nov 1992	Jan 1993
1992	Mean	\$217,500	\$23,000	\$217,500	Jan 1992	Dec 1992
1992	Dec	\$196,900	\$16,700	\$196,900	Sep 1992	Dec 1992
1992	Nov	\$216,200	\$27,600	\$216,200	Jul 1992	Nov 1992
1992	Oct	\$228,700	\$19,700	\$228,700	Jul 1992	Sep 1992
1992	Sep	\$228,700	\$19,700	\$228,700	Jul 1992	Sep 1992
1992	Aug	\$228,000	\$12,700	\$228,000	Jun 1992	Jul 1992
1992	Jul	\$217,800	\$18,600	\$217,800	May 1992	Jul 1992
1992	Jun	\$216,800	\$21,500	\$216,800	Apr 1992	Jun 1992
1992	May	\$214,900	\$25,400	\$214,900	Mar 1992	May 1992
1992	Apr	\$297,000	\$93,000	\$297,000	Jul 1991	Apr 1992
1992	Mar	\$358,900	\$127,400	\$358,900	May 1991	Mar 1992
1992	Feb	\$411,800	\$100,300	\$411,800	Apr 1991	Jan 1992
1992	Jan	\$411,800	\$100,300	\$411,800	Apr 1991	Jan 1992
1991	Mean	\$482,500	\$53,700	\$482,500	Feb 1991	Jul 1991

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1991	Dec	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Nov	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Oct	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Sep	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Aug	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Jul	\$453,000	\$38,100	\$453,000	Apr 1991	Jul 1991
1991	Jun	\$471,800	\$60,100	\$471,800	Apr 1991	May 1991
1991	May	\$477,000	\$54,600	\$477,000	Mar 1991	May 1991
1991	Apr	\$481,900	\$59,000	\$481,900	Feb 1991	Apr 1991
1991	Mar	\$559,900	\$94,300	\$559,900	Nov 1990	Mar 1991
1991	Feb	\$552,500	\$128,300	\$552,500	Oct 1990	Feb 1991
1991	Jan	\$564,200	\$129,400	\$564,200	Jun 1990	Nov 1990
1990	Mean	\$649,300	\$50,700	\$649,300	Jan 1990	Nov 1990
1990	Dec	\$653,200	\$59,400	\$653,200	Jun 1990	Nov 1990
1990	Nov	\$564,200	\$129,400	\$564,200	Jun 1990	Nov 1990
1990	Oct	\$558,200	\$119,400	\$558,200	Jan 1990	Oct 1990
1990	Sep	\$646,400	\$57,900	\$662,000	Jun 1989	Jun 1990
1990	Aug	\$646,400	\$57,900	\$662,000	Jun 1989	Jun 1990
1990	Jul	\$646,400	\$57,900	\$662,000	Jun 1989	Jun 1990
1990	Jun	\$646,400	\$57,900	\$662,000	Jun 1989	Jun 1990
1990	May	\$663,800	\$66,400	\$663,800	Jun 1989	May 1990
1990	Apr	\$603,300	\$144,800	\$603,300	Jun 1989	Jan 1990
1990	Mar	\$603,300	\$144,800	\$603,300	Jun 1989	Jan 1990
1990	Feb	\$603,300	\$144,800	\$603,300	Jun 1989	Jan 1990
1990	Jan	\$603,300	\$144,800	\$603,300	Jun 1989	Jan 1990
1989	Mean	\$591,800	\$147,400	\$591,800	Jan 1989	Jun 1989
1989	Dec	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	Nov	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	Oct	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	Sep	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1989	Aug	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	Jul	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	Jun	\$631,000	\$163,500	\$631,000	Mar 1989	Jun 1989
1989	May	\$582,000	\$117,700	\$582,000	Nov 1988	Mar 1989
1989	Apr	\$582,000	\$117,700	\$582,000	Nov 1988	Mar 1989
1989	Mar	\$582,000	\$117,700	\$582,000	Nov 1988	Mar 1989
1989	Feb	\$492,800	\$55,200	\$492,800	Jun 1988	Jan 1989
1989	Jan	\$492,800	\$55,200	\$492,800	Jun 1988	Jan 1989
1988	Mean	\$373,200	\$70,100	\$373,200	Jan 1988	Nov 1988
1988	Dec	\$423,100	\$61,800	\$423,100	Jun 1988	Nov 1988
1988	Nov	\$423,100	\$61,800	\$423,100	Jun 1988	Nov 1988
1988	Oct	\$396,900	\$23,400	\$396,900	Jun 1988	Jun 1988
1988	Sep	\$396,900	\$23,400	\$396,900	Jun 1988	Jun 1988
1988	Aug	\$396,900	\$23,400	\$396,900	Jun 1988	Jun 1988
1988	Jul	\$406,700	\$28,700	\$406,700	May 1988	Jun 1988
1988	Jun	\$383,800	\$60,400	\$383,800	Apr 1988	Jun 1988
1988	May	\$360,800	\$72,500	\$360,800	Mar 1988	May 1988
1988	Apr	\$339,700	\$67,000	\$339,700	Feb 1988	Apr 1988
1988	Mar	\$343,600	\$54,100	\$343,600	Jan 1988	Mar 1988
1988	Feb	\$341,100	\$39,600	\$341,100	Dec 1987	Feb 1988
1988	Jan	\$346,100	\$44,000	\$346,100	Nov 1987	Jan 1988
1987	Mean	\$252,300	\$46,500	\$252,300	Jan 1987	Dec 1987
1987	Dec	\$312,100	\$60,100	\$312,100	Oct 1987	Dec 1987
1987	Nov	\$280,000	\$59,900	\$280,000	Jul 1987	Nov 1987
1987	Oct	\$250,000	\$30,400	\$250,000	Jun 1987	Oct 1987
1987	Sep	\$256,800	\$31,800	\$256,800	Jun 1987	Jul 1987
1987	Aug	\$254,600	\$28,800	\$254,600	Jun 1987	Jul 1987
1987	Jul	\$249,000	\$26,500	\$249,000	May 1987	Jul 1987
1987	Jun	\$248,600	\$24,800	\$248,600	Apr 1987	Jun 1987
1987	May	\$233,300	\$11,100	\$233,300	Mar 1987	May 1987



<b>Year</b>	<b>Month</b>	<b>Estimated Time- Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
1987	Apr	\$226,300	\$14,300	\$226,300	Feb 1987	Apr 1987
1987	Mar	\$220,800	\$12,200	\$220,800	Jan 1987	Mar 1987
1987	Feb	\$222,100	\$12,300	\$222,100	Dec 1986	Feb 1987
1987	Jan	\$281,000	\$83,900	\$281,000	Oct 1986	Jan 1987

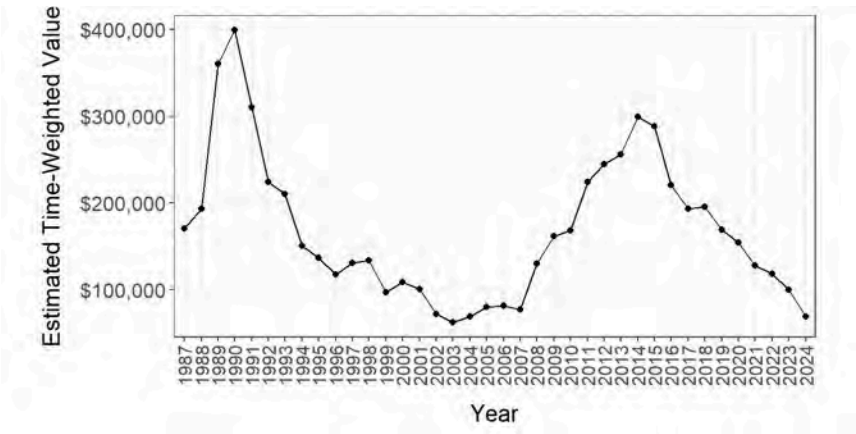
# Alaska Commercial Fisheries Entry Commission

## Estimated Permit Value Report

### (S03E) Salmon, Drift Gillnet, Prince William Sound

Click here (<https://www.cfec.state.ak.us/pmtvalue/RPTDESC.html>) for an explanation of this report. All values are given in 2024 dollars. To download data as a CSV file, click here ([https://www.cfec.state.ak.us/pmtvalue/permit\\_value\\_data.csv](https://www.cfec.state.ak.us/pmtvalue/permit_value_data.csv)). For pre-1987 data, click here ([https://www.cfec.state.ak.us/pmtvalue/pre1987\\_main.html](https://www.cfec.state.ak.us/pmtvalue/pre1987_main.html)).

### Estimated time-weighted permit value in June of each year



### Historical estimated permit values

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2024	Mean	\$72,800	\$6,000	\$72,800	Jan 2024	Jul 2024
2024	Oct	\$74,900	\$2,900	\$74,900	Jun 2024	Jul 2024
2024	Sep	\$74,900	\$2,900	\$74,900	Jun 2024	Jul 2024
2024	Aug	\$74,900	\$2,900	\$74,900	Jun 2024	Jul 2024
2024	Jul	\$70,900	\$5,300	\$70,900	May 2024	Jul 2024
2024	Jun	\$69,300	\$4,800	\$69,300	Apr 2024	Jun 2024
2024	May	\$70,300	\$6,400	\$70,300	Mar 2024	May 2024
2024	Apr	\$74,200	\$6,100	\$74,200	Feb 2024	Apr 2024

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2024	Mar	\$75,800	\$6,100	\$75,800	Jan 2024	Mar 2024
2024	Feb	\$77,900	\$4,600	\$77,900	Nov 2023	Feb 2024
2024	Jan	\$87,500	\$7,000	\$87,500	Jul 2023	Jan 2024
2023	Mean	\$99,100	\$6,700	\$99,100	Jan 2023	Nov 2023
2023	Dec	\$92,200	\$6,700	\$92,200	May 2023	Nov 2023
2023	Nov	\$92,200	\$6,700	\$92,200	May 2023	Nov 2023
2023	Oct	\$95,400	\$2,700	\$95,400	Apr 2023	Sep 2023
2023	Sep	\$95,400	\$2,700	\$95,400	Apr 2023	Sep 2023
2023	Aug	\$97,100	\$1,900	\$97,100	Apr 2023	Jul 2023
2023	Jul	\$97,100	\$1,900	\$97,100	Apr 2023	Jul 2023
2023	Jun	\$100,100	\$3,900	\$100,100	Mar 2023	May 2023
2023	May	\$100,200	\$3,400	\$100,200	Mar 2023	May 2023
2023	Apr	\$101,100	\$3,700	\$101,100	Feb 2023	Apr 2023
2023	Mar	\$103,700	\$2,700	\$103,700	Jan 2023	Mar 2023
2023	Feb	\$107,900	\$2,900	\$107,900	Dec 2022	Feb 2023
2023	Jan	\$108,700	\$2,800	\$108,700	Dec 2022	Jan 2023
2022	Mean	\$115,900	\$5,500	\$115,900	Jan 2022	Dec 2022
2022	Dec	\$111,400	\$0	\$111,400	Aug 2022	Dec 2022
2022	Nov	\$114,600	\$3,900	\$114,600	Jun 2022	Oct 2022
2022	Oct	\$114,600	\$3,900	\$114,600	Jun 2022	Oct 2022
2022	Sep	\$115,600	\$3,400	\$115,600	Jun 2022	Aug 2022
2022	Aug	\$117,800	\$4,200	\$117,800	Jun 2022	Aug 2022
2022	Jul	\$120,300	\$4,100	\$120,300	May 2022	Jun 2022
2022	Jun	\$118,200	\$5,500	\$118,200	Mar 2022	Jun 2022
2022	May	\$117,300	\$6,500	\$117,300	Feb 2022	May 2022
2022	Apr	\$115,300	\$5,800	\$115,300	Feb 2022	Apr 2022
2022	Mar	\$114,600	\$5,500	\$114,600	Jan 2022	Mar 2022
2022	Feb	\$117,900	\$5,700	\$117,900	Dec 2021	Feb 2022
2022	Jan	\$118,400	\$6,200	\$118,400	Dec 2021	Jan 2022
2021	Mean	\$126,000	\$6,300	\$126,000	Jan 2021	Dec 2021

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2021	Dec	\$123,100	\$4,300	\$123,100	Oct 2021	Dec 2021
2021	Nov	\$126,300	\$7,300	\$126,300	Jun 2021	Oct 2021
2021	Oct	\$126,300	\$7,300	\$126,300	Jun 2021	Oct 2021
2021	Sep	\$125,400	\$7,400	\$125,400	May 2021	Jul 2021
2021	Aug	\$125,400	\$7,400	\$125,400	May 2021	Jul 2021
2021	Jul	\$127,700	\$6,900	\$127,700	Apr 2021	Jul 2021
2021	Jun	\$127,700	\$7,100	\$127,700	Apr 2021	Jun 2021
2021	May	\$128,700	\$6,200	\$128,700	Apr 2021	May 2021
2021	Apr	\$126,200	\$6,300	\$126,200	Feb 2021	Apr 2021
2021	Mar	\$122,300	\$2,500	\$122,300	Dec 2020	Feb 2021
2021	Feb	\$122,400	\$2,200	\$122,400	Nov 2020	Feb 2021
2021	Jan	\$123,600	\$3,700	\$123,600	Nov 2020	Jan 2021
2020	Mean	\$149,800	\$21,000	\$149,800	Jan 2020	Dec 2020
2020	Dec	\$124,800	\$5,000	\$124,800	Oct 2020	Dec 2020
2020	Nov	\$126,100	\$4,800	\$126,100	Oct 2020	Nov 2020
2020	Oct	\$151,400	\$14,900	\$151,400	May 2020	Oct 2020
2020	Sep	\$155,900	\$10,400	\$155,900	May 2020	Jul 2020
2020	Aug	\$155,900	\$10,400	\$155,900	May 2020	Jul 2020
2020	Jul	\$155,900	\$10,400	\$155,900	May 2020	Jul 2020
2020	Jun	\$154,700	\$7,000	\$154,700	Apr 2020	Jun 2020
2020	May	\$159,200	\$9,400	\$159,200	Mar 2020	May 2020
2020	Apr	\$167,600	\$7,100	\$167,600	Feb 2020	Apr 2020
2020	Mar	\$174,800	\$2,900	\$174,800	Dec 2019	Mar 2020
2020	Feb	\$175,700	\$2,600	\$175,700	Nov 2019	Feb 2020
2020	Jan	\$176,200	\$2,400	\$176,200	Oct 2019	Jan 2020
2019	Mean	\$171,600	\$5,100	\$171,600	Feb 2019	Dec 2019
2019	Dec	\$174,500	\$1,500	\$174,500	Jul 2019	Dec 2019
2019	Nov	\$173,800	\$2,500	\$173,800	Jun 2019	Nov 2019
2019	Oct	\$169,200	\$6,900	\$169,200	May 2019	Oct 2019
2019	Sep	\$167,700	\$5,800	\$167,700	May 2019	Jul 2019

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2019	Aug	\$167,700	\$5,800	\$167,700	May 2019	Jul 2019
2019	Jul	\$167,700	\$5,800	\$167,700	May 2019	Jul 2019
2019	Jun	\$169,000	\$5,400	\$169,000	Apr 2019	Jun 2019
2019	May	\$168,700	\$5,900	\$168,700	Apr 2019	May 2019
2019	Apr	\$173,000	\$3,000	\$173,000	Feb 2019	Apr 2019
2019	Mar	\$183,700	\$4,500	\$183,700	Nov 2018	Feb 2019
2019	Feb	\$183,700	\$4,500	\$183,700	Nov 2018	Feb 2019
2019	Jan	\$186,600	\$1,200	\$186,600	Oct 2018	Dec 2018
2018	Mean	\$190,200	\$7,100	\$190,200	Jan 2018	Dec 2018
2018	Dec	\$186,600	\$1,200	\$186,600	Oct 2018	Dec 2018
2018	Nov	\$189,700	\$4,700	\$189,700	Jul 2018	Nov 2018
2018	Oct	\$193,600	\$5,800	\$193,600	May 2018	Oct 2018
2018	Sep	\$196,100	\$4,900	\$196,100	May 2018	Jul 2018
2018	Aug	\$196,100	\$4,900	\$196,100	May 2018	Jul 2018
2018	Jul	\$196,100	\$4,900	\$196,100	May 2018	Jul 2018
2018	Jun	\$195,400	\$4,800	\$195,400	Apr 2018	May 2018
2018	May	\$195,400	\$4,800	\$195,400	Apr 2018	May 2018
2018	Apr	\$191,300	\$6,000	\$191,300	Feb 2018	Apr 2018
2018	Mar	\$187,900	\$8,900	\$187,900	Jan 2018	Feb 2018
2018	Feb	\$183,900	\$8,700	\$183,900	Nov 2017	Feb 2018
2018	Jan	\$176,800	\$900	\$176,800	Nov 2017	Jan 2018
2017	Mean	\$187,200	\$10,700	\$187,200	Jan 2017	Dec 2017
2017	Dec	\$176,700	\$2,800	\$176,700	Oct 2017	Dec 2017
2017	Nov	\$176,600	\$3,100	\$176,600	Oct 2017	Nov 2017
2017	Oct	\$176,900	\$4,600	\$176,900	Jul 2017	Oct 2017
2017	Sep	\$185,700	\$8,300	\$185,700	May 2017	Aug 2017
2017	Aug	\$185,700	\$8,300	\$185,700	May 2017	Aug 2017
2017	Jul	\$189,900	\$9,700	\$189,900	May 2017	Jul 2017
2017	Jun	\$193,600	\$7,000	\$193,600	Apr 2017	Jun 2017
2017	May	\$194,000	\$7,700	\$194,000	Mar 2017	May 2017

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2017	Apr	\$197,700	\$7,600	\$197,700	Feb 2017	Apr 2017
2017	Mar	\$193,100	\$11,100	\$193,100	Jan 2017	Mar 2017
2017	Feb	\$183,200	\$17,400	\$183,200	Dec 2016	Feb 2017
2017	Jan	\$177,100	\$13,900	\$177,100	Dec 2016	Jan 2017
2016	Mean	\$201,000	\$26,300	\$201,000	Jan 2016	Dec 2016
2016	Dec	\$173,700	\$14,000	\$173,700	Oct 2016	Dec 2016
2016	Nov	\$174,600	\$12,100	\$174,600	Aug 2016	Oct 2016
2016	Oct	\$174,600	\$12,100	\$174,600	Aug 2016	Oct 2016
2016	Sep	\$194,000	\$22,900	\$194,000	Apr 2016	Aug 2016
2016	Aug	\$194,000	\$22,900	\$194,000	Apr 2016	Aug 2016
2016	Jul	\$210,100	\$21,700	\$210,100	Apr 2016	Jul 2016
2016	Jun	\$221,100	\$6,300	\$221,100	Mar 2016	Apr 2016
2016	May	\$222,600	\$6,800	\$222,600	Mar 2016	Apr 2016
2016	Apr	\$223,100	\$6,500	\$223,100	Feb 2016	Apr 2016
2016	Mar	\$223,100	\$4,900	\$223,100	Jan 2016	Mar 2016
2016	Feb	\$254,000	\$31,000	\$254,000	May 2015	Feb 2016
2016	Jan	\$269,100	\$28,500	\$269,100	May 2015	Jan 2016
2015	Mean	\$293,600	\$10,000	\$293,600	Jan 2015	Jun 2015
2015	Dec	\$286,100	\$2,700	\$286,100	May 2015	Jun 2015
2015	Nov	\$286,100	\$2,700	\$286,100	May 2015	Jun 2015
2015	Oct	\$286,100	\$2,700	\$286,100	May 2015	Jun 2015
2015	Sep	\$286,100	\$2,700	\$286,100	May 2015	Jun 2015
2015	Aug	\$286,100	\$2,700	\$286,100	May 2015	Jun 2015
2015	Jul	\$284,700	\$3,000	\$284,700	May 2015	Jun 2015
2015	Jun	\$288,700	\$7,400	\$288,700	Apr 2015	Jun 2015
2015	May	\$291,300	\$8,900	\$291,300	Mar 2015	May 2015
2015	Apr	\$299,000	\$9,000	\$299,000	Feb 2015	Apr 2015
2015	Mar	\$305,800	\$2,000	\$305,800	Jan 2015	Mar 2015
2015	Feb	\$302,600	\$4,700	\$302,600	Nov 2014	Feb 2015
2015	Jan	\$302,700	\$4,800	\$302,700	Aug 2014	Jan 2015

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2014	Mean	\$293,800	\$17,300	\$293,800	Jan 2014	Nov 2014
2014	Dec	\$308,100	\$8,000	\$308,100	Jun 2014	Nov 2014
2014	Nov	\$308,100	\$8,000	\$308,100	Jun 2014	Nov 2014
2014	Oct	\$311,400	\$3,300	\$311,400	May 2014	Aug 2014
2014	Sep	\$311,400	\$3,300	\$311,400	May 2014	Aug 2014
2014	Aug	\$311,400	\$3,300	\$311,400	May 2014	Aug 2014
2014	Jul	\$309,400	\$2,600	\$309,400	May 2014	Jun 2014
2014	Jun	\$299,600	\$15,000	\$299,600	Apr 2014	Jun 2014
2014	May	\$296,800	\$13,700	\$296,800	Mar 2014	May 2014
2014	Apr	\$287,000	\$14,700	\$287,000	Feb 2014	Apr 2014
2014	Mar	\$278,100	\$12,900	\$278,100	Jan 2014	Mar 2014
2014	Feb	\$269,700	\$8,600	\$269,700	Dec 2013	Feb 2014
2014	Jan	\$266,800	\$1,200	\$266,800	Dec 2013	Jan 2014
2013	Mean	\$260,100	\$11,100	\$260,100	Jan 2013	Dec 2013
2013	Dec	\$270,500	\$3,300	\$270,500	Oct 2013	Dec 2013
2013	Nov	\$272,300	\$1,400	\$272,300	Sep 2013	Oct 2013
2013	Oct	\$275,000	\$5,500	\$275,000	Aug 2013	Oct 2013
2013	Sep	\$270,100	\$9,500	\$270,100	May 2013	Sep 2013
2013	Aug	\$266,000	\$12,100	\$266,000	Apr 2013	Aug 2013
2013	Jul	\$260,100	\$4,000	\$260,100	Apr 2013	May 2013
2013	Jun	\$256,200	\$5,500	\$256,200	Apr 2013	May 2013
2013	May	\$254,900	\$5,200	\$254,900	Mar 2013	May 2013
2013	Apr	\$253,200	\$4,200	\$253,200	Mar 2013	Apr 2013
2013	Mar	\$248,900	\$4,700	\$248,900	Jan 2013	Mar 2013
2013	Feb	\$251,700	\$7,600	\$251,700	Nov 2012	Jan 2013
2013	Jan	\$251,700	\$7,600	\$251,700	Nov 2012	Jan 2013
2012	Mean	\$243,700	\$9,300	\$243,700	Feb 2012	Dec 2012
2012	Dec	\$257,400	\$2,000	\$257,400	Oct 2012	Dec 2012
2012	Nov	\$254,200	\$5,700	\$254,200	Sep 2012	Nov 2012
2012	Oct	\$253,500	\$6,200	\$253,500	Sep 2012	Oct 2012

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2012	Sep	\$245,700	\$2,600	\$245,700	May 2012	Sep 2012
2012	Aug	\$246,100	\$2,300	\$246,100	May 2012	Jun 2012
2012	Jul	\$245,600	\$2,000	\$245,600	May 2012	Jun 2012
2012	Jun	\$245,200	\$1,700	\$245,200	Apr 2012	Jun 2012
2012	May	\$242,400	\$5,000	\$242,400	Mar 2012	May 2012
2012	Apr	\$237,900	\$7,400	\$237,900	Feb 2012	Apr 2012
2012	Mar	\$235,400	\$7,300	\$235,400	Feb 2012	Mar 2012
2012	Feb	\$233,500	\$9,100	\$233,500	Dec 2011	Feb 2012
2012	Jan	\$224,500	\$6,200	\$224,500	Nov 2011	Dec 2011
2011	Mean	\$223,700	\$12,500	\$223,700	Jan 2011	Dec 2011
2011	Dec	\$226,900	\$8,300	\$226,900	Oct 2011	Dec 2011
2011	Nov	\$226,200	\$7,200	\$226,200	Sep 2011	Nov 2011
2011	Oct	\$234,600	\$6,900	\$234,600	Jul 2011	Oct 2011
2011	Sep	\$234,600	\$6,900	\$234,600	Jun 2011	Sep 2011
2011	Aug	\$234,600	\$6,900	\$234,600	May 2011	Aug 2011
2011	Jul	\$233,400	\$6,600	\$233,400	May 2011	Jul 2011
2011	Jun	\$224,100	\$16,000	\$224,100	Apr 2011	Jun 2011
2011	May	\$222,500	\$14,200	\$222,500	Feb 2011	May 2011
2011	Apr	\$219,500	\$14,100	\$219,500	Feb 2011	Apr 2011
2011	Mar	\$217,800	\$7,400	\$217,800	Jan 2011	Mar 2011
2011	Feb	\$220,700	\$10,000	\$220,700	Nov 2010	Feb 2011
2011	Jan	\$220,400	\$11,100	\$220,400	Nov 2010	Jan 2011
2010	Mean	\$182,900	\$29,200	\$182,900	Dec 2009	Dec 2010
2010	Dec	\$225,700	\$9,800	\$225,700	Oct 2010	Dec 2010
2010	Nov	\$223,700	\$13,700	\$223,700	Sep 2010	Nov 2010
2010	Oct	\$216,100	\$20,700	\$216,100	Aug 2010	Oct 2010
2010	Sep	\$211,200	\$21,100	\$211,200	Jul 2010	Sep 2010
2010	Aug	\$192,900	\$10,400	\$192,900	Jun 2010	Aug 2010
2010	Jul	\$173,600	\$16,700	\$173,600	May 2010	Jul 2010
2010	Jun	\$168,700	\$12,300	\$168,700	Mar 2010	Jun 2010



<b>Year</b>	<b>Month</b>	<b>Estimated Time-Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
2010	May	\$163,400	\$9,800	\$163,400	Mar 2010	May 2010
2010	Apr	\$161,900	\$7,200	\$161,900	Feb 2010	Apr 2010
2010	Mar	\$159,100	\$8,300	\$159,100	Dec 2009	Mar 2010
2010	Feb	\$157,900	\$7,300	\$157,900	Nov 2009	Feb 2010
2010	Jan	\$157,400	\$7,400	\$157,400	Nov 2009	Jan 2010
2009	Mean	\$160,700	\$11,000	\$160,900	Dec 2008	Dec 2009
2009	Dec	\$154,400	\$3,400	\$154,400	Oct 2009	Dec 2009
2009	Nov	\$155,900	\$3,900	\$155,900	Oct 2009	Nov 2009
2009	Oct	\$157,300	\$4,700	\$157,300	Aug 2009	Oct 2009
2009	Sep	\$161,500	\$600	\$161,500	Jun 2009	Aug 2009
2009	Aug	\$161,500	\$600	\$161,500	Jun 2009	Aug 2009
2009	Jul	\$161,000	\$1,000	\$161,000	May 2009	Jun 2009
2009	Jun	\$162,200	\$2,200	\$162,200	Apr 2009	Jun 2009
2009	May	\$164,200	\$3,300	\$164,200	Mar 2009	May 2009
2009	Apr	\$163,800	\$9,600	\$163,800	Feb 2009	Apr 2009
2009	Mar	\$164,500	\$16,100	\$164,500	Dec 2008	Mar 2009
2009	Feb	\$161,500	\$17,900	\$161,500	Dec 2008	Feb 2009
2009	Jan	\$156,300	\$18,600	\$156,300	Nov 2008	Jan 2009
2008	Mean	\$131,800	\$14,800	\$131,800	Jan 2008	Dec 2008
2008	Dec	\$145,800	\$17,100	\$145,800	Oct 2008	Dec 2008
2008	Nov	\$140,800	\$14,000	\$140,800	Sep 2008	Nov 2008
2008	Oct	\$132,300	\$10,600	\$132,300	Sep 2008	Oct 2008
2008	Sep	\$137,700	\$6,600	\$137,700	May 2008	Sep 2008
2008	Aug	\$134,800	\$5,500	\$134,800	Apr 2008	Jul 2008
2008	Jul	\$134,800	\$5,500	\$134,800	Apr 2008	Jul 2008
2008	Jun	\$130,300	\$8,300	\$130,300	Apr 2008	May 2008
2008	May	\$130,500	\$7,700	\$130,500	Mar 2008	May 2008
2008	Apr	\$128,200	\$6,500	\$128,200	Jan 2008	Apr 2008
2008	Mar	\$121,100	\$10,200	\$121,100	Jan 2008	Mar 2008
2008	Feb	\$118,600	\$9,800	\$118,600	Jan 2008	Feb 2008

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2008	Jan	\$116,600	\$10,500	\$116,600	Jan 2008	Jan 2008
2007	Mean	\$77,900	\$3,500	\$77,900	Jan 2007	Oct 2007
2007	Dec	\$81,200	\$1,900	\$81,200	Aug 2007	Oct 2007
2007	Nov	\$81,200	\$1,900	\$81,200	Aug 2007	Oct 2007
2007	Oct	\$81,100	\$1,700	\$81,100	Aug 2007	Oct 2007
2007	Sep	\$80,000	\$1,900	\$80,000	Jul 2007	Sep 2007
2007	Aug	\$80,300	\$1,900	\$80,300	Jun 2007	Aug 2007
2007	Jul	\$78,500	\$2,300	\$78,500	Apr 2007	Jul 2007
2007	Jun	\$77,400	\$3,700	\$77,400	Apr 2007	Jun 2007
2007	May	\$77,000	\$3,500	\$77,000	Feb 2007	May 2007
2007	Apr	\$76,500	\$3,800	\$76,500	Jan 2007	Apr 2007
2007	Mar	\$75,400	\$2,200	\$75,400	Jan 2007	Feb 2007
2007	Feb	\$76,600	\$4,300	\$76,600	Dec 2006	Feb 2007
2007	Jan	\$76,900	\$5,600	\$76,900	Dec 2006	Jan 2007
2006	Mean	\$79,500	\$5,300	\$79,500	Feb 2006	Dec 2006
2006	Dec	\$78,100	\$5,600	\$78,100	Dec 2006	Dec 2006
2006	Nov	\$73,100	\$6,800	\$73,100	Aug 2006	Sep 2006
2006	Oct	\$73,100	\$6,800	\$73,100	Aug 2006	Sep 2006
2006	Sep	\$73,100	\$6,800	\$73,100	Aug 2006	Sep 2006
2006	Aug	\$75,100	\$8,500	\$75,100	May 2006	Aug 2006
2006	Jul	\$81,200	\$3,500	\$81,200	May 2006	May 2006
2006	Jun	\$81,700	\$3,300	\$81,700	Apr 2006	May 2006
2006	May	\$81,000	\$3,600	\$81,000	Mar 2006	May 2006
2006	Apr	\$81,000	\$3,500	\$81,000	Feb 2006	Apr 2006
2006	Mar	\$80,100	\$3,600	\$80,100	Feb 2006	Mar 2006
2006	Feb	\$78,000	\$4,500	\$78,000	Sep 2005	Feb 2006
2006	Jan	\$75,500	\$4,600	\$75,500	Aug 2005	Nov 2005
2005	Mean	\$76,700	\$7,400	\$76,700	Jan 2005	Nov 2005
2005	Dec	\$75,500	\$4,600	\$75,500	Aug 2005	Nov 2005
2005	Nov	\$75,500	\$4,600	\$75,500	Aug 2005	Nov 2005

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2005	Oct	\$75,500	\$4,600	\$75,500	Aug 2005	Oct 2005
2005	Sep	\$73,500	\$7,000	\$73,500	Jul 2005	Sep 2005
2005	Aug	\$76,300	\$9,300	\$76,300	Jun 2005	Aug 2005
2005	Jul	\$78,500	\$10,400	\$78,500	May 2005	Jul 2005
2005	Jun	\$80,100	\$7,600	\$80,100	Apr 2005	Jun 2005
2005	May	\$78,000	\$7,400	\$78,000	Mar 2005	May 2005
2005	Apr	\$76,700	\$4,300	\$76,700	Feb 2005	Apr 2005
2005	Mar	\$73,100	\$4,800	\$73,100	Jan 2005	Mar 2005
2005	Feb	\$70,700	\$5,300	\$70,700	Nov 2004	Feb 2005
2005	Jan	\$68,300	\$3,200	\$68,300	Nov 2004	Jan 2005
2004	Mean	\$66,400	\$5,200	\$66,400	Jan 2004	Dec 2004
2004	Dec	\$65,800	\$5,100	\$65,800	Oct 2004	Dec 2004
2004	Nov	\$64,000	\$4,400	\$64,000	Sep 2004	Nov 2004
2004	Oct	\$62,200	\$3,000	\$62,200	Jul 2004	Oct 2004
2004	Sep	\$65,300	\$2,900	\$65,300	Jun 2004	Sep 2004
2004	Aug	\$68,200	\$4,100	\$68,200	May 2004	Jul 2004
2004	Jul	\$67,400	\$3,500	\$67,400	May 2004	Jul 2004
2004	Jun	\$69,100	\$5,100	\$69,100	Mar 2004	Jun 2004
2004	May	\$67,700	\$5,400	\$67,700	Mar 2004	May 2004
2004	Apr	\$67,200	\$5,600	\$67,200	Feb 2004	Apr 2004
2004	Mar	\$64,800	\$4,800	\$64,800	Jan 2004	Mar 2004
2004	Feb	\$63,100	\$4,500	\$63,100	Dec 2003	Feb 2004
2004	Jan	\$63,400	\$4,600	\$63,400	Nov 2003	Jan 2004
2003	Mean	\$60,500	\$4,000	\$60,500	Jan 2003	Dec 2003
2003	Dec	\$59,000	\$5,500	\$59,000	Sep 2003	Dec 2003
2003	Nov	\$58,200	\$4,900	\$58,200	Sep 2003	Nov 2003
2003	Oct	\$57,700	\$4,200	\$57,700	Aug 2003	Oct 2003
2003	Sep	\$57,400	\$4,600	\$57,400	Aug 2003	Sep 2003
2003	Aug	\$61,800	\$2,000	\$61,800	May 2003	Aug 2003
2003	Jul	\$60,700	\$1,900	\$60,700	May 2003	May 2003

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2003	Jun	\$62,400	\$3,400	\$62,400	Apr 2003	May 2003
2003	May	\$62,000	\$3,500	\$62,000	Mar 2003	May 2003
2003	Apr	\$61,800	\$4,600	\$61,800	Feb 2003	Apr 2003
2003	Mar	\$58,000	\$1,400	\$58,000	Jan 2003	Mar 2003
2003	Feb	\$59,400	\$2,900	\$59,400	Dec 2002	Feb 2003
2003	Jan	\$61,600	\$11,400	\$61,600	May 2002	Jan 2003
2002	Mean	\$69,800	\$9,400	\$69,800	Mar 2002	Dec 2002
2002	Dec	\$68,400	\$15,300	\$68,400	May 2002	Dec 2002
2002	Nov	\$68,800	\$15,200	\$68,800	May 2002	Oct 2002
2002	Oct	\$68,800	\$15,200	\$68,800	May 2002	Oct 2002
2002	Sep	\$73,800	\$8,700	\$73,800	May 2002	May 2002
2002	Aug	\$73,800	\$8,700	\$73,800	May 2002	May 2002
2002	Jul	\$72,000	\$7,900	\$72,000	May 2002	May 2002
2002	Jun	\$72,000	\$7,000	\$72,000	Apr 2002	May 2002
2002	May	\$72,300	\$6,800	\$72,300	Mar 2002	May 2002
2002	Apr	\$72,800	\$4,700	\$72,800	Mar 2002	Apr 2002
2002	Mar	\$96,600	\$12,100	\$96,600	Jul 2001	Mar 2002
2002	Feb	\$102,600	\$2,500	\$102,600	Jul 2001	Sep 2001
2002	Jan	\$102,600	\$2,500	\$102,600	Jul 2001	Sep 2001
2001	Mean	\$100,800	\$6,100	\$100,800	Jan 2001	Sep 2001
2001	Dec	\$102,600	\$2,500	\$102,600	Jul 2001	Sep 2001
2001	Nov	\$102,600	\$2,500	\$102,600	Jul 2001	Sep 2001
2001	Oct	\$102,600	\$2,500	\$102,600	Jul 2001	Sep 2001
2001	Sep	\$101,400	\$3,400	\$101,400	Jul 2001	Sep 2001
2001	Aug	\$100,500	\$3,100	\$100,500	Jul 2001	Aug 2001
2001	Jul	\$100,400	\$6,900	\$100,400	May 2001	Jul 2001
2001	Jun	\$100,500	\$7,600	\$100,500	Apr 2001	May 2001
2001	May	\$100,200	\$6,900	\$100,200	Mar 2001	May 2001
2001	Apr	\$98,600	\$3,800	\$98,600	Mar 2001	Apr 2001
2001	Mar	\$100,800	\$4,400	\$100,800	Jan 2001	Mar 2001

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
2001	Feb	\$98,400	\$10,500	\$98,400	Oct 2000	Jan 2001
2001	Jan	\$98,400	\$10,500	\$98,400	Oct 2000	Jan 2001
2000	Mean	\$107,000	\$7,800	\$107,000	Jan 2000	Dec 2000
2000	Dec	\$100,300	\$12,100	\$100,300	Jul 2000	Dec 2000
2000	Nov	\$113,800	\$3,700	\$113,800	Jun 2000	Oct 2000
2000	Oct	\$113,800	\$3,700	\$113,800	Jun 2000	Oct 2000
2000	Sep	\$115,100	\$2,100	\$115,100	May 2000	Jul 2000
2000	Aug	\$115,100	\$2,100	\$115,100	May 2000	Jul 2000
2000	Jul	\$111,800	\$5,000	\$111,800	May 2000	Jul 2000
2000	Jun	\$109,000	\$6,500	\$109,000	Apr 2000	Jun 2000
2000	May	\$108,000	\$5,500	\$108,000	Mar 2000	May 2000
2000	Apr	\$106,100	\$5,000	\$106,100	Feb 2000	Apr 2000
2000	Mar	\$106,100	\$3,300	\$106,100	Jan 2000	Mar 2000
2000	Feb	\$105,200	\$3,900	\$105,200	Dec 1999	Feb 2000
2000	Jan	\$108,800	\$4,100	\$108,800	Oct 1999	Jan 2000
1999	Mean	\$101,300	\$11,800	\$101,300	Feb 1999	Dec 1999
1999	Dec	\$107,600	\$6,200	\$107,600	Oct 1999	Dec 1999
1999	Nov	\$106,000	\$6,100	\$106,000	Sep 1999	Nov 1999
1999	Oct	\$104,600	\$6,000	\$104,600	Sep 1999	Oct 1999
1999	Sep	\$98,400	\$7,100	\$98,400	Jul 1999	Sep 1999
1999	Aug	\$93,900	\$2,300	\$93,900	Jun 1999	Jul 1999
1999	Jul	\$94,200	\$3,500	\$94,200	May 1999	Jul 1999
1999	Jun	\$96,900	\$6,100	\$96,900	Apr 1999	Jun 1999
1999	May	\$101,500	\$15,100	\$101,500	Mar 1999	May 1999
1999	Apr	\$106,500	\$16,800	\$106,500	Feb 1999	Apr 1999
1999	Mar	\$118,600	\$21,200	\$118,600	Dec 1998	Mar 1999
1999	Feb	\$113,200	\$15,700	\$113,200	Nov 1998	Feb 1999
1999	Jan	\$123,800	\$17,800	\$123,800	Jul 1998	Dec 1998
1998	Mean	\$132,000	\$14,000	\$132,000	Jan 1998	Dec 1998
1998	Dec	\$123,800	\$17,800	\$123,800	Jul 1998	Dec 1998

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1998	Nov	\$133,300	\$27,800	\$133,300	Jun 1998	Nov 1998
1998	Oct	\$130,900	\$28,900	\$130,900	Jun 1998	Oct 1998
1998	Sep	\$129,500	\$28,400	\$129,500	Jun 1998	Jul 1998
1998	Aug	\$129,500	\$28,400	\$129,500	Jun 1998	Jul 1998
1998	Jul	\$127,900	\$18,200	\$127,900	May 1998	Jul 1998
1998	Jun	\$133,900	\$13,500	\$133,900	Apr 1998	Jun 1998
1998	May	\$133,400	\$8,200	\$133,400	Mar 1998	May 1998
1998	Apr	\$137,900	\$3,600	\$137,900	Feb 1998	Apr 1998
1998	Mar	\$132,800	\$11,000	\$132,800	Jan 1998	Mar 1998
1998	Feb	\$134,200	\$13,900	\$134,200	Nov 1997	Feb 1998
1998	Jan	\$135,900	\$16,800	\$135,900	Nov 1997	Jan 1998
1997	Mean	\$131,200	\$15,000	\$131,200	Jan 1997	Dec 1997
1997	Dec	\$143,300	\$7,400	\$143,300	Jun 1997	Dec 1997
1997	Nov	\$143,100	\$7,600	\$143,100	May 1997	Nov 1997
1997	Oct	\$118,900	\$20,200	\$118,900	May 1997	Jun 1997
1997	Sep	\$118,900	\$20,200	\$118,900	May 1997	Jun 1997
1997	Aug	\$118,900	\$20,200	\$118,900	May 1997	Jun 1997
1997	Jul	\$132,200	\$19,500	\$132,200	May 1997	Jun 1997
1997	Jun	\$131,000	\$16,000	\$131,000	Apr 1997	Jun 1997
1997	May	\$130,700	\$16,000	\$130,700	Mar 1997	May 1997
1997	Apr	\$129,400	\$7,600	\$129,400	Feb 1997	Apr 1997
1997	Mar	\$124,400	\$9,200	\$124,400	Jan 1997	Mar 1997
1997	Feb	\$118,900	\$10,200	\$118,900	Dec 1996	Feb 1997
1997	Jan	\$114,500	\$6,600	\$114,500	Nov 1996	Jan 1997
1996	Mean	\$118,100	\$11,800	\$118,100	Jan 1996	Dec 1996
1996	Dec	\$115,600	\$5,500	\$115,600	Oct 1996	Dec 1996
1996	Nov	\$119,700	\$1,000	\$119,700	Sep 1996	Nov 1996
1996	Oct	\$111,300	\$8,200	\$111,300	Jul 1996	Oct 1996
1996	Sep	\$112,600	\$7,800	\$112,600	Jul 1996	Sep 1996
1996	Aug	\$111,100	\$8,000	\$111,100	Jul 1996	Aug 1996

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1996	Jul	\$113,600	\$12,100	\$113,600	May 1996	Jul 1996
1996	Jun	\$118,100	\$16,300	\$118,100	Apr 1996	May 1996
1996	May	\$119,200	\$14,900	\$119,200	Mar 1996	May 1996
1996	Apr	\$127,600	\$13,000	\$127,600	Feb 1996	Apr 1996
1996	Mar	\$125,000	\$6,900	\$125,000	Jan 1996	Mar 1996
1996	Feb	\$125,600	\$7,600	\$125,600	Jan 1996	Feb 1996
1996	Jan	\$135,700	\$15,100	\$135,700	Jul 1995	Jan 1996
1995	Mean	\$134,200	\$12,300	\$134,200	Feb 1995	Oct 1995
1995	Dec	\$146,600	\$8,400	\$146,600	May 1995	Oct 1995
1995	Nov	\$146,600	\$8,400	\$146,600	May 1995	Oct 1995
1995	Oct	\$146,600	\$8,400	\$146,600	May 1995	Oct 1995
1995	Sep	\$146,600	\$8,400	\$146,600	May 1995	Jul 1995
1995	Aug	\$146,600	\$8,400	\$146,600	May 1995	Jul 1995
1995	Jul	\$146,900	\$10,500	\$146,900	May 1995	Jul 1995
1995	Jun	\$137,100	\$11,600	\$137,100	Apr 1995	Jun 1995
1995	May	\$133,900	\$12,100	\$133,900	Mar 1995	May 1995
1995	Apr	\$128,500	\$8,000	\$128,500	Feb 1995	Apr 1995
1995	Mar	\$122,700	\$2,900	\$122,700	Feb 1995	Mar 1995
1995	Feb	\$123,100	\$1,700	\$123,100	Nov 1994	Feb 1995
1995	Jan	\$122,000	\$5,200	\$122,000	Oct 1994	Dec 1994
1994	Mean	\$135,600	\$24,800	\$135,600	Feb 1994	Dec 1994
1994	Dec	\$122,000	\$5,200	\$122,000	Oct 1994	Dec 1994
1994	Nov	\$114,100	\$12,400	\$114,100	Sep 1994	Nov 1994
1994	Oct	\$109,800	\$12,100	\$109,800	Jul 1994	Oct 1994
1994	Sep	\$110,300	\$12,200	\$110,300	Jul 1994	Sep 1994
1994	Aug	\$130,300	\$19,600	\$130,300	Jun 1994	Aug 1994
1994	Jul	\$143,400	\$31,800	\$143,400	May 1994	Jul 1994
1994	Jun	\$151,100	\$25,200	\$151,100	Apr 1994	Jun 1994
1994	May	\$148,700	\$27,300	\$148,700	Mar 1994	May 1994
1994	Apr	\$145,400	\$9,600	\$145,400	Feb 1994	Apr 1994

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1994	Mar	\$158,400	\$14,600	\$158,400	Aug 1993	Mar 1994
1994	Feb	\$175,500	\$20,700	\$175,500	Jul 1993	Feb 1994
1994	Jan	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Mean	\$213,300	\$17,500	\$213,300	Jan 1993	Aug 1993
1993	Dec	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Nov	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Oct	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Sep	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Aug	\$202,200	\$13,000	\$202,200	Jun 1993	Aug 1993
1993	Jul	\$208,100	\$4,000	\$208,100	May 1993	Jul 1993
1993	Jun	\$210,500	\$14,900	\$210,500	Apr 1993	Jun 1993
1993	May	\$212,700	\$14,100	\$212,700	Mar 1993	May 1993
1993	Apr	\$215,400	\$14,200	\$215,400	Feb 1993	Apr 1993
1993	Mar	\$227,400	\$13,700	\$227,400	Jan 1993	Mar 1993
1993	Feb	\$231,800	\$11,700	\$231,800	Jun 1992	Feb 1993
1993	Jan	\$244,500	\$21,600	\$244,500	Jun 1992	Jan 1993
1992	Mean	\$219,100	\$29,800	\$219,100	Jan 1992	Jul 1992
1992	Dec	\$245,500	\$21,900	\$245,500	May 1992	Jul 1992
1992	Nov	\$245,500	\$21,900	\$245,500	May 1992	Jul 1992
1992	Oct	\$245,500	\$21,900	\$245,500	May 1992	Jul 1992
1992	Sep	\$245,500	\$21,900	\$245,500	May 1992	Jul 1992
1992	Aug	\$245,500	\$21,900	\$245,500	May 1992	Jul 1992
1992	Jul	\$241,500	\$19,600	\$241,500	May 1992	Jul 1992
1992	Jun	\$224,700	\$25,200	\$224,700	Apr 1992	Jun 1992
1992	May	\$212,300	\$18,300	\$212,300	Mar 1992	May 1992
1992	Apr	\$213,200	\$30,000	\$213,200	Feb 1992	Apr 1992
1992	Mar	\$213,300	\$33,100	\$213,300	Jan 1992	Mar 1992
1992	Feb	\$216,700	\$35,300	\$216,700	Dec 1991	Feb 1992
1992	Jan	\$204,100	\$7,000	\$204,100	Nov 1991	Jan 1992
1991	Mean	\$290,800	\$45,400	\$290,800	Jan 1991	Dec 1991



<b>Year</b>	<b>Month</b>	<b>Estimated Time-Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
1991	Dec	\$208,000	\$4,900	\$208,000	Nov 1991	Dec 1991
1991	Nov	\$256,700	\$31,800	\$256,700	May 1991	Nov 1991
1991	Oct	\$282,400	\$30,400	\$282,400	May 1991	Jul 1991
1991	Sep	\$282,400	\$30,400	\$282,400	May 1991	Jul 1991
1991	Aug	\$282,400	\$30,400	\$282,400	May 1991	Jul 1991
1991	Jul	\$282,400	\$30,400	\$282,400	May 1991	Jul 1991
1991	Jun	\$310,200	\$16,900	\$310,200	Apr 1991	May 1991
1991	May	\$312,200	\$16,200	\$312,200	Mar 1991	May 1991
1991	Apr	\$318,800	\$11,700	\$318,800	Feb 1991	Apr 1991
1991	Mar	\$317,900	\$12,000	\$317,900	Jan 1991	Mar 1991
1991	Feb	\$328,900	\$11,900	\$328,900	Dec 1990	Feb 1991
1991	Jan	\$348,700	\$35,800	\$348,700	Nov 1990	Jan 1991
1990	Mean	\$380,400	\$33,600	\$380,400	Jan 1990	Dec 1990
1990	Dec	\$353,500	\$30,400	\$353,500	Oct 1990	Dec 1990
1990	Nov	\$364,900	\$38,100	\$364,900	Oct 1990	Nov 1990
1990	Oct	\$359,900	\$24,300	\$359,900	Jun 1990	Oct 1990
1990	Sep	\$389,400	\$34,900	\$389,400	Jun 1990	Aug 1990
1990	Aug	\$389,400	\$34,900	\$389,400	Jun 1990	Aug 1990
1990	Jul	\$404,500	\$16,400	\$404,500	May 1990	Jun 1990
1990	Jun	\$399,500	\$17,900	\$399,500	Apr 1990	Jun 1990
1990	May	\$401,400	\$19,500	\$401,400	Mar 1990	May 1990
1990	Apr	\$404,200	\$17,800	\$404,200	Feb 1990	Apr 1990
1990	Mar	\$398,600	\$22,200	\$398,600	Jan 1990	Mar 1990
1990	Feb	\$394,400	\$20,600	\$394,400	Nov 1989	Feb 1990
1990	Jan	\$388,300	\$21,100	\$388,300	Nov 1989	Jan 1990
1989	Mean	\$367,100	\$60,400	\$367,100	Jan 1989	Nov 1989
1989	Dec	\$385,000	\$31,100	\$385,000	May 1989	Nov 1989
1989	Nov	\$385,000	\$31,100	\$385,000	May 1989	Nov 1989
1989	Oct	\$380,600	\$27,900	\$380,600	May 1989	Jun 1989
1989	Sep	\$380,600	\$27,900	\$380,600	May 1989	Jun 1989

Year	Month	Estimated Time-Weighted Value	Standard Deviation	Estimated Unweighted Value	Earliest Transaction	Latest Transaction
1989	Aug	\$380,600	\$27,900	\$380,600	May 1989	Jun 1989
1989	Jul	\$352,100	\$62,300	\$352,100	May 1989	Jun 1989
1989	Jun	\$360,300	\$59,800	\$360,300	Apr 1989	Jun 1989
1989	May	\$368,100	\$65,200	\$368,100	Mar 1989	May 1989
1989	Apr	\$390,000	\$53,400	\$390,000	Mar 1989	Apr 1989
1989	Mar	\$356,200	\$89,300	\$356,200	Dec 1988	Mar 1989
1989	Feb	\$305,700	\$85,700	\$305,700	Nov 1988	Jan 1989
1989	Jan	\$304,900	\$76,700	\$304,900	Nov 1988	Jan 1989
1988	Mean	\$200,200	\$47,100	\$200,200	Jan 1988	Dec 1988
1988	Dec	\$305,100	\$85,700	\$305,100	Nov 1988	Dec 1988
1988	Nov	\$242,700	\$35,300	\$242,700	Jun 1988	Nov 1988
1988	Oct	\$218,500	\$5,400	\$218,500	May 1988	Aug 1988
1988	Sep	\$218,500	\$5,400	\$218,500	May 1988	Aug 1988
1988	Aug	\$218,500	\$5,400	\$218,500	May 1988	Aug 1988
1988	Jul	\$197,400	\$30,500	\$197,400	May 1988	Jun 1988
1988	Jun	\$193,800	\$30,400	\$193,800	Apr 1988	Jun 1988
1988	May	\$192,700	\$30,000	\$192,700	Mar 1988	May 1988
1988	Apr	\$188,300	\$28,100	\$188,300	Feb 1988	Apr 1988
1988	Mar	\$184,600	\$20,600	\$184,600	Jan 1988	Mar 1988
1988	Feb	\$180,900	\$17,000	\$180,900	Dec 1987	Feb 1988
1988	Jan	\$179,200	\$10,300	\$179,200	Nov 1987	Jan 1988
1987	Mean	\$169,800	\$13,300	\$169,800	Jan 1987	Dec 1987
1987	Dec	\$174,500	\$10,400	\$174,500	Sep 1987	Dec 1987
1987	Nov	\$168,000	\$5,200	\$168,000	Sep 1987	Nov 1987
1987	Oct	\$169,600	\$6,500	\$169,600	Aug 1987	Sep 1987
1987	Sep	\$169,600	\$6,500	\$169,600	Aug 1987	Sep 1987
1987	Aug	\$174,000	\$6,600	\$174,000	Jun 1987	Aug 1987
1987	Jul	\$176,800	\$7,300	\$176,800	May 1987	Jun 1987
1987	Jun	\$170,600	\$14,400	\$170,600	Apr 1987	Jun 1987
1987	May	\$169,600	\$14,500	\$169,600	Mar 1987	May 1987

<b>Year</b>	<b>Month</b>	<b>Estimated Time- Weighted Value</b>	<b>Standard Deviation</b>	<b>Estimated Unweighted Value</b>	<b>Earliest Transaction</b>	<b>Latest Transaction</b>
1987	Apr	\$164,300	\$16,000	\$164,300	Feb 1987	Apr 1987
1987	Mar	\$162,700	\$12,100	\$162,700	Jan 1987	Mar 1987
1987	Feb	\$161,900	\$11,900	\$161,900	Dec 1986	Feb 1987
1987	Jan	\$165,600	\$8,200	\$165,600	Dec 1986	Jan 1987

**Submitted by:** Kiley Burton

**Community of Residence:** Cordova

**Comment:**

I oppose proposals 51,52, and 53

Dear Board of Fish, I am a 19-year-old NVE tribal member and year-round resident of Cordova. Last year I bought a Copper River drift permit and boat. I am the youngest tribal member permit holder in the fleet and this is my main source of income and my way of life.

These proposals do not make any sense. There is a large amount of overlap in when the different salmon stocks enter the river and make it past the sonar. Depending on temperature and water levels it can take over a week for the salmon to get past the upper markers to the sonar. During any given time there can be over half a million salmon in this staging area. This doesn't account for our delta stocks that do not go past the sonar.

This proposed 2-week closure is not going to accomplish more biodiversity of our stocks. My family has been fishing this river for over 100 years and if we were going to have biodiversity issues it would have already happened.

This would hurt me financially.

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**Submitted by:** Charlie Busby

**Community of Residence:** Anchorage

**Comment:**

Good Day, I am a personal use fisherman in the lower Copper River. I use a guided power boat to access the fishery. I am 66 years old and a 100% disabled Combat Veteran., I can no longer scale the cliffs to access fishing with my dipnet. Since Ahtna no longer allows me to access easier area without paying a daily fee, that often the fish are not at, I use a guided power boat. I am feeding myself and my wife an 2 grandchildren. Since I can no longer work the fish I catch at Copper River personal use help tto feed my family. I oppose proposals 44, 45, 46, 47, 48, 49, 50, 54, 55, 56, 57, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, & 72. I support48, 58, 59, 70. If it wasn't for the use of a guided power boat I would not be able to harvest mySalmon. I think the present limits for Kings and other salmon are fair and equitable. Yes I save up my dollars to afford a guided power boat and there is no guarantee of success but, what I save at the grocery store allows me to afford it.

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**Submitted by:** Wade buscher

**Community of Residence:** Cordova

**Comment:**

Prop 45) I oppose this proposal, opening the inside Chinook closure area to subsistence fishing would result in increased King Salmon harvest. Many commercial fishermen would change gear to utilize the Saturday subsistence openers to target King salmon and thus put more pressure on the already decreasing King salmon resource.

Prop 46,47) I support these proposals, It makes sense to gather any and all salmon harvest data in a timely manner which could be useful in managing the resource for all user groups

Prop 51,52,53) I oppose these proposals, these proposals would have a direct effect on my livelihood as a commercial fisherman. We benefit greatly from the value of these early run Sockeye and King salmon in the marketplace. Run size and timing is dynamic, we should not be constrained solely by the Miles Lake sonar count.

Prop 56,57) I oppose these proposals, gillnet stacking should not be applied to the Area E gillnet fishery

Prop70) I oppose

Prop78) I oppose

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**Submitted by:** Barren Cabana

**Community of Residence:** Girdwood

**Comment:**

73,74,75,76,77,78

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**Submitted by:** Jeff Cabana

**Community of Residence:** Homer, AK

**Comment:**

Proposal #73 and 74: I SUPPORT permit stacking. These proposal would both benefit permit stacking . This would alleviate requirements for having multiple permit holders on each vessel.

Proposal #75 and 76: I OPPOSE . The allocation plan should remain the same. It's a successful balance between to the user groups as it stands and fairly represents all groups.

Proposal # 77: I OPPOSE. As it stands currently , I feel PWSAC and its included entities is appropriate for PWSAC management of the fisheries. To bring Valdez into the PWSAC Core Report a very individualized fishery, would complicate the overall seine fishery for all involved.

Proposal #78: I OPPOSE. I feel that a 25% decrease in all hatchery egg take in PWS is not justified . There is no evidence of benefit for the good of the sustainable fishery that I am aware of .

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**Submitted by:** Jennifer Cabana

**Community of Residence:** Homer

**Comment:**

I support prop 73 and 74 and the ability to stack them on a vessel. This will limit the load on the process for emergency transfers if one permit holder is unable to be on the vessel.

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**Submitted by:** Jeremy Cabana

**Community of Residence:** Valdez

**Comment:**

See attached.

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**Submitted by:** Jeremy Cabana

**Community of Residence:** Homer

**Comment:**

Prop. 1

I agree

Seems like a good idea.

Prop 16

I agree

Seems like a good idea

Prop 17

I agree

Seems like a good idea

Prop 25

I agree

Seems like a reasonable idea

Prop 26

I agree

Seems like a good idea

Prop 31

I agree

Seems like a good idea

Prop 36

I oppose

It's a bad idea

Prop 37

I agree

A good idea

Prop 39

I oppose

A terrible idea

Prop 40

I oppose

It's a poor idea

Prop 42

I agree

It's a good idea

Prop 44

I oppose

Bad idea

Prop 47

I oppose

Bad idea

Prop 56

I oppose

it is a poor idea

Prop 57

I oppose

It's a bad idea

Prop 73

I oppose

It's a bad idea

Prop 74

I oppose

It's a bad idea

Prop 75

I oppose it

It's a bad idea



Prop 76

I oppose

It's a bad idea

Prop 77

I oppose

This is a terrible idea

Prop 78

I vehemently oppose

This idea would be the downfall of the entire system that so many people rely upon for their survival. Terrible idea and is the work of the devil.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Valdez, Alaska, and I am a purse seine fisherman. Alaskan salmon hatcheries have allowed me to support my family. The last two years have been incredibly difficult due to low prices, and this year has been especially tough with a complete run failure. The loss of hatchery production would probably make it even more devastating.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable

by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska’s broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska’s hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska’s economic and cultural fabric.

Sincerely,

Jeremy Cabana

[REDACTED]

Valdez, Alaska

**Submitted by:** Kannen Cabana

**Community of Residence:** Homer Alaska

**Comment:**

Im a Prince William Sound salmon seine permit holder and I support proposal 73 and support 74 for allowing the stacking of permits that would improve the fishery for the fisherman who desperately need it. Currently there are more boats than the fishery can support in the fleet by allowing the permit stacking it would mean less boats in the fleet.

I oppose proposal 75 and the plan should remain the same it works and it's been working.

I oppose proposal 76 the allocation plan works to keep balance between the seine and gill net user groups.

I oppose proposal 77 PWSAC and Valdez are two different districts and should not be included in PSWAC. The runs are different and shouldn't be lumped together.

I oppose proposal 78, a decrease by 25% egg take is not necessary and would be a negative impact on the fleet of fishing vessels.

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Alaska Board of Fisheries members

I am in favor of proposals 73 and 74

These proposals essentially allow one person to own and operate two salmon purse seine permits on the same vessel in PWS. This is long overdue, when the limited permit system was adopted in 1973 there was considerable concern salmon fisheries would consolidate and be owned/controlled by investors or seafood processors. To insure the fisheries remained a viable enterprise for individual fishermen the limited permit program included language that restricted fishermen's ability to own and operate more than one salmon permit in any one area in a given year.

Much has changed since the mid 1970s, for example salmon prices for pinks are actually lower now than then, vessel prices have increased from about 50,000 dollars for an average salmon vessel to likely close to 750,000 for an average vessel, insurance, moorage, maintenance and all other cost associated with owning and operating a salmon boat.

Many factors that affect having a profitable salmon operation did not exist in the 1970s and 1980s. Salmon farms were in their infancy, RSW systems were very rare and quite undependable.

Fast forward to today and the average salmon fisherman finds it quite a challenge to provide a reasonable profit to provide for their families. There are simply too many boats trying to harvest salmon in every salmon fishery in Alaska. There have been attempts to reduce fleets in the past, SE salmon fishermen did a buy back for salmon purse seine permits. That reduced the number of permits but in the end there are still too many salmon boats there.

These proposals, 73 and 74 if passed likely result in a modest reduction in the number of boats fishing for salmon in the purse seine fishery. This would be a benefit to many people, less boats in the fishery, easier management for ADFG, less congestion in general for boats transiting PWS and the average boat would likely have a modestly higher gross earnings.

## +Alaska Board of Fisheries Members

I oppose proposals 75 and 76, This proposal has been submitted to the BOF in essentially the same language for the last several PWS board cycles by the author of proposal 75. This proposal was proposal 11 and failed in the BOF meeting in 2014 by a vote of 0-7, in 2017 it was proposal 47 and failed by a vote of 0-7, in 2021 it was proposal 43 and failed by a vote of 0-6. It's important to note that the PWS salmon allocation plan was developed over 3 BOF cycles beginning in the late 1990s. Countless hours and committee meetings occurred over this several year period. The data that eventually established the 50-50 allocation split between the purse seine fleet and the drift gillnet fleet is based on the 20 year period before PWSAC was established in PWS. In the meetings, ideas of how to establish a fair working allocation were submitted and debated by all interested parties. The fundamental agreement was, develop a plan that was as simple as possible, brought parity to both gear groups over time and included only PWSAC produced salmon . The establishment of the five year rolling average and the “ triggers” set at 45% at Port Chalmers and Esther Island releases are deliberate and intend to achieve a 50-50 split over time. It is recognized there are vast harvest differences from year to year for both gear groups that is caused by both ex vessel price and run strength. This plan is not intended to achieve parity from year to year but over a long term period. For example, this proposal was submitted in the 2017 PWS BOF cycle. Using the available COAR harvest value data from 1984- 2016 ( the COAR did not have digital records before 1984) the drift gillnet group was ahead of the purse seine fleet by \$ 125,402,807 dollars. Not a lot of harvest value has changed since the 2017 BOF meeting, the updated math using COAR harvest values from 1984 through 2022 the drift gillnet fleet is still 114 million dollars ahead of the seine fleet for PWSAC production harvest value. Proposal 75 limits the harvest value of PWSAC produced salmon to the years 2006 through 2022, PWSAC has been contributing harvest value to the drift gillnet and purse seine fleets since the late 1970s, it was relatively modest until the mid 1980s but did in fact exist. Again the primary reason I am using 1984-2022 is the COAR doesn't seem to have digital records before 1984. If the goal is to have an allocation plan that

achieves parity of harvest values over the long term we should use all the available data we can. Using 2006-2022 seems like an attempt to “cherry pick” data to reinforce this proposal.

Proposal 75 states we should use the harvest values “since inception in 2006”. PWSAC harvest contribution goes back much further than 2006. The proposal also request the trigger percentage for Port Chalmers be changed to 50% instead of the plans 45%. I’m not convinced this proposal is in the best interest of the drift gillnet fleet, if the BOF altered the allocation plan and actually used the 50% proposal and used PWSAC harvest values from 1984-2022, the drift gillnet fleet would be likely excluded from Port Chalmers for years. The purse seine fleet is actually currently behind the drift gillnet fleet by 114 million dollars of harvest value from 1984-2022. They are not complaining about this, the vast majority of both user groups know and accept there is going to be years where one group is ahead or behind, the goal of the allocation plan is to provide some near term financial relief to a user group by using the 5 year rolling average instead of using the overall harvest from 1984.

Fishery allocation plans have a long history of disappointed user groups, it is an impossible job to satisfy every person or user group when developing an allocation plan. The current PWS allocation plan was developed over a period of time that included 3 complete BOF cycles and had BOF appointed committee members for all those years. Much frustration and anger occurred in the years prior to the final adoption of the current plan in 2006. Many ideas and proposals were considered, some were adopted and some were not but they all were considered. The current plan is working, there is no reasonable reason to change it now. Both gear groups have had access to the piggy banks that are triggered by using the 5 year rolling averages. The harvest values from the COAR reports are accepted as correct and the math simply dictates which user group gets access to a piggy bank based on the 5 year rolling average.

Sincerely

Leroy L Cabana

## Alaska Board of Fisheries Members

I oppose proposal 77, this proposal has been submitted every BOF PWS cycle for many years. It was included in the 2014 meeting as proposal 11, it failed 0-7. It was also submitted for the 2017 meeting as proposal 47, it also failed by a vote of 0-7, and in 2021 it was proposal 43 and failed by a vote of 0-6.

The PWS Allocation Plan was developed over three BOF cycles starting in the late 1990s, there was a process that included BOF members and committee members that worked on this for years. Mountains of paperwork and data were submitted and considered. The goal is to have a fair plan to allocate PWSAC produced salmon between the user groups.

This brings up the question, why just PWSAC and not all wild salmon or include VFDA. The answer to this was simple, fisherman from PWS started PWSAC, they represented both gear groups and wanted the salmon produced by PWSAC to benefit both gear groups. PWSAC can only plan and produce salmon that originate at their hatcheries, they have no influence on other salmon that return to PWS.

The only reason there is a need for an allocation plan is PWSAC produced salmon are the only salmon that can be shared by drift gillnet, set gillnet and purse seine fishermen. All other salmon return to areas that only allow either gill nets or purse seines. The hatchery VFDA, is located at the head of Valdez Arm. For all of history, only purse seines have been allowed to commercially harvest salmon in this area known as the Eastern district.

All of PWSAC hatcheries are located in the western side of PWS, Wally Norenberg, Main Bay and AFK are located about as far west as you can go. Cannery Creek is located in the western side of the Northern district and is a purse seine only area. There is a sockeye hatchery located up the Copper River area known as Gulkana which is drift gillnet only. There are only two areas in PWS that allow purse seines and drift gillnet in the same areas. One is Wally Norenberg located on the south side of Esther Island, this is the only area where mixed gear groups sometimes fish together. The other area is a



remote release on Montague at Port Chalmers, it is the “piggy bank” and is either drift gillnet or purse seine depending on the 5 year rolling average.

If PWSAC did not exist, there would be no practical reason to have an allocation plan as there are no other hatchery programs that would allow drift gillnet fishermen to participate or benefit.

In the last paragraph of proposal 77 it states “This proposal does not propose to reallocate VFDA produced salmon to other commercial salmon user groups”. This is flat out incorrect, If VFDA produced salmon are included in the overall harvest values the result would be a vast reduction in purse seine harvesting of PWSAC salmon. Essentially the vast majority of PWSAC salmon would be harvested by the drift gillnet fleet. The whole point of establishing PWSAC was so both user groups would benefit more or less equally from PWSAC production.

There is language in proposal 77 that suggest using state of Alaska borrowed funds somehow means that the drift gillnet fleet should have a benefit from using those funds. The state of Alaska loans money for countless reasons, some go to home buyers, small businesses, processors, all kinds of fishermen, agriculture and the list goes on. No reasonable person expects if they borrow state money, they have an obligation to other parties to assist them. You can not park in your neighbors garage just because they borrowed state money. It’s simply a lending agreement no different than a commercial bank. The money is borrowed for a set term and interest and paid back, no strings attached.

There are many references to allocation plans from Southeast Alaska, every allocation plan in Alaska develops their plan based on historic harvest and participation, they are all different. It’s impractical to adopt an allocation plan from Bristol Bay, Kodiak, area M or Southeast and apply it to PWS. There are different participation histories, geographical differences and harvest strategies. The PWS Allocation Plan was adopted using PWS history and participation.

Sincerely

Leroy Cabana

**Submitted by:** Russell Cabana

**Community of Residence:** Girdwood

**Comment:**

I strongly oppose proposals 75, 76,77, and 78. As a commercial fisherman and salmon seine permit holder for PWS, these proposals are completely unnecessary. Prop 75-77 is an attempt to change our management plan that has been working very well and fair for all users groups PWS. Those proposals are very one sided and are only intended to benefit one user group, and would have huge economic hardships for other user groups. I strongly oppose prop 78 as it will only hurt economically to all of the communities surrounding PWS. Also Prop 78 has been opposed at every meeting throughout the state for years and has wasted a lot of time and resources from many different groups as well as individuals trying to keep our way of life.

Thanks.

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November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am from Girdwood, Alaska, and I participate in Alaska's salmon fisheries through commercial fishing, sport fishing, public use, subsistence, and processing. I've commercially fished my entire life in PWS, and the hatcheries have made it possible to keep me in business and provide a great quality of life in the community where I currently live and grew up. It's already hard enough for commercial fishermen, as fishing is unpredictable and dealing with Mother Nature involves too many variables to predict how each season will go. So, why mess with people's way of life and risk economic losses to our communities?

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reason/s why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

Sustainability and Responsible Management: Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Impacts of Proposal 78: Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
Russell Cabana



Girdwood, Alaska

**Proposal 73 and 74:** [Support](#). Permit stacking is pragmatic and a forward-thinking approach. It promotes fewer vessels and it turn balances economic efficiency, sustainability, and community interests.

**Proposal 75:** [Oppose](#). The current allocation plan has worked and should remain the same. I see no reason to amend it.

**Proposal 76:** [Oppose](#). The current allocation plan has worked well to balance Port Chalmers between both user groups and should remain the same.

**Proposal 77:** [Oppose](#). PWSAC and Valdez are two different districts and should not be included into PWSAC.

**Proposal 78:** [Oppose](#). The commercial fishing industry already operates on slim profit margins. Reducing the egg take by 25% would lower fish returns, increase competition among fishermen, driving up costs per unit of harvested fish (e.g., fuel, equipment, and labor costs) while reducing overall income. Smaller harvests could push many fishermen, especially the younger generation just getting started, to the brink of financial insolvency. Studies on hatchery-released pink salmon in PWS have not definitively proven significant adverse effects on wild stocks or ecosystems. Reducing egg take by 25% would likely have little ecological benefit but severe economic repercussions.

**Proposal 79:** [Support](#). Completing cost recovery in Main Bay has always been more difficult when sport boats are present. If Main Bay was closed for cost recovery it would allow it to be done more efficiently and take less time overall therefor allowing uninterrupted access for sport fisherman once complete.

**Tayla Cabana**

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am writing to express my opposition to Proposal 78. I have participated in Alaska's salmon fisheries for 50 years, fishing many different fisheries in Prince William Sound and other parts of Alaska. Alaska's salmon hatcheries have greatly benefited me, as my extended family relies on the stability, proper management, and health of these fisheries.

All proposals should be able to demonstrate how they will not harm our fisheries or economy. Proposals 75 through 78 do not meet this standard. These are old proposals from the same groups that seek to change well-established, well-thought-out, and highly successful policies. Please do not allow these proposals to destroy our fisheries.

**Please review the following reason why the Board should oppose and reject Proposal 78:**

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Sincerely,

Tim Cabana

  
Girdwood & Whittier, Alaska

**PC106**

**Submitted by:** Larry Cabana , PWS permit holder

**Community of Residence:** HOMER

**Comment:**

73 74 75 76 77 78 79 80 81 82 83 56 57 marked as below

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**PC107**

**Submitted by:** Stephen Camp

**Community of Residence:** Homer

**Comment:**

Bottom trawling must be stopped. Salmon, crab and marine species are disappearing and local residents are not able to fish for subsistence. Once the resources are gone they are gone. This practice has ruined many other parts of the world and the management team has not paid any attention to their data or ours. We need to replace board members with people that are not subsidized by the processors.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a subsistence fisherman, commercial fisherman, and sport fisherman. Hatcheries are an important component of Alaska's salmon fisheries. They help provide subsistence, commercial and sport fishing opportunities. Without hatcheries Alaska's salmon fisheries would be less robust than they are today, providing fewer opportunities to feed the world. Proposal 78 would negatively impact Prince William Sound. This would negatively impact both economic wellbeing and food security in the region.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska



Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Casey Campbell



Sitka, Alaska

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman.

I am a 40 year permit holder. I have fished salmon since I was a child. I was raised in Cordova.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Norman Campbell

[REDACTED]

Cordova, Alaska

**Proposal 1 - Establish pot gear as legal gear for sablefish in PWS subsistence, sport, and personal use fisheries.:** OPPOSE this proposal with CDFU

**Proposal 2 - Reopen waters closed to the harvest of groundfish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 3 - Modify Prince William Sound groundfish pot specifications.:** SUPPORT this proposal with CDFU

**Proposal 5 - Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.:** OPPOSE this proposal with CDFU

**Proposal 7 - Establish gear specifications for directed lingcod fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 8 - Modify the Prince William Sound pacific cod fishery guideline harvest level.:** SUPPORT this proposal with CDFU

**Proposal 9 - Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 10 - Modify pot limit in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 13 - Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 19 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 20 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 22 - Allow the concurrent use of longline gear and sablefish pot gear in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 23 - Prohibit the retention of sablefish from state waters.:** SUPPORT this proposal with CDFU

**Proposal 25 - Establish a personal use sablefish fishery in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 26 - Establish a Prince William Sound groundfish personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 27 - Modify rockfish bag and possession limits.:** SUPPORT this proposal with CDFU

**Proposal 28 - Modify the rockfish area, bag and possession limit.:** OPPOSE this proposal with CDFU

**Proposal 29 - Create additional provisions for yelloweye rockfish management.:** SUPPORT this proposal with CDFU

**Proposal 31 - Repeal closed waters for the Prince William Sound subsistence and commercial Tanner crab fisheries.:** SUPPORT this proposal with CDFU

**Proposal 32 - Reopen the subsistence and commercial Dungeness crab fisheries in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 33 - Adopt community-based subsistence harvest permits and reporting requirements for shellfish in the Prince William Sound Area.:** OPPOSE this proposal with CDFU

**Proposal 34 - Repeal the Registration Area E Tanner crab harvest strategy.:** SUPPORT this proposal with CDFU

**Proposal 35 - Modify the harvest strategy for Prince William Sound Tanner crab.:** SUPPORT this proposal with CDFU

**Proposal 37 - Establish a pot limit of 30 pots per vessel in the Prince William Sound Tanner crab fishery.:** SUPPORT this proposal with CDFU

**Proposal 38 - Allow vessels participating in the Prince William Sound Tanner crab fishery to also tender Tanner crab.:** SUPPORT this proposal with CDFU

**Proposal 39 - Establish season dates for a commercial golden king crab fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 40 - Adopt a harvest strategy for golden king crab in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 42 - Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 43 - Establish a directed octopus fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 46 - Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.:** SUPPORT this proposal with CDFU

**Proposal 47 - Require inseason reporting in subsistence and personal use fisheries.:** SUPPORT this proposal with CDFU

**Proposal 48 - Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 49 - Prohibit transport services in the Glennallen Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 51 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 52 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 53 - Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.:** OPPOSE this proposal with CDFU

**Proposal 55 - Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.:** SUPPORT this proposal with CDFU

**Proposal 58 - Amend the Copper River King Salmon Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 59 - Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 60 - Modify the annual limit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 61 - Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 62 - Allow inseason adjustment of the Copper River personal use maximum harvest level.:** SUPPORT this proposal with CDFU

**Proposal 63 - Amend the opening date of the Chitina Subdistrict personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 64 - Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.:** SUPPORT this proposal with CDFU

**Proposal 65 - Require a weekly permit and inseason reporting in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 66 - Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.:** SUPPORT this proposal with CDFU

**Proposal 67 - Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 68 - Prohibit dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 69 - Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 70 - Extend the lower boundary of the Chitina Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 71 - Prohibit guiding in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 72 - Close sport fishing for salmon based on water temperature in the Gulkana River.:** SUPPORT this proposal with CDFU

**Proposal 78 - Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.:** OPPOSE this proposal with CDFU

**Proposal 80 - Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.:** SUPPORT this proposal with CDFU

**Proposal 81 - Modify the area open to sport fishing near the Main Bay Hatchery.:** SUPPORT this proposal with CDFU

**Proposal 83 - Allow a resident sport angler to use two rods when fishing for salmon.:** OPPOSE this proposal with CDFU

**Proposal 84 - Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.:** SUPPORT this proposal with CDFU

**Proposal 85 - Modify the bag and possession limit for coho salmon.:** OPPOSE this proposal with CDFU

**Proposal 86 - Modify the sport fishing area and season dates in Ibeck Creek.:** SUPPORT this proposal with CDFU

**Proposal 87 - Modify the sport fishing area and season in a Copper River Delta system.:** SUPPORT this proposal with CDFU

**Proposal 88 - Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 96 - Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.:** SUPPORT this proposal with CDFU

**Proposal 97 - Reduce the minimum herring spawning biomass threshold.:** SUPPORT this proposal with CDFU

**Proposal 98 - Align Prince William Sound herring and salmon management area descriptions.:** SUPPORT this proposal with CDFU

**Proposal 99 - Define commercial herring fishery districts in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 100 - Adopt a Kayak Island District herring management plan.:** SUPPORT this proposal with CDFU

**Proposal 102 - Allow commercial fishery permit holders to harvest herring for the own use as bait.:** SUPPORT this proposal with CDFU

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman.

I've been Drift Gillnetting Area E since 1969.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Kenneth Carlson

A solid black rectangular box used to redact the signature of Kenneth Carlson.

Anchorage



**Proposal 1 - Establish pot gear as legal gear for sablefish in PWS subsistence, sport, and personal use fisheries.:** OPPOSE this proposal with CDFU

**Proposal 2 - Reopen waters closed to the harvest of groundfish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 3 - Modify Prince William Sound groundfish pot specifications.:** SUPPORT this proposal with CDFU

**Proposal 5 - Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.:** OPPOSE this proposal with CDFU

**Proposal 6 - Allow for release of rockfish in mechanical jig and hand troll fisheries.:** SUPPORT this proposal with CDFU

**Proposal 7 - Establish gear specifications for directed lingcod fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 8 - Modify the Prince William Sound pacific cod fishery guideline harvest level.:** SUPPORT this proposal with CDFU

**Proposal 9 - Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.:** SUPPORT this proposal with CDFU

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**Proposal 78 - Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.:** OPPOSE this proposal with CDFU

**Proposal 79 - Close Main Bay to all fishing during hatchery cost recovery operations.:** SUPPORT this proposal with CDFU

**Proposal 80 - Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.:** SUPPORT this proposal with CDFU

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**Proposal 102 - Allow commercial fishery permit holders to harvest herring for the own use as bait.:** SUPPORT this proposal with CDFU

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am writing to express my opposition to Proposal 78. I participate in Alaska's salmon fisheries through commercial fishing, and seining is all I have ever done. It's the way I grew up, just like my father and grandfather before me. It's all I've ever known, and I don't know what I would do if I couldn't support my family through this work. This is what I've dedicated my entire life to, putting everything I have into it. It's already extremely competitive for the fish each year, and reducing hatchery production would be a huge hit to my family business.

Sincerely,  
Tor Carlson



Cordova/Valdez, Alaska

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I participate in Alaska's salmon fisheries through commercial fishing, and seining is all I have ever done. It's the way I grew up, just like my father and grandfather before me. It's all I've ever known, and I don't know what I would do if I couldn't support my family through this work. This is what I've dedicated my entire life to, putting everything I have into it. It's already extremely competitive for the fish each year, and reducing hatchery production would be a huge hit to my family business.

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**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices,

ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Impacts of Proposal 78: Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Tor Carlson

A black rectangular box redacting the signature of Tor Carlson.

Cordova & Valdez, Alaska



**Submitted by:** Danny Carpenter

**Community of Residence:** Cordova, Alaska

**Comment:**

See Attached [Boards Support note: commenter did not include an attachment]

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am the owner and operator of an Area E commercial drift gillnet operation. Alaska's salmon hatcheries have a direct impact on my economic well being. As a commercial fisherman the amount of money we make directly correlates to our harvest of product. The ocean and the hatcheries help with the sowing, and myself, I primarily do the reaping. The hatcheries help supplement the wild stock runs that we also harvest and help to spread the fleet out and create a greater amount of economic opportunity for fishermen and their communities.

If the egg take decreases by 25% we are going to see fewer returning fish in western Prince William Sound for harvest by all user groups. It is going to mean fewer fish in my freezer and less loot in the bank account. There will be more seasons where the hatcheries only exist to pay for themselves and not for their original intention which was to create economic opportunity in the Sound.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be

under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Eric Carpenter



King Cove, Alaska

Marc Carrel  
F/V Silver Moon  
[REDACTED]  
Cordova, AK [REDACTED]

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 20, 2024

Re: Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

As a member of the board of Cordova District Fishermen United (CDFU) and as their groundfish division co-chair, I have participated in writing the comments of CDFU. I support CDFU's positions and rationales and will not repeat those in this letter. The intent of this letter is to make my personal comments on allocative board proposals that CDFU cannot weigh in on. These comments are my personal opinion as a Cordova based commercial fisherman only.

**Proposals 56 and 57: Oppose**

I oppose proposals 56 and 57 because adding 50 fathoms of gillnet gear in the Prince William Sound fishery would create too much of an advantage for dual permit holders, thereby forcing fishermen to purchase a second permit in order to remain competitive. This would increase operating costs for fishermen already in the fishery and make it harder for new fishermen to gain entry.

While permit stacking has been popular in Bristol Bay, the Prince William Sound fishery is different. The Bristol Bay fishery is mostly offshore and often so high paced that the extra 50 fathoms don't always provide an advantage when turning over the net quickly is the priority.

On the Copper River and in Prince William Sound, on the other hand, an extra 50 fathoms of gear would be a major advantage. Much of the Copper River fishery is slow paced and 30% more net could easily equate to 30% more fish during long fishing periods. After the inside of the Copper River district is open, or during Coho season, an extra 50 fathoms of gear would allow fishermen to close off entire sand channels that were too wide for that before. In Prince William Sound, where fishermen often fish off the beach or off rock points, the extra 50 fathoms of gear

could very effectively cut off any fishermen with standard sized nets from catching fish. Set net sites in particular could be cut off in ways that they never were before. For those reasons, the extra 50 fathoms would create a much bigger income division between single permit holders and dual permit holders than intended and thereby also significantly increase barriers to entry into the fishery.

Both proposals 56 and 57 were written to allow one person to own and operate two permits. I fundamentally do not agree with this concept. Wealthier fishermen will purchase a second permit while young new entrants to the fishery will be disadvantaged behind the longer nets. With no provision to require the second permit to be in the name of a second person, permit stacking will only eliminate jobs and make it harder for people to buy into the fishery. At this point, the Prince William Sound drift gillnet fishery is the only entry level fishery available for residents of Cordova and therefore needs to remain accessible.

### **Proposal 73 and 74: Oppose**

I am opposed to one person being able to own and operate two state permits for the same fishery. The original intent of limited entry was both to limit the number of fishermen and vessels participating in fisheries, *as well as* to prevent the consolidation of fisheries in the hands of a few. Limiting one permit of a fishery to one owner keeps more jobs in the fleet.

### **Proposal 75: Support**

The original intent of the enhanced salmon allocation plan was to create parity in the revenues of the gillnet and seine fleets. However, since the allocation plan has been in effect, the gillnet fleet has continuously been disadvantaged. From 2006 through 2022, the drift gillnet fleet has been behind the seine fleet in revenue by \$65.4 Million. Changing the trigger points from 45% to 50% and making the Port Chalmers subdistrict the only equalizer would help create parity between the fleets.

Furthermore, replacing the 5 year average with a running average since the beginning of the allocation plan is a better approach because it can include disaster relief payments that arrive many years late.

### **Proposal 76: Support**

This proposal is nearly identical to proposal 75 but keeps the 5 year rolling average in place. I support this for the same reasons as listed above, but do believe that replacing the 5 year rolling average with a long term average is the better approach.

In both proposal 75 and 76, I support removing the Esther subdistrict as an equalizer. Loosing the Esther subdistrict would leave the gillnet fleet with access to one major hatchery run only, while the seine fleet would have access to four different hatchery runs in addition to the remote release site at Port Chalmers. This is unfair and against the original intent of the allocation plan. The Port Chalmers subdistrict should be the only equalizer.

**Proposal 77: Support**

The gillnet fleet is far behind the seine fleet in overall income, and including VFDA in the allocation plan would help get us back to revenue equality between the fleets as originally intended in the allocation plan.

Thank you for your time in considering the proposals before you.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Carrel", is enclosed within a thin black rectangular border.

Marc Carrel  
F/V Silver Moon

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial purse seiner in Prince William Sound. Seining has been my primary source of income most of my life and was the same for my dad and grandfather. This proposal would have a negative impact. Fishing is already a very expensive and high risk industry where typically all the financial responsibilities are put on one person. A lot of people have payments to make and this would make it even more difficult, especially for younger fishermen such as myself.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific

practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Joel Carroll

A solid black rectangular box used to redact the signature of Joel Carroll.

Homer, Alaska



**Submitted by:** Stephanie Carroll

**Community of Residence:** Homer

**Comment:**

I am opposed to proposal 78. Once again hatcheries are under attack and so once again I am writing to ask you to please support our hatcheries and reject this proposal. The claim that hatcheries are a threat to wild fish is just not based on good science. In fact PWS has had record wild fish years multiple times since the introduction of hatcheries. The decline in king salmon is much more likely to be caused by intercept and by-catch. It is very difficult to determine the actual cause. What is not difficult to see is the economic impact that a reduction would have to our fishermen and our fishing communities. Salmon hatcheries provide jobs in the commercial sector as well as the recreational opportunities it supports. Indirectly it also provides a boost to the communities where the fishermen work and live, buy their groceries and do their repairs. In our current economic climate it seems irresponsible to make such a big cut to our livelihood based on little to no evidence. Thank you

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My name is Weston Carroll. I grew up in a fishing family and fished with my father in PWS in the late 80's and early 90's. I started running my own boat in 1997 and last summer was the first summer my son started running his own boat in PWS as well.

Proposal 78 – I oppose this proposal. There is no conclusive scientific evidence to justify this proposal

Proposals 75, 76, 77 - I oppose these proposals. They are a one-sided attempt to shift more of the allocation to the drift gillnet fleet and take away from the seine fleet.

Proposal 78 – This proposal is yet another attempt to reduce hatchery production. Hatcheries play a vital role in our Alaskan salmon industry. The hatchery production is a significant part of our commercial catch most years. The hatchery production also has significant economic impacts for the fishing communities around the state. The hatchery production also provides for sport fishing opportunity, an example of this would be the youth pink salmon derby that takes place every summer in Valdez. This proposal argues that hatchery production has had negative effects on King Salmon stocks in the Yukon River. The science backing these claims is weak and inconclusive and the science lists other factors that could potentially have far more significant impact on King Salmon stocks than hatchery production from PWS area. Please oppose this proposal. Don't sacrifice our livelihood when there is so little evidence supporting any direct correlation to the decline in King Salmon.

Proposals 75, 76, 77 - These 3 proposals are a one-sided attempt to reduce fishing opportunity for the seine fleet and give more fishing opportunity to the drift gillnet fleet. The allocation plan has been in place for many years and I feel that unbiased and more thorough research would need to be completed and presented before making any changes to the current allocation plan. Here is one example of why I feel proposal 77 is one sided in their argument. They are arguing that the VFDA hatchery should be included in the PWS allocation plan. They reference AAC 33.364 as an argument that in the Southeast region all hatcheries are included and reference the statement that "stated goals are to provide fair and reasonable allocation of the harvest of enhanced salmon". So, I looked up AAC 33.364 and it also states that the goal of fair allocation is 44-49% for Seine and 24-29% for drift gillnet. It is one-sided to use the parts of AAC 33.364 to benefit their argument but leave out the fact that in Southeast the target goal is for seine fleet to get nearly 2 times the allocation of drift gillnet.

Thank you for reading my comments

Weston Carroll

F/V Amber Dawn

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

Re: **Oppose** Proposals 14, 15, 16, and 17 – PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

My name is Carmel Carty McCarthy, I live in Kodiak and am a mom to 7 kids ranging in age from 15 to 34. I inherited a commercial fishing business, which my husband Peter and I started in 2003. Unfortunately due to brain cancer in 2016, he was forced to step out and I stepped in. Having found myself a widow and single parent of young kids, skippering our vessel wasn't an option. I lacked the skill, knowledge and confidence to walk into a wheelhouse and do what needed to be done. I've been blessed to have an exceptional fisherman step up to not only skipper my Trawler, but to be an advisor, confidant and in so many ways a partner in my business.

Peter, my late husband, fished and tendered Alaska waters from Prince William Sound to Kodiak, Akutan to Port Moller, from his arrival to Kodiak in 1989 until his death in 2016. In 2008 we bought the F/V Stella, a 58 foot vessel and converted her to a trawler. In 2013 we sponsored her from 24ft to 32ft wide, making her one of the first of her kind in Alaska and one of the infamous Super 8's. With the size of the F/V Stella, since 2013 we have been able to participate in various trawl fisheries that in years prior we were unable to do, one of these being the PWS pollock fishery.

PWS Pollock Fishery is an extremely important component to my business. For my crew, all Kodiak family fishermen and women, it is usually the first paycheck we receive in sometimes more than 3 months. Obviously, weather is a contentious factor in all Alaskan fishing operations, and for its part we were unable to get to the Sound this year, and have consequently spent all year trying to recoup the loss, to no avail. The income generated from the Pollock sound fishery along with 620 and 630 has in the past allowed us to pay our crew and schedule maintenance and capital improvement projects. This year, with the seafood industry in crisis, exorbitant fuel prices and unrealistic ex-vessel prices, virtually every small vessel business is suffering, including mine.

In our experience the Pollock fishery in PWS is a fairly intensive management structure. It requires constant contact between my skipper and the managers even before leaving the dock in Kodiak. My skipper is required to check in prior to commencing fishing and check out before leaving any management section, along with disclosing all daily catches. We are required to retain all pollock, rockfish and any salmon we might catch and deliver back to town. We do not discard. Additionally we don't drag our nets on the bottom. With what it costs me to buy new trawl nets and make repairs to old ones, dragging my gear on the bottom is completely asinine. I

commend the managers on their attention to detail and keeping all of us accountable, thereby giving us an opportunity to fish.

I completely oppose proposals 14,15,16 and 17 PWS pollock fishery. I thank you sincerely for the opportunity to comment and appreciate all the work you do for all us fishermen and women.

Carmel Carty McCarthy

#### Proposal #18

I fully support this proposal as it would add 30 additional days to the PWS Sablefish season giving additional opportunity to those who would like to fish into the late summer. I can not think of any negative consequences if this proposal were to be adopted.

#### Proposal #19

I am strongly opposed to the adoption of this proposal. In it the author states the following: "This change will not take anything away from permit holders". I completely disagree and will explain why in the following paragraphs.

I have held a PWS Sablefish permit going back to the years when the fishery was still being prosecuted as a "derby", hence I have a long history of harvesting Sablefish in PWS. Ever since the fishery was changed to an IFQ managed one there was always a portion of the annual quota that remained unharvested for a variety of reasons, including the original abbreviated harvest seasons, medical issues preventing permit holders from fishing, whale depredation, and times of low abundance. In the most recent years, with the dramatic collapse of ex vessel prices, many permit holders have just simply chosen not to fish, as it was economically unviable to do so and even more fish remained unharvested.

In my opinion, leaving unharvested quota in the water isn't such a horrible thing. There's certainly no obvious downside such as in over escaping a salmon stream. In fact it is a good thing as one would have to assume at least a portion of these fish are of a discrete resident population. Being left in the water would not only add to overall abundance in following years but these fish would gain size and weight and only become more valuable in the future.

The authors of this proposal likely are using slinky pots to harvest their quota which is certainly a good thing, incurring zero loss from whale depredation. The bad thing is they are no doubt "high grading", choosing to release small fish which are worth just pennies per pound back into the water. You can't blame them, perfectly legal, one would be foolish not to.

So therein lies why I oppose the adoption of this proposal, which would surely result in fewer and smaller fish available for harvest in future years for all of the permit holders.

So the quote "This change will not take anything from permit holders" goes entirely out the window".

Finally, the authors of proposal 19 were certainly well aware when they purchased their limited entry permits that they were buying into an IFQ fishery which gave them the privilege to harvest a number of pounds of PWS Sablefish annually based upon TAC for that particular year. No more, no less. It's been working just fine for years. As the saying goes, don't fix it if it ain't broke.

(To be clear there have been no studies ever conducted that I am aware of regarding the interaction and or migration of PWS and GOA Sablefish stocks)

#### Proposal #26

I am opposed to the adoption of this proposal as written, however I do support the intent of allowing sport fishermen the use of pots to harvest Sablefish. The unlimited catch allowance is unacceptable. I would think the yearly catch should mirror something similar to the PU salmon fishery in the Upper Copper River. 30 per household. Also the year long season proposed is unacceptable as well. Something like April 1 thru September 30 would surely be more appropriate. Considering the weather in PWS, a longer season makes little sense for small sport boats anyway.

#### Proposal #45

I am strongly opposed to this proposal being adopted as it would have an enormous impact on Chinook escapement to the Upper Copper River. The adoption by the BOF a few cycles ago of the proposal to create Saturday subsistence fishing on the Copper River Flats basically makes

proposal #45 completely unworkable. The original intent of the creation of Saturday subsistence fishing was to give local residents using skiffs a chance to harvest subsistence salmon on their days off, as well while at the same time not having to compete with commercial fishermen. So yes maybe a few more local residents now have better access to subsistence fishing thanks to Saturday fishing. However the overwhelming preponderance of vessels participating in the Saturday subsistence openers are large commercial jet bowpickers worth hundreds of thousands of dollars with multiple subsistence permit holders aboard whom almost entirely hold PWS and Copper River drift gillnet permits. By allowing these boats access to these inside closed waters(created to protect King Salmon) would result in nothing short of an unmitigated disaster. Furthermore this would also, by regulation, open these same waters on Mondays and Thursdays when commercial fishing is closed for conservation concerns.

Finally I feel very strongly that the Native Village of Eyak's subsistence captain SHOULD be allowed access to the inside waters as specified in this proposal while taking tribal members out to the flats to harvest their subsistence salmon.

#### Proposal #78

I am strongly opposed to the adoption of this proposal for a number of reasons. Obviously if adopted, PWSAC, VFDA, the cities of Cordova and Valdez, processors and last but not least the commercial fishing fleet that hold limited entry permits for PWS, would all suffer enormous financial consequences. There exists no scientific evidence that hatchery raised pink and chum salmon are somehow responsible for diminishing king salmon populations, it is strictly just speculation. Furthermore, there does exist actual real evidence of bottom trawlers taking thousands of king salmon yearly as a bycatch while targeting pollock. Yes, there is in regulation an annual 20,000 king salmon bycatch limit, which is only enforceable by what onboard observers are reporting. And whose to say how accurate those observers' reports really are? An observer sleeps in during a nighttime haul back. An observer becomes "chummy" with the captain and or crew and occasionally "looks the other way" So in reality no one can really say or know precisely just how many king salmon are being tossed back unreported. I suspect there are plenty. Just recently one trawler near Kodiak caught 2,000 kings in a single tow. That reported event indicates just how deadly that fishery can be at times to untargeted species such as king salmon. So in my opinion, the trawl industry, already recognized as a culprit in the diminishing stocks of the king salmon mystery, is having an even greater impact then they are being blamed for.

Needless to say there are also many other factors to be considered when trying to get to the bottom of just why the king salmon population is declining. Obviously warming ocean temperatures, as a result of "climate change" is likely a significant part of the problem. One has to look no further than the extremely warm water "blob" that set up in the gulf of Alaska in 2018 which led to a significant destruction of plankton, resulting in a crash of sockeye salmon returning to the Copper River.

Other factors include over harvesting in some areas of the state, under reporting in some of the PU and subsistence harvests as well very lax enforcement, in particular at fish wheels under federal permits in the Upper Copper River.

And finally, if one really believes that hatchery production of pink and chum salmon in Alaska is somehow responsible for the decline of king salmon, keep in mind Russia releases billions and billions more fry yearly than all of Alaskan hatcheries combined. So reducing the PWSAC and VFDA annual fry release by 25% is a mere "drop in the bucket" to solving this perceived problem while at the same time having a devastating financial effect on communities, fishermen, processors and the hatcheries themselves.

#### Proposals 51thru 53

I am strongly opposed to these proposals. If any of these 3 were to be adopted it would result in an incredible loss of fishing opportunity for the commercial drift net fleet and consequently a

devastating impact on their yearly income. On many years, daily sonar counts have remained below numbers anticipated, especially so for days early in the season. Historically, this is a notoriously difficult time for area management biologists' decision making. They must consider harvest numbers which may be robust, yet have absolutely no clue as to how many salmon have already entered the river, especially considering the approximate 7 to 10 days travel time to reach the Miles Lake sonar.

I have fished commercially on the Copper River for 36 seasons and can honestly say throughout all of those years area management biologists have always taken a cautious approach and have consistently erred on the side of conservation when managing the Copper River Salmon return. The upriver escapement goal has been met or often exceeded on almost all of those years. The commercial fleet has likely forgone the opportunity to harvest hundreds of thousands of fish over those years under this continuing conservative management.

Given that the peak of the early portion of the run is late May/early June, what the makers of these proposals are asking for would be nothing short of devastating for fleet, as we would likely be leaving tens of thousands of fish to enter into the river daily which would otherwise have been harvested, costing us collectively millions of dollars. Furthermore closing the fishery after just 2 openers leaves the area manager, the upriver biologist as well as the fisherman without having any idea of the strength of the run. In the meantime the sonar counter may not be meeting it's anticipated cumulative expectations for a certain date and yet there could a very substantial amount of salmon that have entered the river. This exact scenario has played out at times over the years after just a couple commercial fishing closures when after a sluggish start the sonar counts begin to skyrocket for several days quickly surpassing anticipated numbers. To have fishing closed for longer durations which would likely happen if any of these proposals were to be adopted, could very likely lead to huge over escapements and a significant amount of lost fishing time and revenue.

I personally have not seen nor heard of data showing early run fish not returning to certain areas up until this BOF cycle. I find it very curious and somewhat suspicious how all of a sudden 3 proposals from 3 different groups just happen to all show up together this year. If in fact however this were the case and early run spawning areas weren't seeing adequate escapement, whose to say early PU and subsistence openings aren't part of the problem? Why haven't the makers of these proposals addressed restricting these groups?

And finally I cannot overstate just how conservatively the Copper River commercial drift fishery has been managed over my 36 years of history and hope BOF members can recognize that and take it into consideration when deliberating these proposals.

Richard Casciano

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

Re: **Oppose** Proposals 14, 15, 16, and 17 – PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

I am writing in opposition to proposals 14,15,16 and 17

I am a lifelong Alaskan and Kodiak resident who runs our families trawl vessel in the Gulf of Alaska, we have been fishing here for more than 40 years.

The Alaskan seafood industry is currently in a crisis and closing Prince William Sound to Pollock fishing would be one more hit to already struggling Alaskan businesses. It would also have adverse effects on the salmon populations of PWS, since Pollock are one of the main predators of juvenile salmon. I believe ADF&G also oppose these proposals, and are more than capable of managing this productive fishery.

Thank You  
Jason Chandler  
F/V Topaz



**Submitted by:** Stacie Chappell

**Community of Residence:** Native Village of Eyak (Cordova)

**Comment:**

oppose #51,52,53 and 78

Dear board of fish! I am expressing my concerns on these proposals. I am a tribal member of the Native Village of Eyak and commercial fisherman! My family as well as about 70% of our tribal member families depend on the Copper River and PWS for our livelihood! And there is a huge percentage of non tribal member Cordova residents that do as well! I live in Cordova Year round with my family and these proposals will have a negative impact on my family and our community.

Thank you for your time.

---

**Submitted by:** Roy Chenault

**Community of Residence:** Houston

**Comment:**

The guides are bringing more and more people fishing and blowing out the lake louise. Adfg has failed to manage every fishery in alaska so far. If you want to keep the loosing streak keep raising catch limits. When will you learn from your mistakes.

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**Submitted by:** Charles Totemoff , Chenega Corporation

**Community of Residence:** Anchorage

**Comment:**

Chenega Corporation opposes 79. Chenega Corporation supports 79, 80 and 81.

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**Submitted by:** Greg Cheremnov

**Community of Residence:** Cordova

**Comment:**

I strongly oppose proposals 51,52 and 53. All three proposals have the same premise of closing commercial fishing by regulation after a minimal amount of openers. This is unnecessary regulation because the openers are already determined by escapement and historic run return timing. The ADFG biologist uses these factors in making a determination to open commercial fishing by emergency order. Therefore this regulation would provide no benefit to the management or the copper river salmon stocks. Likely these proposals would have a negative impact. By causing over escapement leading to the decimation of future salmon stocks.

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Chickaloon Native Village (CNV) or Nay'dini'aa Na' Kayax is a federally-recognized sovereign Tribal Government in Alaska (Federal Register, Volume 47, Number 227, November 24, 1982, and reaffirmed in Federal Register, Volume 58, Number 202, October 21, 1993), with the full power and authority to consult and enter into agreements with local, state, and federal governments at their discretion. Chickaloon Village Traditional Council (CVTC) is the governing body of CNV as recognized by CNV Tribal citizens with the full power and authority to act for CNV. CVTC has a responsibility to provide a government for the good health and welfare of its Tribal citizens and address any needs in its community.

CNV's ancestral territory and customary area of use encompasses much of Southcentral Alaska and extends from the Wrangell St. Elias Mountains and Copper River Watershed to the Talkeetna and Chugach Mountains and Upper Cook Inlet. This territory includes countless watersheds, rivers, streams, lakes, and wetlands stewarded by CNV Tribal Citizens for thousands of years. CNV's traditional area of influence overlaps neighboring Dena'ina Dene and Ahtna Dene federally recognized Tribes. CNV has a responsibility to steward and protect the environment, cultural resources, and the health of Tribal Citizens and community members in perpetuity. Actions that occur within CNV's traditional ancestral territories and customary area of use, including Copper River Watershed, may impact our environment, the cultural resources including fish and wildlife, and the health, safety, and welfare of our Tribal citizens.

Ahtna Peoples, including CNV Tribal citizens, have long managed salmon using traditional practices deeply rooted in cultural and ecological knowledge, ensuring sustainable salmon runs and protecting this vital resource. As a cultural keystone species, salmon are integral to Ahtna ways of life, and their loss would cause profound and irreparable harm. Principles such as fish allocations and escapement goals are embedded in Ahtna cosmology, reflected in oral traditions and spiritual beliefs. By aligning seasonal harvesting with salmon migration patterns and using selective tools like dip nets, fish wheels, and weirs, Ahtna Peoples ensured adequate spawning and population renewal. Before colonization, we successfully maintained large, sustainable salmon runs through these time-tested methods. Embracing these traditional practices today offers a pathway to restoring balance and securing healthy salmon populations for future generations.

CVTC supports Board of Fish Proposals 51, 52, 53, and 63 to reduce commercial and personal use fishing opportunities in the Copper River District during the early run until a management goal is met. CVTC believes the proposed actions will provide immediate benefit to Copper River sockeye and Chinook salmon populations until a comprehensive genetic-based approach is available for consideration and implementable.

- Proposal 51: Reduce commercial salmon fishing opportunity in the Copper River District.
- Proposal 52: Reduce commercial salmon fishing opportunity in the Copper River District

- Proposal 53: Allow.the.Copper.River.District.commercial.salmon.fishery.to.open.for.the.first.two.periods?then.close.until.the.Copper.River.cumulative.salmon.management.objective.is.met
- Proposal 63: Amend.the.opening.date.of.the.Chitina.Subdistrict.personal.use.fishery

Further, CVTC supports proposal 17 to increase observation of the Prince William Sound Walleye Pollock Pelagic Trawl Fishery. CVTC is concerned with possible Chinook salmon bycatch in this fishery and believes increased standards for accountability should be applied.

- Proposal 17: Establish.observer.requirements.in.the.Prince.William.Sound.pelagic.trawl.fishery

CVTC also supports proposals 30, 33, and 45 by the Native Village of Eyak to increase subsistence access to traditional foods.

- Proposal 30: Increase.subsistence.Tanner.crab.pot.limit.in.portions.of.Prince.William.Sound
- Proposal 33: Adopt.community\_based.subsistence.harvest.permits.and.reporting.requirements.for.shellfish.in.the.Prince.William.Sound.area
- Proposal 45: Allow.subsistence.fishing.for.salmon.in.the.Copper.River.inside.closure.area

**Submitted by:** Rocky Chirrick

**Community of Residence:** oregon

**Comment:**

ive been participating this fishery since early 1990s every year on fishing vessel Pacific Ram its generally the boats first paycheck of the year for me and crew we have never had a bad bycatch issue very little actually you really cant put gear on bottom in there you would destroy your gear its not user friendly for any trawl gear weve had observed trips voluntarily commenting on proposals 14/15/16/17

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## **Chitina Dipnetters Association**

### **Public Comments Concerning Submitted Proposals To The December 2024 PWS/Upper Copper and Upper Susitna Finfish and Shellfish BOF Meeting**

#### **Prop. 58 – support**

Amend the Copper River king salmon management plan

The Copper River king salmon escapement goal is 21,000-31,000. Previously this escapement goal had no upper bound and no mechanism existed for the F&G commissioner to raise the king salmon bag limit for the Chitina Personal Use Dipnet Fishery (CPUDF). If in the future the Copper River king escapement is predicted to pass the 31,000 upper bound, this proposal could allow harvest of more than the one king permitted in the dipnetter bag limit. Something the Chitina Dipnetters Association (CDA) has been for years advocating.

#### **Prop. 59 – support**

Allow the commissioner to increase the CPUDF sockeye salmon bag limit if the Copper River sockeye salmon escapement goal will be exceeded.

#### **Prop. 60 – oppose**

Reduce the CPUDF household annual bag limit

The existing CPUDF annual bag limit is 25 salmon for the permit holder and 10 salmon for each additional household dependent. This annual bag limit was passed by the BOF during the 2014 PWS/Upper Copper finfish meeting for reasons it standardized the PU dipnet salmon bag limit between the Chitina PU fishery and the South Central Alaska PU dipnet fishery. It also made the bag limit more equitable for larger families. Since the CPUDF is managed by actual sonar counts the new bag limit was considered sustainable.

#### **Prop. 61 – oppose**

Reduce the CPUDF annual household bag limit and add supplemental periods.

See comments for proposal 60. Supplemental periods were done away with when the 2014 BOF passed the existing CPUDF bag limit.

Prop. 62 – oppose

Reduce the CPUDF maximum harvest level of 100,000 – 150,000 to 50,000 if the Copper River District commercial drift gillnet fishery is closed for 13 or more consecutive days.

This regulation was on the books until the BOF at their 2017 meeting repealed it at the request of a Chitina Dipnetters Assn. (CDA) proposal. The PU dipnet fishery opening and closing are based solely off of the sonar count passage numbers. When commercial fishermen are restricted because of low run numbers, those low numbers will show as low sonar counts, triggering closures in the dipnet fishery. To require that the PU dipnet fishery salmon allocation drop from 150,000 to 50,000 just because the commercial fleet has been restricted for 13 consecutive days, is asking the CPUDF fishery to bear two restrictions, first less fishing time due to low salmon sonar counts and second severe allocation reduction. This is unjustifiable. This allocation reduction would be for the remaining dip net season even though run numbers may rebound soon after.

The Copper River District drift gill net fishery is a mixed stock fishery. In recent years fishing times have been severely restricted in this fishery due to a poor king salmon run and the low survival rate of king salmon released from drift gill nets. This restriction due to low king number could trigger a 13 consecutive day closure and cause the reduction of the CPUDF salmon allocation to 50,000 salmon. Penalizing the CPUDF, where king salmon can be safely released from dipnets, would mean dipnetters would lose the opportunity to harvest sockeye salmon.

Prop. 63 – oppose

Change the opening date of the Chitina Personal Use Dipnet Fishery from June 7-15 to June 21.

The crux of this proposal is protection of the early upper Copper River salmon stock. The CPUDF management is abundance based using actual salmon sonar count numbers and passage of the upper Copper River stock is already taken into account when designating fishing time for the CPUDF. In the early 2000's the opening date for the CPUDF was changed from June 1 to June 7-15. This delay was to give the early upper Copper king salmon stock an extra 1-2 weeks to pass through that fishery unhindered. CPUDF users are allowed only 1 king salmon in their annual bag limit. According to F&G 2005-2009 radio telemetry data, by June 15, 60% of the upper Copper salmon stock has already passed through the CPUDF (**see attachment A**). During the week of June 7-15 there are 6 individual Copper River salmon stocks moving through the CPUDF, one of which is the upper Copper stock (**see attachment A**). From 2015-2023 the CPUDF averaged a 14% harvest of the total salmon sonar count attributed for that dipnetting fishing week (**see attachment B**). This 14% is spread over 6 different Copper salmon stocks. The number of upper Copper salmon saved by delaying the CPUDF opening date to June 21 would be insignificant.

In the last ten years, the number of Glennallen Subdistrict issued dipnet subsistence permits has greatly increased. As more restrictions are placed on the CPUDF, many of

these users have moved to the upriver subsistence fishery where fishing time is continuous, bag limits are much more liberal and they have priority over other users. Placing more restrictions on the CPUDF will only speed this movement.

**Prop.64 - oppose**

Prohibit a household from possessing permits for multiple personal use salmon fisheries.

The CPUDF and South Central Alaska P.U. dipnet fishery have identical annual bag limits. Each P.U. salmon dipnet fishery represents an individual river drainage and salmon stock. The author of this proposal infers that many P.U. dipnetters are obtaining multiple permits for these two fisheries in order to harvest a full family annual bag limit from each fishery. F&G data from the years 2015-2022 (**see attachment C**) shows that for dual permit holders for these two fisheries, if they fished both permits, had a combined harvest equal to one fishery annual bag limit for the size of their family. There is no justification for passing this proposal.

**Prop. 65 – oppose**

Require weekly harvest reporting in the CPUDF.

Similar proposals have been submitted in at least 4 of the last BOF PWS/Upper Copper Finfish meetings and were voted down in each. F&G staff comments, have consistently opposed these proposals on the premise that it would place undo burden on P.U. dipnetters and that weekly reporting is not needed and would not be used for management of the CPUDF. The fishery is managed by actual sonar count passage.

**Prop. 66 – oppose**

Manage the CPUDF to achieve the Gulkana Hatchery broodstock goal.

The CPUDF is a multi mixed salmon stock fishery. Reducing fishing time when supposedly Gulkana salmon are passing through the dipnet fishery will only reduce opportunity for Alaska state residents to harvest Copper River salmon to feed their families and due to the mix of salmon stocks, not guarantee more fish will make it to the hatchery.

**Prop. 67- oppose**

Prohibit removing king salmon from the water if it is to be released in the CPUDF. This proposal is not practical in many of the back eddies where shore based dipnetters are tied off short to prevent falling into the turbulent water of the Copper River in Woods Canyon. When releasing a king after already harvesting their 1 annual king or because king harvest is prohibited, most dipnetters will try release kings unharmed in the water. Due to precarious dipnetting sites or because the king has become entangled in the net mesh, this is not always possible. Public announcements could remind dipnetters to



release king salmon, not meaning to be retained, be done as gently as possible to ensure they make it to their spawning grounds.

Prop. 68 – **oppose**

Prohibit dipnetting from a boat in the CPUDF.

Productive shore based dipnetting spots within Woods Canyon can be in short supply especially during high water events. For this reason and because some dipnetters are physically not able to dipnet from the rocky outcrops in the canyon, they choose to use a boat. Dipnetting from a boat also gives the mobility to find a better fishing spot. Dipnetting from a boat is just another means for Alaska residents to harvest their set annual bag limit and once filled they are done for the year.

Prop. 69 – **oppose**

Place restrictions on dipnetting from a boat.

Chitina P.U. dipnetters have a set annual family bag limit and once filled they are done for the year. Boat dipnetting just affords users another means of filling their finite family bag limit and should not be burdened with unneeded restrictions.

Prop. 70 – **support**

Extend the lower boundary of the CPUDF

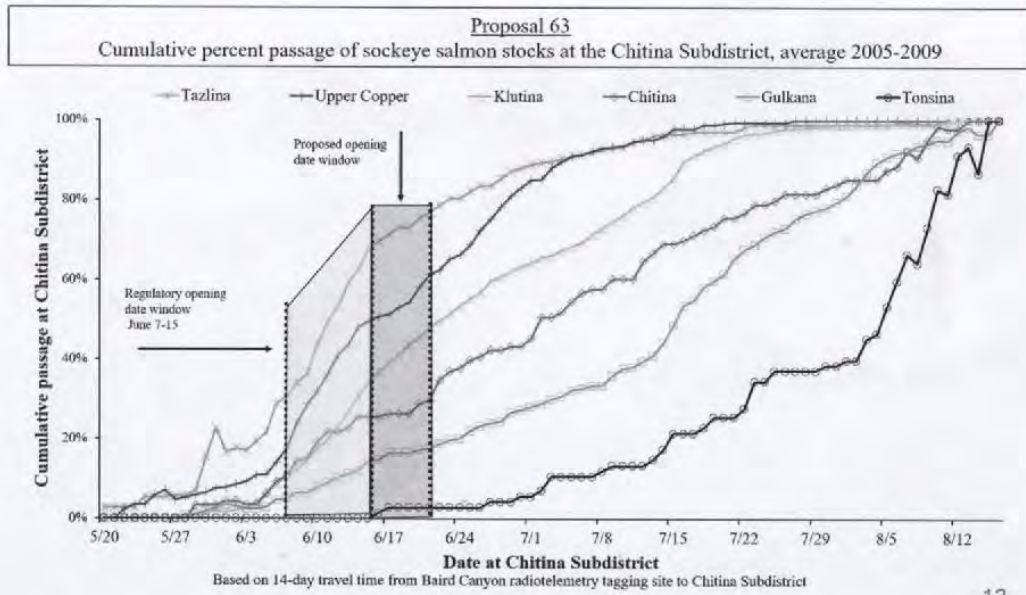
This is a CDA submitted proposal and the proposal language explains our stance. A map showing the existing and new boundary plus the existing short drift area is in **attachment D**.

Prop. 71 – **oppose**

Prohibit guiding in the CPUDF.

At the 2021 PWS/Upper Copper/Upper Susitna Finfish meeting, the BOF eliminated guiding in the Glennallen Subdistrict subsistence fishery. This decision was based on the 8 subsistence criteria and the clause of “pattern of noncommercial taking” was interpreted to relate to guiding within that fishery and therefore a vote to eliminate guides. This is a Personal Use fishery and the only qualifying criteria is the requirement that a P.U. user must be an Alaska resident and possess a valid state sport fishing licence. Many of these resident dipnetters choose to use a guide service to obtain their families salmon harvest and if guiding was eliminated in the CPUDF it would for various reasons (lack of their own equipment, disabilities or new to the fishery) disenfranchise many users.

ATTACH. A



# ATTACH. B

Harvest of sockeye and king salmon in the Chitina Subdistrict personal use salmon dip net fishery from June 7-15 each year, compared to total salmon passing through the fishery during that period and percent overall harvest, 2015 - 2023

Year	Fishing hours	Actual harvest		Allowable harvest	
		Sockeye	King	Total salmon count at sonar (May 24-June 1)	Percent of sonar
2015	192	38,279	301	318,761	12%
2016	216	16,324	247	123,139	13%
2017	216	12,749	28	170,998	7%
2018	48	2,624	106	43,364	6%
2019	216	27,856	411	149,088	19%
2020	132	13,416	251	69,794	20%
2021	96	13,981	174	60,299	23%
2022	96	9,328	176	54,278	18%
2023	24	4,597	99	37,690	12%
Average	137	15,462	199	114,157	14%

Note: assumes two-week passage time from sonar to Chitina Subdistrict

ATTACH. C

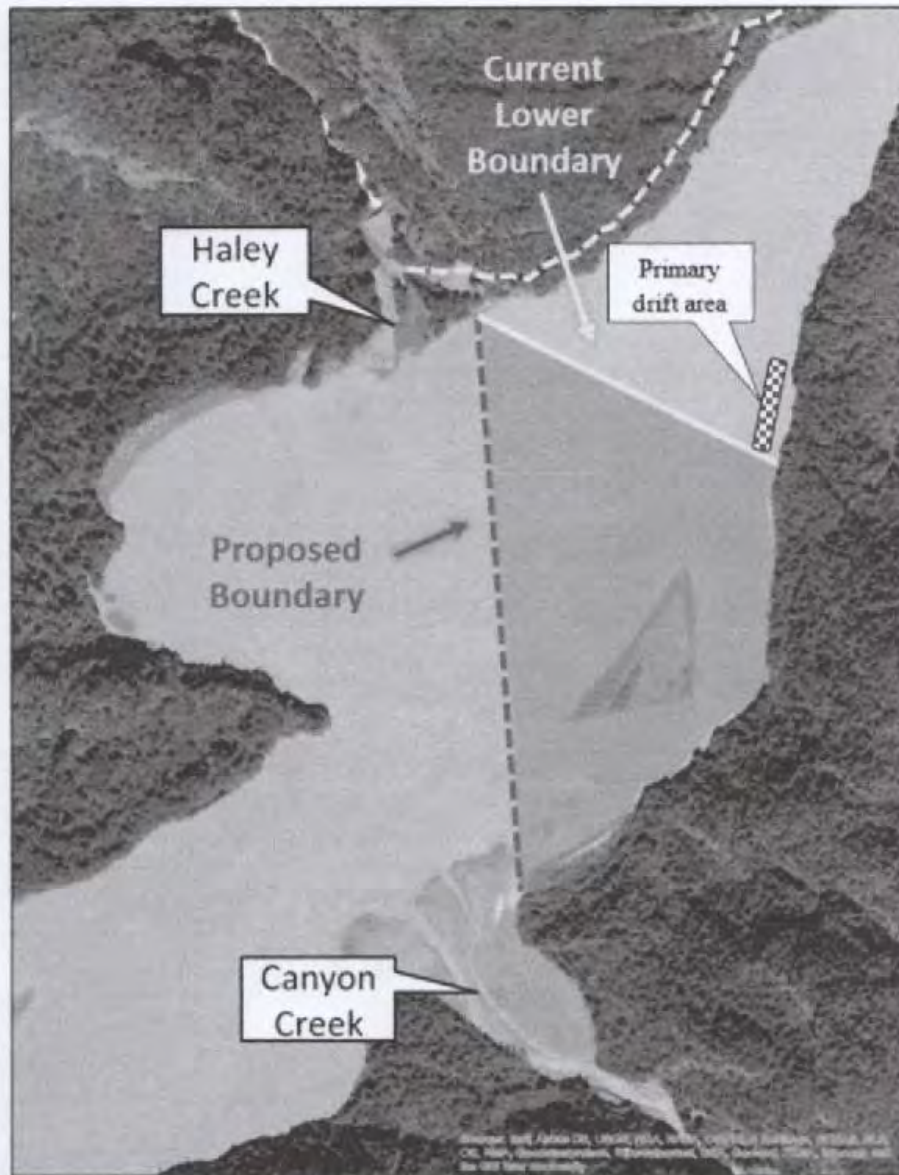
## DATA FROM F&amp;G FOR HOUSEHOLDS ACQUIRING BOTH A UCI (SOUTHCENTRAL) AND CHITINA P.U. DIPNET PERMIT

Disclaimer: Since these numbers haven't gone through any biometric review, they don't represent the true harvest estimates we would report on. They are based on the corrected raw data from user reports. So, take it with a grain of salt that the actual numbers may be slightly different than what we see here for usage and harvest.

Permit Year	Household Permits	Households	UCI Fished	UCI Did Not Fish	UCI Did Not Report	UCI Average Household Size	UCI Average Harvest For Households That Fished	Chitina Fished	Chitina Did Not Fish	Chitina Did Not Report	Chitina Average Household Size	Chitina Average Harvest For Households That Fished	AVERAGE FAMILY SIZE FOR DUAL	I FISHERY BAG LIMIT FOR FAMILY SIZE	ACTUAL DUAL HARVEST PER AVE. FAMILY SIZE
2022	UCI Only	26552	19235	3858	3461	3.02	22.15								
2022	Chitina Only	5441						4369	709	368	2.95	27.44	3.475	50	52
2022	UCI and Chitina	1745	1242	360	143	3.42	24.21	1271	359	115	3.53	27.59			
2021	UCI Only	24702	17288	3594	3820	3.04	22.72								
2021	Chitina Only	5536						4397	708	431	2.93	24.96	3.325	49	48
2021	UCI and Chitina	1865	1217	455	198	3.34	24.02	1273	452	140	3.41	24.01			
2020	UCI Only	26331	16104	3643	6584	3.01	19.93								
2020	Chitina Only	4780						3205	1042	533	2.97	16.15	3.42	49	38
2020	UCI and Chitina	2235	1389	470	376	3.43	21.07	1391	601	243	3.40	15.73			
2019	UCI Only	24542	15013	3115	6414	2.97	23.16								
2019	Chitina Only	6188						4317	770	1101	2.98	28.75	3.46	50	50
2019	UCI and Chitina	2051	1199	442	410	3.49	24.82	1275	419	357	3.44	25.46			
2018	UCI Only	22557	13958	3589	5010	3.04	17.83								
2018	Chitina Only	3812						2356	712	744	3.10	22.92	3.63	51	41
2018	UCI and Chitina	1250	727	322	201	3.65	19.62	732	313	205	3.61	21.04			
Total	UCI Only	124684	81598	17797	25289	3.02	21.48								
Total	Chitina Only	25757						18644	3941	3172	3.00	24.40			
Total	UCI and Chitina	9146	5774	2049	1323	3.49	24.01	5942	2144	1060	3.47	22.18			

ATTACH. C

ATTACH. D





## **Chitina Dipnetters Association**

### **Public Comments (Part B) Concerning Submitted Proposals To The December 2024 PWS/Upper Copper and Upper Susitna Finfish and Shellfish BOF Meeting**

Prop. 44 - **Oppose**

Prop. 45 - **Oppose**

Prop. 46 - **Oppose**

Prop. 47 - **Oppose**

Attempts to lump all upriver and downriver subsistence and personal use fisheries together. The upriver Chitina personal use dipnet fishery (CPUDF) is managed by actual sonar counts coupled to preseason estimates and historical average harvest effort for each weekly fishing period. F&G has repeatedly, in past BOF PWS/Copper meetings, said weekly reporting in the CPUDF is not needed and would not be used to manage this fishery and would place undo burden on the users.

Prop. 49 - **Oppose**

Prop. 50 - **Oppose**

Prop. 54 - **Oppose**

Commercial fishing inside barrier island closures during statistical weeks 20 and 21 were put in regulation by the BOF in early 2000's. The reason was to protect early upper Copper king salmon stocks as they mill in these shallow water areas awaiting their run upriver. These kings were highly vulnerable to gill nets in shallow water. With the recent poor Copper king runs and the outcry of upriver ANS, passing this proposal would only prolong this.

Prop. 55 - **Oppose**

In years of poor king numbers with associated strong sockeye run, the Cordova drift gill net fleet may be restricted due to high king mortality in gill nets. Upriver dipnetter guides, during king conservation measures, can release kings unharmed from dipnets and should not be restricted from harvesting sockeyes.

Prop. 56 - **Oppose**

Prop. 57 - **Oppose**

Prop. 48 - **Support**

Prop. 51 - **Support**

This is the best proposal to pass more upriver salmon stocks to meet ANS and spawning escapement.



November 20, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Re: Proposals 15, 16, & 17

Dear Members of the Alaska Board of Fisheries:

Chugach Alaska Corporation (Chugach) is the Alaska Native Regional Corporation for the Chugach Region established pursuant to the Alaska Native Claims Settlement Act of 1971, as amended, 43 U.S.C 1601 (ANCSA). Chugach owns or has valid selection rights to over 928,000 acres of full fee estate and subsurface estate in the areas around the coastal towns in the Prince William Sound and Chugach Region, including Cordova, Tatitlek, Port Graham, English Bay, Valdez, and Seward. Chugach is currently owned by more than 2,800 shareholders who are primarily of Alutiiq (Sugpiaq), Eyak (Athabascan), and Tlingit descent. Chugach exists to serve the interests of the Alaska Native people of the Chugach Region and to preserve the rich culture heritage of its lands.

For thousands of years subsistence fishing has been vital to our people. Today, shareholders and residents of this region continue to harvest resources from the sea. Sustainable management of the fisheries is critical to the long-term viability of this important resource. The PWS Pollock Pelagic Trawl Fishery bycatch harvests important fish species that are vital to our shareholders, descendants, and residents of this region. Rockfish, black cod, Chinook salmon, and halibut are harvested in this fishery, as allowed in bycatch limits managed by the state. This unintentional take negatively affects local residents that depend on these important resources.

The Chenega IRA Council has submitted three proposals to address the PWS Pollock Pelagic Trawl Fishery. Chugach supports Proposal 16 which would close this fishery. This would protect important fish species and habitat from the adverse impacts of the trawl fishery and dragging of pelagic trawl gear on the seabed. If Proposal 16 is not enacted, then we encourage the BOF to support Proposal 15 and 17. Proposal 15 would modify how bycatch limits are set (by pounds, not percent of pollock harvest) and Proposal 17 requires on-board electronic monitoring and observers on a portion of the fishing trips.

Thank you for considering this request.

Sincerely,

Sheri Buretta  
Chairman of the Board





November 20, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Re: Proposal 78

Dear Members of the Alaska Board of Fisheries:

Chugach Alaska Corporation (Chugach) is the Alaska Native Regional Corporation for the Chugach Region established pursuant to the Alaska Native Claims Settlement Act of 1971, as amended, 43 U.S.C 1601 (ANCSA). Chugach owns or has valid selection rights to over 928,000 acres of full fee estate and subsurface estate in the areas around the coastal towns in the Prince William Sound and Chugach Region, including Cordova, Tatitlek, Port Graham, English Bay, Valdez, and Seward. Chugach is currently owned by more than 2,800 shareholders who are primarily of Alutiiq (Sugpiaq), Eyak (Athabascan), and Tlingit descent. Chugach exists to serve the interests of the Alaska Native people of the Chugach Region and to preserve the rich culture heritage of its lands.

Chugach opposes Proposal 78 which would reduce hatchery production of pink and chum salmon by 25%. Healthy, vibrant, sustainably managed fisheries help support the economy in the Chugach Region. In PWS hatcheries contribute significantly to the fishing industry with over 2,200 jobs and \$315 million in total economic output from pink and chum salmon production. Proposal 78 significantly threatens coastal communities dependent on both pink and chum salmon fisheries in the Chugach Region. Chugach shareholders and descendants depend on vibrant pink and chum salmon fisheries and Proposal 78 poses a significant threat to these commercial fisheries.

Fish hatcheries in PWS ensure that sustainable harvest of both pink and chum salmon are accessible to all user groups including commercial, sport, personal use, and subsistence fishermen. In addition, the pink and chum salmon help fund production of coho and sockeye salmon which enhance sport, subsistence, and personal use fisheries.

Please oppose Proposal 78. Thank you for considering this request.

Sincerely,

Sheri Buretta  
Chairman

**Submitted by:** Andrzej Ciostek

**Community of Residence:** 13651E.Norman Av. Palmer ,AK

**Comment:**

I support The Alaska Outdoor Council Proposal 14 5 AAC 28.263. to help the conservation of salmon in (PWS) Prince William Sound in its entirety. Preservation and conservation of ecosystems for marine life it's the best way to protect our salmon for now and next generations.

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**CITY OF CORDOVA, ALASKA  
RESOLUTION 11-24-34**

**A RESOLUTION OF THE COUNCIL OF THE CITY OF CORDOVA, ALASKA, IN  
SUPPORT OF ALASKA'S SALMON HATCHERY PROGRAM AND IN OPPOSITION  
TO PROPOSAL 78 WHICH WILL BE BEFORE THE ALASKA BOARD OF FISHERIES  
AT THE DECEMBER 10-16, 2024, MEETING**

**WHEREAS**, the City of Cordova benefits greatly from Alaska's Private Nonprofit Salmon Hatchery Program; and

**WHEREAS**, Alaska's salmon hatchery program has successfully operated for 50 years, supplementing wild salmon harvests, and supporting fisheries throughout the state, especially in salmon-dependent communities like Cordova; and

**WHEREAS**, Proposal 78 would reduce hatchery production by 25%, impacting hatcheries in the Prince William Sound region at a time when coastal communities like Cordova need salmon production stability and support for wild stocks most; and

**WHEREAS**, reducing pink and chum salmon production by 25% would cause significant harm to Cordova's economy, diminishing fisheries tax revenues and disrupting the economic flow that hatchery salmon provides to Cordova's local businesses and families; and

**WHEREAS**, hatchery programs play a well-documented role in supplementing wild salmon returns, stabilizing coastal economies, and reducing harvest pressure on wild stocks, particularly during years of lower abundance; and

**WHEREAS**, Proposal 78 would introduce uncertainty into the production of Alaska hatchery salmon, complicating planning and loan obligations for hatchery associations and ultimately risking the sustainability of Alaska's hatchery program, which has long been a partnership model between private nonprofits and the State; and

**WHEREAS**, Alaska's salmon hatchery program supports an estimated 4,200 jobs, \$219 million in labor income, and \$576 million in total economic output annually, with over 14,000 Alaskans earning a portion of their income from hatchery salmon; and

**WHEREAS**, the Prince William Sound Aquaculture Corporation (PWSAC) headquartered in Cordova and the Valdez Fisheries Development Association (VFDA) contribute significantly to the economies of Prince William Sound communities by providing jobs and generating an estimated \$200 million in combined economic output annually; and

**WHEREAS**, Cordova, as a rural, off-road community, relies on economic stability to sustain its families, support local businesses, and create a place where young families, lifelong residents, and local enterprises can thrive; and

**WHEREAS**, the processing of pink and chum salmon in Cordova has been a critical factor in stabilizing electric rates over the past 20 years, as revenue from the growing salmon industry has allowed Cordova's local electric cooperative to spread operating costs and fund innovative grid advancements, increasing resilience and affordability year-round for the community; and

**WHEREAS**, the data surrounding hatchery impact on wild salmon populations is inconclusive and does not justify the drastic production reductions proposed by Proposal 78; and

**WHEREAS**, Alaska's salmon hatchery program operates as a nonprofit model, is self-funded through cost recovery and enhancement taxes, and follows a rigorous public permitting process employing sound scientific methods to sustainably protect wild salmon populations while benefiting all user groups, including subsistence, personal use, sport, and commercial fisheries; and

**WHEREAS**, Proposal 78 threatens to disrupt the sustainability of Alaska's hatchery programs by imposing a new oversight process that conflicts with existing regulatory structures, which have successfully overseen the balance between hatchery and wild stocks.

**NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF CORDOVA, ALASKA, that:**

**Section 1.** The City of Cordova firmly opposes Proposal 78, which will be considered at the December 10-16, 2024, Alaska Board of Fisheries meeting in Cordova, and urges the Board to reject this proposal to prevent economic harm and unnecessary disruption to Alaska's hatchery programs.

**Section 2.** The City of Cordova reaffirms its support for Alaska's Salmon Hatchery Programs, including PWSAC and VFDA, recognizing their role in supporting Cordova's community, economy, and sustainable fisheries practices.

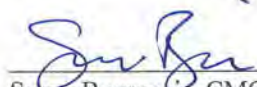
**Section 3.** The City of Cordova calls on the Alaska Board of Fisheries to support science-based, unbiased, assessment methods for hatchery management in collaboration with the Alaska Department of Fish and Game, industry leaders, and the hatchery community to better understand the benefits Alaska's salmon hatcheries provide to all Alaskans.

**PASSED AND APPROVED THIS 6<sup>th</sup> DAY OF NOVEMBER 2024.**



ATTEST:

  
David Allison, Mayor

  
Susan Bourgeois, CMC, City Clerk

## CITY OF VALDEZ, ALASKA

## RESOLUTION #24-45

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA,  
SUPPORTING THE ALASKA SALMON HATCHERY PROGRAM

WHEREAS, the City of Valdez benefits greatly from the Alaska Private Non Profit Salmon Hatchery Program; and

WHEREAS, Alaska's salmon hatchery program has operated for 50 years and supplements wild salmon harvests throughout the state; and

WHEREAS, Alaska's salmon hatchery program is a model of sustainable economic development that directly benefits subsistence fishermen, personal use fishermen, sport fishermen, charter fishermen, commercial fishermen, seafood processors, as well as state and local governments such as Valdez; and

WHEREAS, Alaska hatcheries accounted for 76% of the total common property commercial catch and 64% of the total ex-vessel value totaling \$46 million in the Prince William Sound region in 2023; and

WHEREAS, the Prince William Sound Aquaculture Corporation (PWSAC) headquartered in Cordova and the Valdez Fisheries Development Association, Inc. (VFDA) headquartered in Valdez contribute significantly to the economies of Prince William Sound communities by providing jobs and an estimated \$200 million in combined economic output annually; and

WHEREAS, reducing hatchery produced Pink and Chum Salmon by 25% will significantly impact fisheries tax revenues Valdez receives and greatly reduce wharfage and dockage fees generated due to the loss of an estimated 4 million pounds of salmon products crossing the Port of Valdez shipping terminals annually; and

WHEREAS, cost recovery revenues from the sale of hatchery produced Pink salmon significantly fund VFDA's Coho salmon sport fish enhancement program, which is the cornerstone of the Valdez summer economy, providing salmon for many sport fish related businesses and the Valdez Fish Derbies; and

WHEREAS, Alaska's salmon hatchery program has proven to be significant and vital to Alaska's seafood and sportfish industries and the State of Alaska by creating employment and economic opportunities throughout the state and in particular coastal communities such as Valdez; and

WHEREAS, Alaska's salmon hatchery program is non-profit and self-funded through cost recovery and enhancement taxes on the resource and is a model partnership between private and public entities; and

WHEREAS, the State of Alaska has significantly invested in Alaska's salmon hatchery programs and associated research to provide for stable salmon harvests and to bolster the economies of coastal communities like Valdez, while maintaining a wild stock escapement priority; an

City of Valdez, Alaska  
Resolution #24-45  
Page 1

WHEREAS, Alaska's salmon fisheries continue to be certified as sustainable by two separate programs, Responsible Fisheries Management (RFM) and Marine Stewardship Council (MSC); and

WHEREAS, salmon hatchery programs are permitted and overseen using a transparent public process, employ strong scientific methodology, and are built upon sound and sustainable fisheries policies intended to protect wild salmon populations.

NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA, that

Section 1. The City of Valdez affirms its support for Alaska's Salmon Hatchery Programs, including PWSAC and VFDA.

Section 2. The City of Valdez supports unbiased and scientific methods to assess the interaction of Alaska's salmon hatchery programs with natural stocks, such as the Alaska Hatchery/Wild Salmon Interaction Study which began in 2011 and the Salmon Ocean Ecology Program.


Section 3 The City of Valdez calls on the Alaska Board of Fisheries to reject proposals to reduce hatchery production, including Proposal 78, and work with the hatchery community, the Alaska Dept. of Fish and Game and industry leaders to further its understanding of the importance of the Alaska salmon hatchery program to all Alaskans and the scientific study surrounding hatchery wild salmon interactions.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA, this 6<sup>th</sup> day of November 2024.

CITY OF VALDEZ, ALASKA

  
Dennis Fleming, Mayor

ATTEST:

  
Sheri L. Pierce, MMC, City Clerk



**Submitted by:** Jennifer Clark

**Community of Residence:** Wasilla

**Comment:**

I support proposal 14. This fishery is ruining our salmon, halibut, and crab fishery

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**Submitted by:** John Clark

**Community of Residence:** Wasilla

**Comment:**

I support proposal 14. We need to protect the ecosystem!

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**Submitted by:** Rebecca Clark

**Community of Residence:** Anchorage

**Comment:**

Please adopt #51. I lived in Glennallen and worked for Copper Valley Air for years. The economic impact on companies like Copper Valley Air when the river system is shut down is substantial.

Many in the community depend on the Salmon for their livelihood.

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**Submitted by:** Katherine Clawson

**Community of Residence:** Fairbanks

**Comment:**

Personal use dipnetting in chitna is a family tradition and how my family gets most of its fish for the year. It is one of the unique things about being Alaskan that we do. I'm all for protecting the fish runs, but taking away this personal use permit to allow commercial permits goes against not only what 99% of Alaskans want, but violates the very spirit of living up here.

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November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am writing to express my opposition to Proposal 78. I am from the Kenai Peninsula, Alaska, and my family currently participates in the sport and subsistence fisheries. Hatcheries have been my livelihood for 22 years. Proposal 78 would impact the amount of fish available to all user groups by reducing the number of fish to catch. Competition for available fish has greatly increased, with more and more visitors and residents wanting to catch salmon each season. Pink salmon fulfill a visitor's dream of catching a salmon, as the other salmon species become less numerous to catch. Therefore, pink salmon can reduce the pressure on other salmon species.

In addition, I have personally observed other salmon species, during the smolt stage, eating young pink salmon as they migrate out. This observation could benefit the survival of these other salmon as they make the difficult transition to saltwater. Pink salmon are an asset to food security for Alaskans and for an increasing world population. Proposal 78 would have a severe impact on the hatcheries themselves, as the expenses alone to keep a hatchery viable are very costly.

For the statements listed above, reducing the amount of pink salmon production from the hatcheries by one-quarter could have a significant impact. It is shortsighted and a bad idea.

Sincerely,  
Cathy Cline

A solid black rectangular box used to redact the signature of Cathy Cline.

Kenai Peninsula, Alaska



November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

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I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be

under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
Cathy Cline



Kenai Peninsula, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial seiner and a third generation fisherman. Hatcheries have supported me and my family for generations. Proposal 78 would result in a loss of income, not only for my business, but my crew and the community.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable

by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska’s broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska’s hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska’s economic and cultural fabric.

Sincerely,

Dustin Cline

[REDACTED]

Prince William Sound

**Submitted by:** Clemens Clooten

**Community of Residence:** Fairbanks

**Comment:**

BOF,

My family and myself oppose the following proposals ( 44-47, 49, 50, 54-57, 60-69, 70) that are in any way against dipnetting on the Copper River, and reducing the amount of fish taken and reducing the days that fishing is allowed. Our family uses the Copper River red and king salmon through out the year.

We are supporting the following proposals (48, 51, 52, 53, 58, 59, 70).

Our family supports the proposals the Chitina Dipnetters Association approve.

Thank you,

The Clooten Family

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**From:** Kurt Cochran marathon@peak.org  
**Subject:** Chairwoman Carlson-Van Dort and Board Members  
**Date:** November 26, 2024 at 7:45 AM  
**To:** Kurt Cochran marathon@peak.org

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## Chairwoman Carlson-Van Dort and Board Members

PWS Pollock

The pollock fishery is very important to our family and families that work on our boats. We have three boats Son-in-law Axel-Marathon, Son Keith -Bay Islander and myself - New Life the boats support over 18 family's.

They are 80 to 90 feet.

The sound is a safe place to fish out of the weather this time of year. I have been fishing there probably 30 years when there were plants and tenders there buying pollock and boats were smaller.

We start our year off in the sound it is the first pollock to come into Kodiak. For this reason it is important no one has had a pay check since November and it is the place we can fish clean. We don't take chances with our nets. Seattle is where my nets have to go to be fixed and we would lose our season. The bottom is unknown and deep we don't put our nets on the bottom and take that risk to catch pollock.

The sound is a clean fishery the data shows that.

I have taken state observers out over the years but not recently. A lot of the time we have federal observers on the boat doing nothing and now we have EM cameras that the state could access.

The state keeps it a slow pace fishery only allowing a few boats 6 to 8 at a time to fish so things don't go side ways with bycatch. All of our boats use a salmon excluder and one boat has live camera to see what we are catching.

In short the PWS pollock fishery has more benefits to the state than not.

The pollock love to eat pink salmon smolts so removals of pollock is good for the salmon. We should probably be catching more.

PWS generates Revenue for ADFG,  
 Revenue for boats,family's and the plant work force.

So I ask the board to leave the PWS pollock fishery open.

Don't support proposals 14, 15, 16 and 17

Thank You

Kurt Cochran

**Submitted by:** Kirk Coen

**Community of Residence:** Delta Junction

**Comment:**

63,64,65

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**Submitted by:** George Cole

**Community of Residence:** Willow

**Comment:**

Regarding proposal 16, I whole heartedly agree that trawling doesn't have a place in Alaska fisheries. While some populations are healthy others are on the brink of disaster. We need to eliminate non selective fisheries, trawling is the worst of these.

With regards to copper river, it's my understanding that subsistence and personal use fisheries, under Alaska law, are placed ahead of commercial interests. On the copper river the personal use and subsistence fishers shouldn't have their number reduced as they catch 100-150K fish per year while commercial is catching over 3 million.

Specifically I don't support proposal 49. The transporter services allow people of lesser means to participate in the fishery. Yes its costs 200 with Hem and Copper but that is far less than buying a 4 wheeler, a truck and trailer to pull it.

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## Proposals 44–50 (Subsistence Proposals)

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### Proposal 44

**What it does:** This would allow subsistence fishermen to have more than the legal limit of gillnet gear onboard a vessel.

**ADF&G Position: Oppose.** Concerns it increases the potential to illegally deploy additional gear and enforcement would be challenging due to the size of the fishing area.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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### Proposal 45

**What it does:** This would allow salmon to be taken for subsistence in the inside closure area described in 5 AAC 24.350(1)(B) unless all other Copper River king salmon fisheries have been restricted first.

**ADF&G Position: Oppose.** Aligns with subsistence priorities and user needs while maintaining conservation goals. This could complicate enforcement of the prohibition on selling subsistence-caught salmon. Commercial fishermen might exploit this by fishing in areas closed to commercial fishing under the guise of subsistence fishing and then selling their catch.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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### Proposal 46

**What it does:** Require Copper River District subsistence fishery harvest reporting within seven days of harvest.

**ADF&G Position: Neutral.** ADF&G cites logistical challenges and user compliance issues.

**James Colles Position: Oppose.** ADF&G already monitors fish counts and their escapement goals with the use of fish counters. This additional information doesn't seem helpful. I don't understand how ADF&G would use these numbers in conjunction with their current number gathering methods. I see a risk in potentially double counting fish or a scenario where data is not meshed effectively and leads to poor management of the fishery.

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### Proposal 47

**What it does:** Require inseason harvest reporting by Glennallen Subdistrict subsistence and Chitina Subdistrict personal use fisheries permit holders within 5 days of their fishing activity.

**ADF&G Position: Neutral.** Concerns include administrative burden and compliance challenges.

**James Colles Position: Oppose.** Inseason reporting would be an additional burden on users and department, and compliance with the 5-day reporting requirement may be challenging to enforce. The department already has the authority under 5 AAC 01.015 and 5 AAC 77.015 to require more frequent reporting but has not because it is not needed for effective and sustainable inseason management. Additionally, similar data issues as mentioned in proposal 46 opposition.

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### Proposal 48

**What it does:** Allow guided fishing from a boat in the Copper River Glennallen Subdistrict subsistence salmon fishery.

**ADF&G Position: Neutral.** ADF&G does not see conservation issues presented by this proposal.



**James Colles Position: Support.** This would provide greater access to the fishery for those who do not have access to a nonguided boat that can operate on the Copper River, or do, but do not have the skills to operate it on the Copper River. This will allow access for those with physical limitations.

#### **Proposal 49**

**What it does:** Prohibit commercial operators from transporting state subsistence permit holders engaged in subsistence fishing activities.

**ADF&G Position: Neutral.** Seen as restrictive for users who rely on transport services for subsistence access.

**James Colles Position: Oppose.** Due to the lack of public lands, most permit holders would be limited to dipnetting within the 1-mile section of shore immediately above the Chitina-McCarthy Bridge. Keeping access to state resources for Alaskan residents is important, and creating a small open area wouldn't be beneficial for maintaining this access.

#### **Proposal 50**

**What it does:** Prohibit the use of any electronics that may aid in locating fish, depth, or paths of travel, such as fish finders, depth finders, and chartplotters, while fishing from a boat in the Glennallen and Chitina Subdistricts.

**ADF&G Position: Oppose.** There is no evidence that permit holders using this technology experience higher harvest rates, and prohibiting these devices could affect boating safety.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

#### **Proposals 54–55 (Salmon Management Plans)**

##### **Proposal 54**

**What it does:** This would allow for a maximum of three 12-hour fishing periods where the inside closure area (Figure 54-1) of the Copper River District is closed during statistical week 20 and 21. This would increase the number of periods with the inside waters open to commercial fishing.

**ADF&G Position: Oppose.** Inside-waters closures have been a longstanding management tool to conserve Copper River king salmon. Limiting the number of inside-water closures may result in unsustainable levels of king salmon harvest.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

##### **Proposal 55**

**What it does:** Require the department to restrict guided fishing for at least a week in the Upper Copper River drainage with at least one of the management measures outlined in the Copper River King Salmon Management Plan (5 AAC 24.361) when the commercial fishery is prohibited from fishing within the Copper River District king salmon inside closure area for more than two consecutive periods outside those required by the Copper River King Salmon Management Plan.

**ADF&G Position: Neutral/Oppose.** Unnecessarily reducing opportunity in the Upper Copper River sport and personal use fisheries based on commercial fishery restrictions implemented several weeks prior to the fish entering upriver fisheries because of management concerns at that time in the run. The department restricts upriver sport and personal use of fisheries as needed under general EO authority to ensure escapement goals are achieved.

**James Colles Position: Oppose.** Concur with ADF&G staff findings. Additionally, there are no regulations linking restrictions in the Copper River District commercial gill net fishery to sport fish guiding in the Upper Copper River drainage. There are also no regulations that define guided fishing in a personal use fishery.

#### **Proposal 58**

**What it does:** Provide emergency order authority for the commissioner to increase the king salmon annual limit in the Copper River Chitina Subdistrict (CSD) personal use dip net salmon fishery when escapement is projected to exceed the upper bound of the spawning escapement goal.

**ADF&G Position: Support.** This provides flexibility to increase harvest opportunities while ensuring resource sustainability.

**James Colles Position: Support.** Concur with ADF&G staff findings.

#### **Proposal 59**

**What it does:** Provide emergency order authority for the commissioner to increase the sockeye salmon annual limit in the Copper River Chitina Subdistrict (CSD) personal use dip net salmon fishery when sockeye escapement is projected to exceed the upper bound of the spawning escapement goal.

**ADF&G Position: Support.** Similar to Proposal 58, it allows additional harvest opportunities when resources are abundant.

**James Colles Position: Support.** Concur with ADF&G staff findings.

#### **Proposal 60**

**What it does:** Reduce the total annual limit in the Chitina Subdistrict personal use salmon dip net fishery. The limit for head of household would be reduced from 25 to 20 fish, and the limit for each additional household member would be reduced from 10 to 5 fish.

**ADF&G Position: Neutral.** The department does not have conservation concerns that require reducing harvest. The personal use fishery is managed inseason and harvest is controlled by reductions in fishing time determined weekly based on number of fish passing the Miles Lake sonar.

**James Colles Position: Oppose.** Sockeye salmon counts are not a concern currently. I would prefer to see the protection of the King Salmon in this area.

#### **Proposal 61**

**What it does:** Reduce the total annual limit in the Chitina Subdistrict personal use salmon dip net fishery and reestablish supplemental periods for the harvest of additional sockeye salmon.

**ADF&G Position: Neutral.** The department does not have conservation concerns that require reducing harvest. The personal use fishery is managed inseason and harvest is controlled by reductions in fishing time determined weekly based on the number of fish passing the Miles Lake sonar.

**James Colles Position: Oppose.** I see no benefit in reducing the fishing limit and expanding slowly. The fishery is already controlled by escapement goals the ADF&G monitors.

#### **Proposal 62**

**What it does:** Reduce the maximum harvest level in the Chitina Subdistrict personal use salmon dip net fishery to 50,000 salmon when the Copper River District commercial fishery is closed for 13 or more consecutive days.

**ADF&G Position: Neutral/Oppose.** Unnecessarily reducing opportunity in the personal use dip net fishery based on commercial fishery openings is unwarranted. The current abundance-based management approach within the Copper River Personal Use Dip Net Salmon Fishery Management Plan compensates for fluctuations in inseason and annual run strength and the department has general emergency order authority to further restrict the personal use fishery as needed to ensure escapement goals are achieved.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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### Proposal 63

**What it does:** This would change the opening of the Chitina Subdistrict personal use dip net fishery to June 21 or 2 weeks after a daily management objective of fish passage is achieved at Miles Lake sonar.

**ADF&G Position: Oppose.** It is unnecessary for conservation because the Chitina Subdistrict personal use fishery harvest accounts for only a small portion of the sockeye and king salmon runs, and management of the fishery is abundance-based and designed to distribute harvest opportunity and escapement over the duration of the run.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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### Proposal 64

**What it does:** This prohibits households from participating in the Chitina Subdistrict (CSD) personal use salmon fishery if an Upper Cook Inlet (UCI) personal use salmon fishery permit has already been issued to that household during that year.

**ADF&G Position: Oppose.** There are no management or sustainability concerns with households fishing both a CSD and UCI personal use salmon fishing permit in the same year. It unnecessarily restricts Alaskans' ability to participate in personal use fisheries and potentially restricts harvest of available surplus production. Allowing households to participate in both the CSD and UCI personal use salmon fisheries provides 169 opportunity and flexibility to sustainably harvest salmon to meet their household food security needs.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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### Proposal 65

**What it does:** Require a weekly permit be obtained to participate in the Chitina Subdistrict (CSD) personal use fishery and require reporting be submitted within 7 days for each weekly permit.

**ADF&G Position: Neutral.** Inseason reporting would be an additional burden on users and the department, and compliance with weekly permit and the 7-day reporting requirement may be challenging to enforce. The department already 172 has the authority under 5 AAC 77.015 to require more frequent reporting but has not because it would not be used nor needed for inseason management.

**James Colles Position: Oppose.** This would be administratively burdensome and challenging for enforcement.

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**Proposal 66**

**What it does:** Require the department, in consultation with the Hatchery Operator, to restrict time and area in the Chitina Subdistrict (CSD) personal use dip net salmon fishery to achieve the Gulkana Hatchery broodstock goal.

**ADF&G Position: Oppose.** Managing exclusively for Gulkana Hatchery sockeye salmon broodstock is impractical in a mixed stock fishery prosecuted on salmon 4 to 6 weeks prior to them reaching the hatchery spawning locations. Restricting time and area in this fishery would be an undue loss of opportunity for households participating in the CSD personal use fishery.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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**Proposal 67**

**What it does:** Prohibit removing king salmon from the water prior to release in the Chitina Subdistrict (CSD) personal use dip net salmon fishery.

**ADF&G Position: Oppose.** In other dip net fisheries where the release of king salmon is required, fishers may remove king salmon from the water prior to release. Because of the nature of fishing on the Copper River, it is unclear if leaving king salmon in the water prior to release would actually decrease king salmon mortality. Depending on how a fish is entangled, it may be impossible to release while keeping it in the water from the boat or a shore-based fishing site. Enforcement of the in-water release of king salmon would also be very difficult.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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**Proposal 68**

**What it does:** Prohibit using a dip net from a boat to harvest salmon in the Chitina Subdistrict (CSD).

**ADF&G Position: Oppose.** there are no management or biological concerns with using dip net gear from a boat, and it would increase conflict between users due to increased competition at shore-based sites. Many fishers may be physically limited and incapable of sweeping while wading or scaling steep terrain to access productive fishing sites.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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**Proposal 69**

**What it does:** Establish time and area restrictions for households dipnetting from a boat in the Chitina Subdistrict (CSD).

**ADF&G Position: Oppose.** This proposal could increase conflict between users, it will complicate enforcement, and it may not reduce harvests. It is unclear what proposed actions are to be taken or when they will be enacted.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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**Proposal 70**

**What it does:** Increase the size of the Chitina Subdistrict (CSD) by extending the lower boundary approximately 0.5 miles downstream.

**ADF&G Position: Neutral.** Increased harvest associated with the expansion will be minimal because households are already capped by their permit limits and the additional fishing area is not more productive than areas currently open.

**James Colles Position: Support.** Having more space to stretch out the boats can result in lower congestion due to the longer drift time and the ability to space out further from other boats.

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#### **Proposal 71**

**What it does:** Prohibit guided fishing from a boat in the Copper River Chitina Subdistrict (CSD) personal use dip net salmon fishery.

**ADF&G Position: Oppose.** The department does not have biological concerns that require reducing harvest. Total harvest in the CSD has never exceeded management parameters and harvest by guided dip netters accounts for only a small percentage of overall harvest. Guide services provide a valuable option for Alaskans wanting to access and harvest fish, including those with physical limitations.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

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#### **Proposal 72**

**What it does:** Require the department to close the Gulkana River salmon sport fisheries when water temperature exceeds 18°C at any time during a 24-hour period for 3 consecutive days or exceeds 20°C.

**ADF&G Position: Oppose.** It is well known that salmon can experience physiological stress at elevated water temperatures and the department has authority to restrict fisheries during extreme temperature events. There is no evidence that the observed elevated temperature events in the Gulkana River have negatively impacted productivity nor elevated natural or hooking mortality. Anglers targeting salmon would be subject to highly unpredictable closures and openings based on varying water temperatures. Resulting inseason management notifications would be often unworkable and fishing opportunities could be reduced.

**James Colles Position: Oppose.** Concur with ADF&G staff findings.

**Submitted by:** Bill Comer

**Community of Residence:** Valdez

**Comment:**

I am opposed to proposal #78.

As the owner operator of a sport fishing charter business and a short term rental operation in Valdez, Alaska, I am opposed to Reducing pink salmon egg take for VFDA. The Pink chum and silver salmon VFDA raise are a Major economic Engine for the city of Valdez and Prince William sound every summer. I have dozens of clients and customers who come to Valdez to Fish, salmon as well as sightsee and observe the commercial Salmon industry in operation.

VFDA has a very Unique situation being located along the Trans Alaska oil pipeline, it uses water from a hydroelectric dam, has an oil refinery on one side and Marine Terminal on the other side. VFDA fosters a cooperative relationship between all these competing industries. All the while providing pink salmon for a commercial fleet and Silver Salmon for the sport fishing and tourism . Much of the funding for the silver salmon comes from funds generated from the pink salmon harvest.

Please do not support # 78

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THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

Commercial Fisheries Entry Commission

Mailing Address: PO Box 110302  
Juneau, Alaska 99811-0302  
Main: 907.789.6160  
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To: Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries

Date: November 26, 2024

Thru: Glenn Haight, Chair  
Rick Green, Commissioner  
Commercial Fisheries Entry Commission

Subject: CFEC Comments on  
Proposals 56, 57, 73, and 74:  
Dual and stacked permit  
proposals for PWS seine and  
drift gillnet operations

From: Reid Johnson, Research Section Lead  
Commercial Fisheries Entry Commission

Proposals 56 and 57 request that the Board of Fisheries consider allowing dual permit operations in the Prince William Sound (PWS) drift gillnet salmon fishery. Dual permit operations involve two permit holders collaborating on a single vessel to harvest fisheries resources. This arrangement allows permit holders to share vessel-related costs, such as insurance and maintenance, reduce crew expenses, and potentially benefit from additional gear allowances granted at the Board's discretion.

In addition to dual permit operations for drift gillnet vessels, these proposals further ask that the Board to consider stacked permit operations for the drift gillnet fishery, where one individual owns and operates two permits. Unlike dual permit operations, stacked permits do not involve cost-sharing with another individual, and the permit holder remains responsible for vessel expenses and paying crew shares.

Proposal 73 and 74 both request the board consider allowing permit stacking for the PWS seine salmon fishery. The Board allowed dual permit operations for seine gear in PWS during the last board cycle.

The Commercial Fisheries Entry Commission (CFEC) monitors permit prices across Alaska's limited entry fisheries. In response to public inquiries about the potential impacts of dual and stacked permit operations on permit prices, we offer the following for consideration:

1. **Permit Market Dynamics**

The PWS drift gillnet and seine fisheries operate under a limited entry system, with a finite number of permits available. There are 535 gillnet permits, and 267 seine permits. Under basic supply and demand economics, when supply is fixed, changes in demand directly influence price. Currently, demand for permits is constrained by regulations that generally allow individuals to fish only one permit at a time. There is little incentive to own multiple permits under these rules since a second permit cannot be actively fished.

**2. Impact of Stacked Permit Operations**

If stacked permit operations are permitted, allowing an individual to fish with additional gear upon purchasing a second permit, demand for permits would increase. As the supply of permits cannot expand, this increased demand would lead to higher permit prices if all other factors that influence permit prices remain constant.

**3. Impact of Dual Permit Operations**

Dual permit operations could lower barriers to entry for commercial fishing. By enabling individuals to fish under a dual permit arrangement, prospective entrants could avoid the significant upfront costs of purchasing both a permit and a vessel, which often cost hundreds of thousands of dollars each. Instead, an individual could purchase only a permit and then negotiate cost-sharing agreements with an existing vessel who also owns a permit. While increased participation would raise demand and permit prices, dual permit operations could still reduce the total cost of entry.

**4. Latent Permits and Price Buffering**

The PWS drift gillnet fishery has a substantial number of latent permits—permits held by individuals who choose not to fish. When dual or stacked permit regulations are enacted, latent permit holders often sell their permits to active participants, increasing the number of permits being fished. This latent supply serves as a buffer, mitigating the potential price spikes caused by heightened demand. In 2023, a total of 91 PWS drift gillnet permits were latent, or 17 percent of the 535 permits available. Permit latency has been increasing in the PWS drift gillnet fishery since 2013. In the PWS salmon seine fishery, there were 33 latent permits in 2023 (12 percent).

In summary, the adoption of dual or stacked permit operations would likely lead to increased demand for permits, driving higher permit prices. Allowing dual permit operations will also lower entry barriers to fisheries by reducing initial investment requirements for prospective participants. The presence of latent permits in the PWS drift gillnet fishery will temper the extent of these price increases, providing an additional layer of market stability.

Finally, we are obligated to point out that the financial performance of the fishery will continue to be the primary driver of permit prices. Allowing dual or stacked permit operations will impact permit prices, but the primary driver of permit prices will continue to be the perceived value of future income generated from fishing efforts.

CFEC report number 24-08N provides more detailed information on permit prices, latency, and average gross earnings per individual or permit.

If you have any questions or for further clarification, please contact us at your convenience:

[REDACTED]



**Submitted by:** Clinton Connelley

**Community of Residence:** Fairbanks

**Comment:**

I OPPOSE Proposals 44,45,46,47,49,50,54,55,56,57, 60,61,62,63,64,65,66, 67,68,69,71  
and I SUPPORT Proposals 48,51,52,53,58,59,70.

I believe the salmon of Alaska belong to the local Alaskan residents. If there is a need to reduce the catch and increase the escapement numbers my belief it has to come from the for profit operators using the Alaskan owned fish. Commercial fishing is only an option when there are enough fish for all personal use and escapement combined.

Thank you,

Clint Connelley

---

**Submitted by:** William Conner

**Community of Residence:** Petersburg

**Comment:**

I am opposing proposal 14 and 15 and 16 and 17.

I have been fishing since 1975. I seine in PWS for salmon and I-- my vessel participates in the trawling in WG and CG and someday PWS.

I am a one boat owner and employ up to 8 separate individuals and family's throughout the year.

Pollack trawling in PWS had helped the salmon survival; when the quota was not caught or was not taking place the pollack target the hatcheries pink smolt in a much larger number and we have seen at times the run failures at the hatcheries in a big part because of the pollack predation. I would in fact propose a larger quota in PWS so as not to experience a salmon failure like we have had in 2024.

I strongly oppose any closure or limitation of the pollack trawl fishery in PWS.

Bill Connor

---

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am from Petersburg, Alaska, and I'm involved in commercial fishing, specifically salmon seining in Prince William Sound. The hatcheries have allowed for a more even income over the past decades by providing more harvest opportunities, which in turn has created a stable income for my business, my family, and the incomes of four other families. Proposal 78 would, at a minimum, decrease my annual income by 25% and reduce the potential to find crew members willing to fish for 25% less. If those supporting Proposal 78 were to consider reallocating 25% of their own income to support the fishing families who rely on hatcheries, it could sway my opinion.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.


**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong

foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Impacts of Proposal 78: Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
William Connor  
  
Petersburg, Alaska

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

Re: Oppose Proposals 14, 15, 16, and 17 – PWS Pollock Fishery

Dear Chairwoman Carlson-Van Dort and Board Members,

My family owns and operates the F/V Leslie Lee. The Leslie Lee is a 97-foot catcher vessel that has fished out of Kodiak since the early 1990s for both Pollock and Cod. The vessel has participated in the PWS Fishery during this time. My Family bought the Leslie Lee in 2018 and since then we have participated in the PWS fishery for several years. Right now, trawl fishing families like ours are struggling with poor markets and low prices, just like nearly every other commercial fishery. We need all opportunities now more than ever to provide for our families and coastal communities, so I would hate to lose the ability to fish in the PWS Pollock fishery.

As a trawl family, we are used to monitoring and closely managed fisheries. When fishing in the federal pollock fishery, our vessel has their EM system on for 100% of all fishing trips and we keep everything we catch as we are required to do. The State has the ability to put observers on our boat in PWS, and I trust that they would if they thought we had an issue. My captains and crew have nothing to hide and the reality is PWS pollock is a very clean fishery that operates in daily communication with the State manager. There is not a valid reason to close or alter this fishery, and the fact that the Department opposes all four proposals communicates that.

Making significant changes to Gulf of Alaska fisheries like PWS pollock, and even contemplating a closure, during this extremely dire economic climate is a significant risk to all of us as harvesters, the processing plants we rely on, and our coastal communities.

Thank you for the opportunity to comment. I urge you to oppose Proposals 14, 15, 16, and 17.

Sincerely,



Mark Cooper

Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
Anchorage, AK 99811-5526

November 26, 2024

Re: Oppose Proposals 14, 15, 16, and 17 – PWS Pollock Fishery

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Making significant changes to Gulf of Alaska fisheries like PWS pollock, and even contemplating a closure, during this extremely dire economic climate is a significant risk to all of us as harvesters, the processing plants we rely on, and our coastal communities.

Thank you for the opportunity to comment. I urge you to oppose Proposals 14, 15, 16, and 17.

Sincerely,



Mark Cooper



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November 26, 2024

Scott Blake, CEO & Co-Founder  
Copper River Seafoods  
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Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526 Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

**Re: Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp)**

### Meeting Proposals

Dear Members of the Alaska Board of Fish,

Please consider the following comments from Copper River Seafoods in advance of the Alaska Board of Fisheries Prince William Sound and Upper Copper/Upper Susitna Rivers Finfish and Shellfish (Except Shrimp) Meeting in Cordova, Alaska December 10-16, 2024.

We are writing to express our perspective regarding four proposals within the Commercial Groundfish proposal section including 14, 15, 16, 17 which address the impact of trawling on the ecosystem of Prince William Sound (PWS). I do not believe the issues expressed within these proposals is solved by an absolute shutdown of the pollock fishery in PWS, particularly with respect to the growing pollock biomass and its far-reaching consequences on other marine species.

In PWS, pollock are preying on euphausiids, fish, herring, copepod nauplii, eggs, and adult copepods. They represent a massive biomass and current pollock populations are not well understood. This lack of science-based knowledge about the size of the pollock population as well as their impact on other PWS fish stocks, has profound implications for the broader ecosystem. If left unchecked, the expanding pollock biomass has the potential to destabilize populations of other species critical to PWS fisheries and marine biodiversity.

Pollock consume key species across the food web, in Prince William Sound this likely means hatchery salmon fry, wild salmon fry, herring, juvenile crab, and more. Allowing this biomass to grow unchecked may ultimately lead to ecosystem collapse, threatening the livelihoods of all user groups dependent on these resources. It is worth noting that we are starting to observe interactions with the pollock biomass in the newly opened PWS herring fishery and have questions about the relationship between pollock predation on herring.

To address this challenge, we propose:

1. More Deeply Study Pollock in PWS: Better understand the impact of increasing pollock biomass in PWS so that we know the impact on salmon – including hatchery returns - and amongst the many other species harvested in PWS, notably the recently re-opened PWS herring fishery.
2. Create Local Stewardship: Engage local PWS companies and local harvesters to harvest the pollock fishery responsibly, fostering a vested interest in maintaining ecological balance.

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3. Expand Fishing Opportunities: Introduce longer and more extended harvest periods with small-boat fisheries to efficiently control biomass while minimizing bycatch.
4. Mandatory Observer Coverage: Require 100% observer coverage on all ADFG PWS pollock test fisheries to ensure accountability and adherence to bycatch regulations.
5. Sustainable Biomass Management: Focus on harvesting pollock to prevent overpopulation while protecting critical species like crab, halibut, herring, and salmon from predation and competition.

We **support Proposal 15** which modifies bycatch limits in PWS and mandates that bycatch is brought to port and surrendered to ADFG potentially to support local food aid programs or SeaShare.

We **support Proposal 17** with modifications. Remove request for electronic monitoring as this is not a request the BOF can address. Revise request for 50% physical onboard observer coverage to require 100% observer coverage on all ADFG PWS pollock test fisheries to ensure accountability and adherence to bycatch regulations.

We **oppose Proposals 14 and 16** —shutting down trawling and allowing the pollock biomass to expand unchecked would create havoc across all user groups, culminating in ecological and economic damage that would be difficult to reverse. If the biomass grows too large, it risks collapsing entire fisheries and reducing opportunities for future generations. Shutting down the fishery altogether would hurt stakeholders across the board.

We urge the Board of Fisheries (BOF) to consider an alternative approach to pollock fishery management in PWS to ensure a balanced, science-based approach to managing the pollock biomass while heeding the concerns of PWS stakeholders. A deeper understanding of the impacts of increased pollock populations in PWS, coupled with more robust oversight and community-based stakeholders, would allow us to navigate the challenges of trawl damage and bycatch while protecting the long-term sustainability of our marine resources and economic opportunity for PWS stakeholders.

Sincerely,

Scott Blake, CEO & Co-Founder  
Copper River Seafoods

###

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November 26, 2024

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Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526 Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

### **Re: Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) Meeting Proposals**

Dear Members of the Alaska Board of Fish,

Please consider the following comments from Copper River Seafoods in advance of the Alaska Board of Fisheries Prince William Sound and Upper Copper/Upper Susitna Rivers Finfish and Shellfish (Except Shrimp) Meeting in Cordova, Alaska December 10-16, 2024.

#### **Who We Are: Copper River Seafoods Impact in Alaska**

At Copper River Seafoods, we are dedicated to Alaska's economy, communities, and natural resources. At peak, we directly employ nearly 700 people and provide critical support to commercial fishermen throughout Southcentral, Southwest, and Far North Alaska. With primary processing facilities in Cordova and Naknek and buying stations in Homer, Kotzebue, Seward, and Whittier, we sustain a network that drives Alaska's seafood industry and supports communities statewide. We operate an added-value manufacturing facility and one of the largest cold storages in Anchorage, which are instrumental to food security in Alaska by enabling us to feed Alaskans through supplies to local grocery stores, restaurants, food banks, and other food distribution hubs year-round. In 2024, we entered a 3-year USDA supported grant partnership with the Anchorage School District to bring nutritious Alaska seafood to 40,000 students through local school meals. In collaboration with the non-profit SeaShare, in the months of October and November 2024 alone, we provided 50,000 pounds of ready-to-cook seafood—equating to 200,000 meals—distributed to food banks statewide including Port Graham, Matsu, Homer, Hooper Bay, Bethel, and Fairbanks. For nearly 30 years, we have been a cornerstone of Alaska's seafood industry, supplying fresh, frozen, and value-added products to local, national, and international markets. As we expand our reach, our commitment to Alaska remains unwavering. We are committed to supporting our fishermen as new fisheries open, demonstrated most recently by our commitment to support the newly opened Prince William Sound Herring Fishery.

#### **Salmon Management Plan Comments**

We **strongly oppose**:

- Proposal 51
- Proposal 52
- Proposal 53

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### CRS Comments on Proposals 51, 52, 53

#### **The Critical Importance of Early-Season Copper River Salmon**

The salmon supply from Copper River is vital to our operations and to the communities that depend on it. Restricting early-season commercial fishing opportunities, as outlined in Proposals 51, 52, and 53, undermine the flexibility required for adaptive, in-season management.

Climate variability already presents challenges, and rigid mandates risk over-escapement and lost commercial harvest opportunities. These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has shown to already restrict early commercial effort. The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment. Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decade ago. Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

The objectives of these proposals will have severe economic impacts to the fleet and the region. We’d be remiss to not mention the market perspective, which is these restrictions would inflate early-season pricing, shorten promotional windows, and discourage buyers—ultimately harming fishermen and the entire supply chain.

### Allocation Plan and Hatchery Operation Comments

We **strongly oppose**:

- Proposal 78

We **support**:

- Proposal 79
- Proposal 80
- Proposal 81

### CRS Comments on Proposal 78

#### **The Harmful Impacts of Prince William Sound Hatchery Production Cuts**

Prince William Sound has faced significant setbacks in recent years. Now, Proposal 78 threatens to further damage Alaska’s \$600 million hatchery-driven economy by arbitrarily cutting hatchery production by 25%. Alaska’s hatchery programs not only ensure food security and stability for coastal communities but also produce nearly one billion meals globally every year. Proposal 78 serves another major blow to an industry that is on the brink and can’t handle much more.

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This proposal would have devastating consequences for businesses like ours, which rely on Prince William Sound chum and pink salmon for summer operations. Reduced access to the pink and chum resource increases our operational costs by limiting throughput in our Cordova, Whittier, and Anchorage facilities. Cuts to production limit opportunities for our fishing fleet. For the processors and sellers of PWS salmon, further cuts disrupt relationships with important customers who depend on these products. Reducing the resource by 25% makes the fishery less relevant and key buyers will look elsewhere to other markets. Once lost, markets will take time to rebuild and many more Alaska Seafood customers will lose faith in Alaska.

In summary, cutting production by one quarter devastate businesses like ours by reducing access to Prince William Sound chum and pink salmon, increasing operational costs, and eroding market competitiveness. Communities like Cordova and Valdez, already grappling with economic instability, would bear the brunt of Proposal 78, but Prince William Sound processors like Copper River Seafoods will suffer devastating impacts too.

### CRS Comments on Proposals 79, 80, 81

#### **The Importance of Reducing Hatchery Operation Interference**

Hatcheries are the backbone of sustainable fisheries in Prince William Sound (PWS), ensuring that fish populations remain robust for all user groups—subsistence, sport, and commercial. Without the ability to complete critical operations like broodstock collection and cost recovery, hatcheries cannot fulfill their purpose. This failure threatens the very existence of fish stocks, leaving all user groups with nothing. The Board of Fisheries (BOF) must take decisive action to protect hatchery operations from interference to preserve the delicate balance that benefits everyone. Allowing disruptions to continue will compromise the sustainability of the fishery and jeopardize the livelihoods, traditions, and opportunities of countless Alaskans.

#### **Proposal 79**

Hatcheries exist to serve all user groups, but only if they can complete their primary tasks of broodstock collection and cost recovery without interference. We share concerns about the disruption of hatchery operations due to increasing interference and concur with the recommended adjusted language within this proposal to allow hatcheries to function efficiently. It is crucial that all user groups stay out of the way during critical hatchery operations, ensuring sustainable fish stocks for everyone once cost recovery is complete. We request that the State make the necessary corresponding subsistence, personal use, and sport fishery regulatory changes to be consistent with the requested change to commercial fishery regulations.

#### **Proposal 80**

This proposal is closely aligned with Proposal 81.

#### **Proposal 81**

We strongly support the recommendations of Proposal 81 which implement restrictions, such as prohibiting hook use and preventing access during cost recovery operations. Without these measures, the problem will worsen, potentially leading to catastrophic impacts on hatchery operations. The use of snagging hooks in Main Bay is causing significant harm to hatchery operations, leading to injuries that increase the risk of infectious hematopoietic necrosis (IHN) transmission—a disease that has recently impacted up to 50% of broodstock in the area in recent years. While the exact source of IHN is unclear, the evidence strongly suggests that current fishing practices are contributing to the problem. To protect hatchery operations and ensure sustainability for all user groups, snagging hooks should be prohibited, and Main Bay should be designated as a non-sport fish area during hatchery operations. Access can be allowed after hatchery needs are met, but it is vital to resolve this issue now to prevent further harm to the fishery.

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Regards,  
Scott Blake, CEO & Co-Founder  
Copper River Seafoods

**###**

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Lot 11 Block 1 Harbor Loop Subdivision

**CORDOVA**  
300 Cannery Row

**HOMER**  
795 Fish Dock Road

**ANCHORAGE WEST**  
1304 Laona Drive

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fishermen. I am a lifelong commercial purse seiner in PWS. I have owned and operated my boat for 25 years. My parents had their own seine operation in the sound in which they raised me. I was born and raised in Homer, Alaska.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Megan Corazza

A solid black rectangular box used to redact the signature of Megan Corazza.

Homer

**SUPPORT this proposal with CDFU****Proposal 40 - SUPPORT**

*Adopt a harvest strategy for golden king crab in Prince William Sound.*

Golden King crab fisheries must depend on CPUE in the commercial fishery to set its GHL, because there is no good way to survey. This proposed harvest strategy is similar to the one being used with success in Southeast.

As the fishery develops and distinct populations of Golden King crab are discovered, it will be prudent to break the area into districts. In the meantime, the statistical areas that are already in regulation allow for a reasonable starting point until the next BOF meeting cycle.

Local PWS economies are struggling following years of depressed fish prices, increased overhead costs for operations, and increased efforts of time for static harvests. It is imperative that the BOF direct ADFG to open these small scale fisheries, because they are simply not being proactively opened without BOF direction.

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**SUPPORT this proposal with CDFU****SUPPORT this proposal with CDFU****Proposal 46, 47 - SUPPORT**

*-Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.*

*-Require in season reporting in subsistence and personal use fisheries.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required real-time reporting for years, proving it is possible. We do not believe requiring weekly reporting on the lower Copper River will cause any burden to subsistence users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

#### **OPPOSE this proposal with CDFU**

##### **Proposal 48 - OPPOSE**

*Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.*

The commercialization of subsistence resources in Alaska goes against their intended use. No one should collect profits from a subsistence fishery. Additionally, competition by professional guides in a subsistence fishery increases the cost and difficulty for participants not using a guide service to be as productive.

Preventing the commercialization and guiding within the subsistence fishery is a precedent being set across Alaska. Prohibiting the commercialization of subsistence fisheries became statewide regulation in 2024; repealing this would need to be taken up at the statewide BOF meeting.

#### **SUPPORT this proposal with CDFU**

##### **Proposal 49 - SUPPORT**

*Prohibit transport services in the Glennallen Subdistrict.*

We support this proposal but with an edit that would add the restriction of “transporting” but also retain “directing” in the regulation. Removing “directing” may create ambiguity in the regulation.

#### **OPPOSE this proposal with CDFU**

##### **OPPOSE this proposal with CDFU**

##### **OPPOSE this proposal with CDFU**

##### **Proposals 51, 52, 53 - OPPOSE**

- Reduce commercial salmon fishing opportunity in the Copper River District.*
- Reduce commercial salmon fishing opportunity in the Copper River District.*
- Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.*

These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has shown to already restrict early commercial effort. The objectives of these proposals will have severe economic impacts to the fleet and the region.

The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment.

Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

## **SUPPORT this proposal with CDFU**

### **Proposal 55 - SUPPORT**

*Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.*

We favor how this proposal addresses a shared burden of conservation. It is irresponsible and unsustainable to allow commercial guiding operations to efficiently harvest king salmon upriver while downriver commercial users are restricted in an effort to allow these same kings into the river. As the author stated, commercial users throughout this river system should share the responsibilities when necessary to ensure the conservation of this resource.



**OPPOSE this proposal with CDFU****Proposal 58 - OPPOSE**

*Amend the Copper River King Salmon Management Plan.*

With statewide concerns for king salmon, this is not a time to consider raising limits.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of sockeye, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**OPPOSE this proposal with CDFU****Proposal 59 - OPPOSE**

*Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.*

This proposal is a reallocation of a resource that is already at its allocation limit.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of king salmon, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**SUPPORT this proposal with CDFU****SUPPORT this proposal with CDFU****Proposal 60, 61 - SUPPORT**

*-Modify the annual limit for the Chitina Subdistrict.*

*-Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.*

If the personal use fishery exceeds its allocation, there should be restrictions placed on this gear group to ensure conservation of the Copper River salmon population. With increased interest and growth in the personal use fishery, we must reduce the limits to allow all participants equal access, while also protecting this resource for future generations.

With no cap on personal use participants, the most direct way to protect the resource and remain within the allocation parameters is to reduce the annual bag limit.

**SUPPORT this proposal with CDFU****Proposal 62 - SUPPORT**

*Allow inseason adjustment of the Copper River personal use maximum harvest level.*

We favor how this proposal addresses a shared burden of conservation. We are in support of adopting a triggered regulation for conservation purposes. During times of concern, all user groups should be managed accordingly to ensure the long-term viability of this resource.

In years of low abundance, the commercial fishery typically bears the burden of conservation and sees significant reductions, but other user groups do not.

CDFU submitted a similar triggered-regulation proposal to the 2021 BOF meeting, which suggested a new section for regulation 5 AAC 77.591: if the Copper River District commercial harvest is 50% below the 10 year average by June 1, the maximum harvest level in the Chitina subdistrict will be reduced to 50,000 sockeye.

**OPPOSE this proposal with CDFU****Proposal 63 - OPPOSE**

*Amend the opening date of the Chitina Subdistrict personal use fishery.*

We share concerns about dip net pressure on Copper River stocks, however we do not support restricting management based on projected run timing curve. The run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

**SUPPORT this proposal with CDFU****Proposal 64 - SUPPORT**

*Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.*

Personal use limits were originally set based on what needs a participant may have for the year. Allowing a user to obtain their bag limits in multiple personal use fisheries is a loophole in state regulation that should be closed for conservation purposes.

Commercial salmon boats must choose what state regulation area they will fish. In other instances in regulation, there are aggregate harvest limits based on area: In Game regulation, deer cannot be harvested to a full limit in PWS, Kodiak, and Southeast in one year.

### **SUPPORT this proposal with CDFU**

#### **Proposal 65 - SUPPORT**

*Require a weekly permit and inseason reporting in the Chitina Subdistrict.*

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting in the Chitina Subdistrict will cause any burden to its users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

### **SUPPORT this proposal with CDFU**

#### **Proposal 66 - SUPPORT**

*Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.*

Despite evidence of a strong return, the egg take goal for Gulkana hatchery was not achieved in 2024. It is imperative for all user groups to be managed for salmon resource goals. A similar regulation is in place for every other hatchery in the area and this regulation alignment will close a loophole as well as ensure efficient hatchery operations.

### **SUPPORT this proposal with CDFU**

#### **Proposal 67 - SUPPORT**

*Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.*

This proposal encompasses good science. King salmon that are released must be given an opportunity to survive and spawn.

**SUPPORT this proposal with CDFU**

**SUPPORT this proposal with CDFU**

**Proposal 68, 69 - SUPPORT**

*-Prohibit dipnetting from a boat in the Chitina Subdistrict.*

*-Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.*

Regulation was written before the growing efficiency of this personal use fishery. We need to adapt regulation now to account for drastic changes in harvest and increased commercialization of the personal use fishery in recent years brought through guided express boat charters. Our Copper River king and sockeye resources simply cannot handle the impacts of an increased style of fishing prevalent in the Chitina subdistrict. The efficiency of the guided boat personal use dip net fishery has driven this gear group to be above their allocation.

**OPPOSE this proposal with CDFU**

**Proposal 70 - OPPOSE**

*Extend the lower boundary of the Chitina Subdistrict.*

The personal use dip net fishery has been exceeding its allocation in recent years. Instead of relieving pressure on the resource, this proposal to move a boundary would simply move pressure downriver: more area for the Chitina subdistrict will only increase effort by dipnetters and lead to more boats and pressure on the resource. There is a finite resource that is fully allocated, and we cannot continue to give more.

**SUPPORT this proposal with CDFU**

**Proposal 71 - SUPPORT**

*Prohibit guiding in the Chitina Subdistrict.*

We are in support of this proposal that addresses the increased commercialization of the personal use fishery. A commercial gillnet fishery for Copper River salmon already exists: the Area E commercial gillnet fishery at the mouth of the Copper River. Anyone who would like to commercialize the harvest of fish can purchase an Area E gillnet permit.

Personal use only makes sense if Alaska residents are getting access to a resource for less than it would cost to purchase the resource. The commercialization of the personal use fishery through private guiding increases the cost to the average participant, as each fisherman is forced to either compete with skilled guides in powerful boats or pay

upwards of \$400 dollars a day to ride along. When personal use fishermen invest in expensive guide services to harvest their fish, it easily equates to \$20 per fish or more. This is more than someone might pay purchasing fish at Costco! Obtaining fish by paying money in the personal use fishery more closely resembles sport, because it is a joke, one where commercial fishermen are a punchline.

Prohibiting guiding in the Chitina subdistrict is a straightforward and fair way to alleviate congestion and pressure on the resource.

### **SUPPORT this proposal with CDFU**

#### **Proposal 72 - SUPPORT**

*Close sport fishing for salmon based on water temperature in the Gulkana River.*

Heat stress on salmon is well-studied. Similar practices are being put in place throughout the US.

### **OPPOSE this proposal with CDFU**

#### **Proposal 78 - OPPOSE**

*Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.*

There is no conclusive evidence to suggest this proposed decrease in pink and chum production. The BOF has repeatedly turned down similar anti-hatchery proposals for this very reason in the last twenty years. This proposal asks the BOF to modify regulation 5 AAC 24.370. However, this regulation does not address egg take level, nor does any regulation implemented by the BOF. For this reason, this proposal and any future proposals like it should be rejected.

Passing this proposal will result in serious economic harm to every salmon permit holder CDFU represents. The total economic impact of PWS hatcheries is significant, and reducing their production will mean immediate economic downturns on communities already beset with revenue losses due to depressed fish prices and fishery resource disasters. PWSAC activities alone are estimated to contribute approximately \$50 million in labor income and support roughly 2,400 jobs.

The goal of these hatcheries is not solely economic. They must achieve their corporate escapement goals to continue to operate and produce salmon for all user benefit. Their goal is to optimize Area E salmon production for the long-term wellbeing of all user groups, in addition to optimizing Alaska's wild salmon resources. We all should be reminded of the benefits that these hatcheries provide for all user groups, including commercial, sport, personal use, and subsistence.

### **SUPPORT this proposal with CDFU**

**Proposal 79 - SUPPORT**

*Close Main Bay to all fishing during hatchery cost recovery operations.*

All common property users should cooperate to allow PWSAC to achieve its corporate escapement goals. We should all understand the importance of efficient cost recovery and brood take at the Main Bay Hatchery. All user groups depend on the accomplishment of these two goals for the future of this resource. It is counterproductive to have some user groups interfering with PWSAC's operations that are essential for the benefit of all. Eliminating conflict and maximizing efficiency during cost recovery and brood operations will only help all users. At times, there may only be a window of just a few days when optimal harvest by cost recovery can take place. If that is bogged down by subsistence or personal use fishing, opportunity is lost for all.

Passing this proposal still allows for sufficient access inside Main Bay to harvest sockeye salmon. There are many areas outside the AGZ in Main Bay where sockeye build up and allow for great harvest opportunities for sport and subsistence users. When PWSAC is actively working to collect brood and harvest cost recovery, the Main Bay Subdistrict is generally closed to commercial fishermen, and this allows exclusive access to sport and subsistence users. Until cost recovery efforts terminate, these user groups would still have sole access to this resource outside the THA within Main Bay.

**SUPPORT this proposal with CDFU****Proposal 80 - SUPPORT**

*-Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.*

Increasing the sport fishing distance from the barrier seine is essential to eliminating the majority of the damage from boats and tackle to the hatchery barrier seine. If we do not increase this distance, the problem will not be solved. The current setback distance does not protect hatchery property or its staff, as fishermen still can easily reach the barrier seine with their snagging hooks. Moving this distance back to 250 feet should eliminate the negative impact on the hatchery, and anglers will still have sufficient opportunity to harvest sockeye in Main Bay.

By closing the area behind the barrier seine to all sport fishing, fish being staged for broodstock will no longer be harvested. Closing the area will also reduce the number of wounded fish that are compromised and must be culled from the brood stock.

We also want to ensure ADFG has the tools to work with hatchery staff to manage the sport fishery in Main Bay. A precedent for this exists at the Ship Creek Hatchery in Anchorage, where EO authority has been used to shut down the sport fishery to ensure the hatchery accomplished its brood goals.

The end goal is to collaboratively assist PWSAC in successfully achieving their corporate escapement goals each year, while reducing the damage to PWSAC property and the risk of injury to PWSAC staff.

SUPPORT this proposal with CDFU

**Proposal 81 - SUPPORT**

*Modify the area open to sport fishing near the Main Bay Hatchery.*

We support PWSAC's effort to resolve this issue in Main Bay through their Proposal 81, but suggest adopting Proposal 80 to ensure the problem at hand is solved.

**OPPOSE this proposal with CDFU**

**Proposal 83 - OPPOSE**

*Allow a resident sport angler to use two rods when fishing for salmon.*

There is already reasonable access in this fishery. The suggested regulation change could cause enforcement issues. How would enforcement know that only salmon are being retained while fishing with two rods?

**SUPPORT this proposal with CDFU**

**Proposal 84 - SUPPORT**

*Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.*

Sport harvest of saltwater kings and rockfish has been significantly increasing over the last ten years. This is increasingly concerning for our region which is vested in the conservation of Chinook salmon and rockfish. With a growing sport fish charter industry, it is not sustainable to continue to allow charter captains and crew to retain their bag limit while clients are on board. ADFG is already moving in this direction in Proposal 29, and the precedent is already set in Kodiak, Southeast, and federally for halibut. This would bring PWS into alignment.

**OPPOSE this proposal with CDFU**

**Proposal 85 - OPPOSE**

*Modify the bag and possession limit for coho salmon.*

This proposal is an allocative grab by the author to take a larger portion of the resource for the benefit of their company and clients. This year, ADFG reduced the bag limit to one coho salmon. This is not the time to double the bag limit from three fish to six fish.

The author also suggests this regulation change to target hatchery-bound coho salmon. There is already an expanded coho take in Valdez Arm to target these hatchery fish. Increasing the bag limit across the region has the potential to negatively impact many small wild coho streams around PWS.

**SUPPORT this proposal with CDFU****Proposal 86 - SUPPORT**

*Modify the sport fishing area and season dates in Ibeck Creek.*

With increased effort later in the season on Ibeck Creek, we support this proposal to protect spawning coho salmon. It does not make sense to allow fishing in spawning beds. These fish have already been counted as escapement by ADFG aerial surveys, and should be left to spawn and ensure future runs.

SUPPORT this proposal with CDFU

**Proposal 87 - SUPPORT**

*Modify the sport fishing area and season in a Copper River Delta system.*

We firmly support protections for spawning coho salmon in the Copper River Delta.

**SUPPORT this proposal with CDFU****Proposal 88 - SUPPORT**

*Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.*

We support this proposal that addresses a shared burden of conservation to protect our salmon fisheries. If the commercial fleet is restricted to protect coho salmon during years of low run entry and low aerial survey counts, the sport fishery should be similarly restricted to protect coho in the Copper River Delta. During years of low returns, we must all work together to reach escapement goals and ensure future healthy salmon runs.

SUPPORT this proposal with CDFU

**Proposal 99 - SUPPORT**

*Define commercial herring fishery districts in Prince William Sound.*

The recent discovery of a large new herring population at Kayak Island needs defined waters to operate an exploratory herring fishery.

SUPPORT this proposal with CDFU

**Proposal 102 - SUPPORT**

*Allow commercial fishery permit holders to harvest herring for the own use as bait.*

A regulation like this exists in most other areas in Alaska. Here are examples:

Southeast: 5 AAC 27.170. Harvest of bait by commercial permit holders in Southeastern Alaska Area. The holder of a valid CFEC interim use or limited entry permit may take



but may not sell herring for use as bait in the commercial fishery for which the permit is held

Yakutat: 5 AAC 27.270. Harvest of bait by commercial permit holders in Yakutat Area.

The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

Kodiak: 5 AAC 27.545. Harvest of bait by commercial permit holders in Kodiak Area.

The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am writing to strongly oppose Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. I'm from Valdez, Alaska, where I hold PWS permits and work as a boat owner and captain. Growing up in Alaska's salmon hatchery industry, it has shaped my entire life. This proposal will have a negative impact on both my family and me.

Sincerely,  
Richard Corazza

[REDACTED]

Valdez, Alaska

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I'm from Valdez, Alaska, where I hold PWS permits and work as a boat owner and captain. Growing up in Alaska's salmon hatchery industry, it has shaped my entire life. This proposal will have a negative impact on both my family and me.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries

Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

Impacts of Proposal 78: Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,  
Richard Corazza

A solid black rectangular box used to redact the signature of Richard Corazza.

Valdez, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I have been an Alaskan commercial fisherman for 46 years. Our family has 4 generations of experience in Alaskan fisheries. I started Seining in PWS in 1985 and both of my adult children have continued to seine in PWS with their own permits and seine vessels.

I have participated in cost recovery at the hatcheries in PWS. Without the great benefit of the hatcheries, I would not have been able to conduct a profitable fishery operation in many of the years since I started seining in PWS. Because of the relative stability that the hatcheries provided, I was able to make a living, support a family, support my community, start my children on a career path, and generate job opportunities for 4 crewmembers every year.

This proposal to ARBITRARILY decrease egg take levels by 25 percent has no basis in scientific fact. Fisheries science overuses modeling which is heavily affected by assumptions. We can send a man to the moon but can't explain where salmon go in the ocean or how they are affected by weather patterns or predation factors or myriad other factors that affect their survival. Assumptions can be affected by researcher bias and severely alter results. I don't believe science has proven that hatchery fish are detrimental to ocean productivity or detrimental to wild stocks.

Hatchery fish have been around for over 100 years, 46 of them in my lifetime. I have seen unexplainable highs and lows in salmon returns in all of these years. Some years the wild stocks return in great numbers and hatchery stocks do not. Some years it is opposite and hatchery stocks dominate the return. No one can explain this scientifically or accurately. With an industry that has a long running history of utilizing hatcheries with no scientifically proven detriments to ocean bearing capacity or wild stock abundance it is foolish to just start throwing darts at what may be the wrong target. There may be things to change in the hatchery system but not the slippery slope of decreasing production. Thank you for considering my thoughts.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Richard Corazza

A solid black rectangular box used to redact the address information.

Homer, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

My family has been commercial fishing in Alaska since 1939 to the present and I personally drifted Cook Inlet for 30 years before I started seining for salmon with my husband Rich in Prince William Sound in 1985. I own my own Prince William Sound seine permit at present.

Personally and as a family the hatchery system in Prince William Sound has been of great benefit to us, especially because of the destruction of many natural salmon streams due to the 1964 earthquake. In many places, PWS land and islands raised anywhere from 6 ft to 30 ft which prevented ocean water and fish from reaching the streams, photos in the Valdez Museum show some of that destruction. The hatchery system helped the survival of wild salmon in PWS and supplemented the fisheries which helped the economy of the coastal towns of Alaska, including Valdez, Cordova, Whittier, Seward, Homer and even Anchorage and the Valley that also has a large population of salmon fishermen.

First, to decrease egg take levels by 25% assumes that all the salmon fry released make it to the ocean and scientific research has shown that is not true, in fact research at Southeast Alaska hatcheries showed that only 43% of the hatchery fry survived and that within the first week, not even taking into account ocean survival. In addition to that, Proposal 78 doesn't even mention the ongoing reality of marine mammals like sea lions and whales that are consuming large amounts of outgoing fry and incoming salmon. The large consumption of fry and salmon is documented every year and has hit a crisis level in the last 4 years with as many as 40 sea lions in front of each hatchery and great numbers of whales have discovered the hatchery fry in the spring.

No one should consider passing Proposal 78 without acknowledging and studying the impacts of these marine mammals on the numbers of hatchery fish. If this issue has not been addressed then there is a lack of understanding of the conditions within Prince William Sound. Add to that the ocean conditions and the foreign nations who also produce pink salmon then it is obvious that there are many factors affecting the fish in Alaska. And to be fair, having grown up in Cook Inlet and watching more and more sportsmen and dip netting happen on the Kenai River perhaps we should also be asking how such intense fishing on king salmon who are returning to their spawning river are surviving nets and outboard motor propellers and hooks.

To blame all the decline on the unknown factor of hatchery fish is unfair and unscientific. If PWS loses the hatchery program the effects will be devastating for Alaskan fishermen far and wide, not just the fishermen with the permits but also the towns that rely on their income, the deckhands, the tender and the processors plus all those businesses down the line that benefit



from the fish. Plus, not everyone realizes that commercial seiners pay for 73% of the entire hatchery stock of silvers for sportsmen, and those are expensive fish. Those numbers are authenticated by the Valdez Hatchery system.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to

the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Sonja Corazza

A solid black rectangular box used to redact the signature of Sonja Corazza.

Homer, Alaska



CORDOVA DISTRICT  
**FISHERMEN**  
— UNITED —

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish  
(except shrimp) Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

Cordova District Fishermen United (CDFU) is an industry-based nonprofit strengthening commercial fishing in the Prince William Sound region by advocating for the needs of community-based fishermen. We are celebrating 90 years representing fishermen and their families for thriving fisheries that sustain regional ecosystems, communities, and ways of life - ensuring they are well informed, resourced, and mobilized to affect positive change for all harvesters in the region.

Proposals submitted in April by CDFU were thoughtfully developed since the 2021 BOF meeting cycle considering input through direct relationships with fishermen, processors, ADFG, PWS hatcheries, our RSDA, and other community stakeholders in Prince William Sound fisheries.

This fall CDFU hosted open gear group committees with Area E fishermen to develop position recommendations on proposals for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting, and advise its Board of Directors.

The slate of positions below represents a strong future for fishermen and a resilient regional economy built with good science, a shared burden of conservation and fair

opportunity for all user groups, productive hatcheries and adaptable management to create and sustain more small-scale, low-impact fisheries.

We respectfully ask you to consider our enclosed comments as you deliberate.

We want to thank each member of the Alaska Board of Fisheries for your time and consideration of our comments. We greatly appreciate your service and the attention to the issues facing our fleet and fisheries. Staff, CDFU Board of Directors, and gear group committees are available to further clarify anything regarding our comments. Please do not hesitate to reach out.

Sincerely,



Ezekiel Brown  
Board President  
[ezekiel.k.brown@gmail.com](mailto:ezekiel.k.brown@gmail.com)



Jess Rude  
Executive Director  
[director@cdfu.org](mailto:director@cdfu.org)

BOF Proposal Number	BOF Proposal Synopsis	CDFU Comments	Appendix with tables, graphs, etc.?
1	Establish pot gear as legal gear for sablefish in PWS subsistence, sport, and personal use fisheries	OPPOSE	
2	Reopen waters closed to the harvest of groundfish in Prince William Sound	SUPPORT	
3	Modify Prince William Sound groundfish pot specifications	SUPPORT	
5	Adopt a provision to close waters to specific groundfish gear types for rockfish conservation	OPPOSE	YES
6	Allow for release of rockfish in mechanical jig and hand troll fisheries	SUPPORT	
7	Establish gear specifications for directed lingcod fisheries in Prince William Sound	OPPOSE	YES
8	Modify the Prince William Sound pacific cod fishery guideline harvest level	SUPPORT	
9	Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed	SUPPORT	
10	Modify pot limit in the Prince William Sound Pacific cod fishery	SUPPORT	
13	Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery	SUPPORT	
14	Close the Prince William Sound walleye pollock pelagic trawl fishery	NO POSITION	
15	Modify bycatch limits in the Prince William Sound pelagic trawl fishery	NO POSITION	
16	Close the Prince William Sound pelagic trawl fishery	NO POSITION	
17	Establish observer requirements in the Prince William Sound pelagic trawl fishery	NO POSITION	
19	Modify the commercial fishing season for sablefish in Prince William Sound	SUPPORT	
20	Modify the commercial fishing season for sablefish in Prince William Sound	SUPPORT	
22	Allow the concurrent use of longline gear and sablefish pot gear in Prince William Sound	SUPPORT	
23	Prohibit the retention of sablefish from state waters	SUPPORT	
25	Establish a personal use sablefish fishery in Prince William Sound	OPPOSE	
26	Establish a Prince William Sound groundfish personal use fishery	OPPOSE	
27	Modify rockfish bag and possession limits	SUPPORT	
28	Modify the rockfish area, bag and possession limit	OPPOSE	
29	Create additional provisions for yelloweye rockfish management	SUPPORT	
31	Repeal closed waters for the Prince William Sound subsistence and commercial Tanner crab fisheries	SUPPORT	YES
32	Reopen the subsistence and commercial Dungeness crab fisheries in Prince William Sound	SUPPORT	
33	Adopt community-based subsistence harvest permits and reporting requirements for shellfish in the Prince William Sound Area	OPPOSE	
34	Repeal the Registration Area E Tanner crab harvest strategy	SUPPORT	YES
35	Modify the harvest strategy for Prince William Sound Tanner crab	SUPPORT	YES
36	Increase the pot limit in the Prince William Sound Tanner crab fishery	SUPPORT	
37	Establish a pot limit of 30 pots per vessel in the Prince William Sound Tanner crab fishery	SUPPORT	
38	Allow vessels participating in the Prince William Sound Tanner crab fishery to also tender Tanner crab	SUPPORT	
39	Establish season dates for a commercial golden king crab fishery in Prince William Sound	SUPPORT	YES
40	Adopt a harvest strategy for golden king crab in Prince William Sound	SUPPORT	
42	Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound	OPPOSE	
43	Establish a directed octopus fishery in Prince William Sound	SUPPORT	
46	Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery	SUPPORT	
47	Require inseason reporting in subsistence and personal use fisheries	SUPPORT	
48	Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict	OPPOSE	
49	Prohibit transport services in the Glennallen Subdistrict	SUPPORT	
51	Reduce commercial salmon fishing opportunity in the Copper River District	OPPOSE	YES

52	<i>Reduce commercial salmon fishing opportunity in the Copper River District</i>	OPPOSE	YES
53	<i>Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met</i>	OPPOSE	YES
55	<i>Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted</i>	SUPPORT	
56	<i>Allow permit stacking by Prince William Sound commercial salmon drift gillnet permit holders</i>	NO POSITION	
57	<i>Allow dual permit operations in the Prince William sound commercial drift gillnet salmon fishery</i>	NO POSITION	
58	<i>Amend the Copper River King Salmon Management Plan</i>	OPPOSE	
59	<i>Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan</i>	OPPOSE	
60	<i>Modify the annual limit for the Chitina Subdistrict</i>	SUPPORT	
61	<i>Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict</i>	SUPPORT	
62	<i>Allow inseason adjustment of the Copper River personal use maximum harvest level</i>	SUPPORT	
63	<i>Amend the opening date of the Chitina Subdistrict personal use fishery</i>	OPPOSE	
64	<i>Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year</i>	SUPPORT	
65	<i>Require a weekly permit and inseason reporting in the Chitina Subdistrict</i>	SUPPORT	
66	<i>Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal</i>	SUPPORT	
67	<i>Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict</i>	SUPPORT	
68	<i>Prohibit dipnetting from a boat in the Chitina Subdistrict</i>	SUPPORT	
69	<i>Establish restrictions when dipnetting from a boat in the Chitina Subdistrict</i>	SUPPORT	
70	<i>Extend the lower boundary of the Chitina Subdistrict</i>	OPPOSE	
71	<i>Prohibit guiding in the Chitina Subdistrict</i>	SUPPORT	
72	<i>Close sport fishing for salmon based on water temperature in the Gulkana River</i>	SUPPORT	
73	<i>Allow permit stacking by Prince William Sound commercial salmon purse seine permit holders</i>	NO POSITION	
74	<i>Allow permit stacking in the Prince William Sound commercial salmon purse seine fishery</i>	NO POSITION	
75	<i>Amend the Prince William Sound Management and Salmon Enhancement Allocation Plan</i>	NO POSITION	
76	<i>Amend the Prince William Sound Management and Salmon Enhancement Allocation Plan to increase access to the Port Chalmers Subdistrict by drift gillnet permit holders</i>	NO POSITION	
77	<i>Include salmon produced by Valdez Fishery Development Association in the Prince William Sound Management and Salmon Enhancement Allocation Plan</i>	NO POSITION	
78	<i>Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%</i>	OPPOSE	YES
79	<i>Close Main Bay to all fishing during hatchery cost recovery operations</i>	SUPPORT	YES
80	<i>Manage the Main Bay sport fishery based on the hatchery corporate escapement goal</i>	SUPPORT	YES
81	<i>Modify the area open to sport fishing near the Main Bay Hatchery</i>	SUPPORT	YES
83	<i>Allow a resident sport angler to use two rods when fishing for salmon</i>	OPPOSE	
84	<i>Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel</i>	SUPPORT	YES
85	<i>Modify the bag and possession limit for coho salmon</i>	OPPOSE	
86	<i>Modify the sport fishing area and season dates in Ibeck Creek</i>	SUPPORT	
87	<i>Modify the sport fishing area and season in a Copper River Delta system</i>	SUPPORT	
88	<i>Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed</i>	SUPPORT	
96	<i>Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation</i>	SUPPORT	

97	<i>Reduce the minimum herring spawning biomass threshold</i>	<b>SUPPORT</b>	YES
98	<i>Align Prince William Sound herring and salmon management area descriptions</i>	<b>SUPPORT</b>	
99	<i>Define commercial herring fishery districts in Prince William Sound</i>	<b>SUPPORT</b>	YES
100	<i>Adopt a Kayak Island District herring management plan</i>	<b>SUPPORT</b>	
102	<i>Allow commercial fishery permit holders to harvest herring for the own use as bait</i>	<b>SUPPORT</b>	

**Proposals 1, 25, and 26 - OPPOSE**

***-Establish pot gear as legal gear for sablefish in PWS subsistence, sport, and personal use fisheries.***

***-Establish a personal use sablefish fishery in Prince William Sound.***

***-Establish a Prince William Sound groundfish personal use fishery.***

The proposal 25 author states that the sablefish GHL is not being fully harvested, and that therefore a surplus supports reallocating leftover GHL to a new personal use fishery. We do not support this, as we have authored proposals and support others that will remove some of the regulatory hurdles that prevent the commercial fleet from harvesting the full GHL.

Similar regulation exists in Southeast Alaska but Prince William Sound sablefish populations do not compare. The addition of a sport/personal use pot fishery in PWS will create a gear conflict with established longline gear. Participation in a sablefish pot fishery will require excessive gear and equipment expenses in order to safely haul pots, line and anchors to set in 2,000+ ft of water. This is burdensome for an average sport/personal use vessel, and very unlike setting shrimp pots in 300 ft of water. Associated difficulties will result in much lost gear. Today, sport fishermen are currently quite successful at targeting black cod with rod and reel. Electric reels are now affordable and commonplace.

**Proposal 2 - SUPPORT**

***Reopen waters closed to the harvest of groundfish in Prince William Sound***

Existing closure areas were created in the 1990's to protect crab stocks, but the areas defined that prohibit groundfish harvests force groundfish fishermen to use hooks instead of pots. This results in a greater harvest of rockfish and other non-targeted species. Passing this proposal will further incentivize the use of slinky pots that reduce potential crab bycatch because species are returned to the water unharmed, unlike rockfish bycatch by hooks. ADFG opposed this proposal in part due to the low harvest of Pacific cod in this area. However there is a high level of harvest by hooks for halibut and black cod in the pot closure area that could potentially switch to pots if this proposal were to pass.

**Proposal 3 - SUPPORT**

***Modify Prince William Sound groundfish pot specifications***



We are in favor of increased opportunity for IFQ fishermen to harvest their quota with reduced rockfish bycatch. Reducing halibut fishing with hooks will also decrease whale predation.

### **Proposal 5 - OPPOSE**

#### ***Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.***

Commercial rockfish harvest is not consistently exceeding its GHL. In fact, looking at the average harvest for the last ten years, commercial harvests are below the GHL. Being that rockfish are long-lived species and that on average the GHL is not exceeded, one individual year of exceeding the GHL does not necessitate BOF action. Harvest by commercial has not been growing, but sport harvest has more than doubled since the early 90's. Sport harvest in PWS now exceeds an estimated 340,000 lbs, which is more than double the commercial GHL. Furthermore, the commercial GHL was based on mean annual harvest and the state of Alaska has had no consistent rockfish survey in PWS.

ADFG is not enforcing the regulations of the current PWS rockfish management plan that are designed to limit rockfish harvest specifically: "a) A vessel may not land or have on board more than a combined total of 3,000 pounds (round weight) of all rockfish species within five consecutive days." Enforcing this regulation would be sure to limit trawl bycatch.

The Commissioner already has the ability to close any state fishery to conserve rockfish. This proposal is a means to regulate the federal halibut fishery, over which it does not have management authority. We have concerns that granting the state this power will, if it is used to close state waters to federal halibut fishing, put the state in conflict with federal law and open yet another legal dispute.

Included in appendix, pages 1-3:

- Alaska Sport Fishing Survey Regional Summary Estimates in numbers, 2014-2023
- Alaska Sport Fishing Survey Regional Summary Estimates in numbers, 1996-2005
- Table 3, PWS commercial rockfish harvest by gear type in pounds, 1988-2019
- Table, PWS Rockfish GHL and Harvest, 2010-2024

**Proposal 6 - SUPPORT*****Allow for release of rockfish in mechanical jig and hand troll fisheries.***

Sport fishermen regularly use deep water releases to return unwanted rockfish unharmed. We would like to see this proposal expanded to allow longline and pot fishermen to also be allowed to use deepwater releases to return rockfish.

**Proposal 7 - OPPOSE*****Establish gear specifications for directed lingcod fisheries in Prince William Sound.***

This proposal is an attempt to reallocate the lingcod resource away from traditional user groups. Longline fishermen in PWS rarely, if ever, target lingcod as claimed by proposer. Instead, the quota is caught as bycatch in the halibut longline fishery. The lingcod fishery in PWS is quite small, with annual harvests of 20,000-30,000 lbs - the majority of which is harvested outside state waters.

The bycatch of rockfish in this fishery is only a small percentage, and is not enough to necessitate an expensive gear change. The GHL for lingcod is not being fully harvested, and longline fisheries are staying within the determined rockfish bycatch limits. Closing the lingcod fishery to longline gear would do little to reduce harvest of lingcod by the halibut longline fleet. They simply would be forced to surrender the proceeds of their lingcod bycatch to the state.

Included in appendix, page 4:

- Table, PWS Lingcod GHL and Harvests, 2012-2024.

**Proposal 8 - SUPPORT*****Modify the Prince William Sound pacific cod fishery guideline harvest level.***

The PWS Pacific cod fishery is not fully developed. Pacific Cod are plentiful, quota is being easily harvested in a small portion of the area, and much area is unfished. Allowing for growth in the fishery with a percentage increase in quota on years when the quota is harvested will provide PWS fishermen with a much needed winter fishery. An incremental percentage increase is consistent with the initial structure of other state-waters Pacific cod fisheries. This is how quota was initially set to 25% in 2011.

**Proposal 9 - SUPPORT**

***Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.***

The development and use of longlined collapsible slinky pots in the Pacific cod fishery allows much smaller vessels to fish pots than previously could. Multiple proposals have asked for the quota allocation of pots to be increased. Simply combining the longline and pot quota will allow fishermen to harvest the resource whichever way they prefer, while still leaving some quota set aside for small boat jig fishermen.

Bycatch of rockfish is much lower when using pots than hooks. Closing the P-cod fishery to longline hooks for January and February will further incentivise fishermen to switch to fishing pots which will further reduce bycatch of rockfish. We are working to develop alternative language for this proposal that would allow for a slinky pots fishery to occur during the parallel season and retain allocation for jig and handtroll.

**Proposal 10 - SUPPORT**

***Modify pot limit in the Prince William Sound Pacific cod fishery.***

The 60 pot limit was created when the pot fishery was being prosecuted with conventional hard pots weighing 500+ lbs and 6' tall or bigger. With the adoption of smaller lightweight slinky pots, a larger pot limit is prudent.

Lightweight, collapsible slinky pots used by the small boats participating in the cod fishery are much smaller than conventional hard pots. They have a volume of about 15 cubic ft per pot. A conventional hard pot has a volume of 120 cubic ft. Passing this regulation would allow small boats to fish 120 lightweight pots, which would further encourage the switch to pot gear from longlining hooks.

There is no definition of a slinky pot in regulation. Since it is a new, evolving technology, we would not suggest creating any regulation that might prohibit refinement of the design. Instead we suggest simply defining them as a "pot weighing less than 30 lbs".

**Proposal 13 - SUPPORT**

***Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery.***

There is an unharvested surplus of skates, and therefore fishermen should have the ability to harvest them. This could be either through a directed fishery or liberalized bycatch limits.

**Proposals 14, 15, 16, 17 - COMMENT**

- Close the Prince William Sound walleye pollock pelagic trawl fishery.***
- Modify bycatch limits in the Prince William Sound pelagic trawl fishery.***
- Close the Prince William Sound pelagic trawl fishery.***
- Establish observer requirements in the Prince William Sound pelagic trawl fishery.***

CDFU did not take a position on Proposals 14-17, which seek to close or modify the regulations for the PWS pollock pelagic trawl fishery. We have concerns about bycatch in this fishery, however pollock are predators on salmon and herring fry. At this time ADFG has not yet shared data to best understand the trawl fishery impacts. We urge the BOF to exercise caution on drastic proposals such as these and ask that any actions taken on this fishery are taken incrementally.

Neither the BOF or ADFG have been granted the authority to require electronic monitoring aboard vessels. CDFU does not support any such requirements without sufficient guardrails to prevent excessive burden on small boat fishermen. CDFU supports increased observer coverage placed upon these vessels only if paired with a hard rockfish bycatch cap. Rockfish harvest in the pelagic trawl fishery is included in the 150,000lb GHL for rockfish in PWS harvested by all commercial fisheries. Under current regulation, it is theoretically possible for the TAC for this fishery to grow large enough that the Pollock trawl fleet could catch the entire GHL for rockfish in January and force closures of other statewaters groundfish fisheries that our members participate in.

**Proposal 19 - SUPPORT*****Modify the commercial fishing season for sablefish in Prince William Sound.***

The sablefish GHL has not been harvested since the implementation of the shared quota fishery in 2003. Managing through individual quotas has failed to allow full harvest of the resource. It is costing permit holders thousands of dollars in lost opportunity. Permit holders should have the opportunity to harvest fish that are being left in the water every year due to the cumbersome quota share system.

Some proposals request the season be extended into October. If the BOF chooses to pass one of those proposals, we would like to see proposal 19 modified so the “B season” begins two weeks after whatever new closure date is adopted.

**Proposal 20 - SUPPORT*****Modify the commercial fishing season for sablefish in Prince William Sound.***

We know of no biological reason for the current season dates. Two other proposals request extending season length. Fishermen often start fishing halibut in PWS before the April 15th opener for sablefish, and are forced to throw all their sablefish back overboard.

**Proposal 22- SUPPORT*****Allow the concurrent use of longline gear and sablefish pot gear in Prince William Sound.***

Fishing with pots should be encouraged. They have a lower bycatch rate of rockfish versus hooks. This proposal would align regulations with the federal fishery, where fishing with both pots and hooks is allowed.

Often groundfish fishermen deliver in a port other than their home port. If a Cordova-based fisherman goes halibut fishing, delivers in Seward, and then wants to pot fish black cod, he first has to run all the way back to Cordova to drop off his hooks. Halibut fishermen fishing in federal waters commonly have both pots and hooks aboard but often transit state waters, making for an enforcement nightmare.

**Proposal 23 - SUPPORT*****Prohibit the retention of sablefish from state waters.***

Southeast Alaska also has a state water sablefish fishery, but does not have regulation this broad. Southeast's regulation: "5 AAC 28.170 (b) The operator of a fishing vessel may not take sablefish in the Northern or Southern inside Subdistricts with sablefish taken in another area on board."

This is a PWS sablefish management plan, and therefore regulations within should pertain to the PWS sablefish fishery. This regulation as written prohibits federal sablefish fishermen from operating gear for any species in state waters. These fishermen often don't even participate in the PWS sablefish fishery, and therefore have no reason to look for this regulation in the book. If the BOF wishes to keep this regulation as is, it will need to be moved to a more appropriate place as a general PWS groundfish regulation.

**Proposal 27 - SUPPORT*****Modify rockfish bag and possession limits.***

The sport fleet is targeting rockfish on the same pinnacles day after day, catching and releasing hundreds of fish. Deep water releases have a decent survival rate when used once on a fish. But the same rockeye are being caught over and over again. We support the BOF creating a hard cap on rockfish harvest by the sport fleet to prevent their harvest level from continuing to grow.

**Proposal 28 - OPPOSE*****Modify the rockfish area, bag and possession limit.***

There is no separate management for rockfish for inside and outside waters of PWS. As more and more participants move to outside waters, sport rockfish limits should be lowered, not raised.

**Proposal 29 - SUPPORT*****Create additional provisions for yelloweye rockfish management.***

Any regulations should be placed on the user group whose harvest is growing unchecked. Sport rockfish harvest has been growing for 20 years. Commercial harvest has remained steady.

This proposal does not go far enough. The BOF should consider placing a harvest cap on sport rockfish to prevent continued expansion of this fishery. It should also expand to best manage all rockfish, not just yelloweye.

**Proposal 31 - SUPPORT*****Repeal closed waters for the Prince William Sound subsistence and commercial Tanner crab fisheries.***

The PWS Tanner crab fishery is the only one in the state with closed waters. The closed waters are traditional Tanner crab grounds for both subsistence and the historic commercial fishery. Repealing the closed waters would increase access to the resource for subsistence users on the east side of PWS who are currently limited in protected area to crab.

Closed water regulations were passed in the 2017 and 2021 BOF meeting cycles, but not properly vetted. They were created to protect "Tanner crab nursery grounds" but this is flawed logic as the proposal points out. ADFG's own trawl survey does



not show evidence of concentrations of juvenile crab in the closed waters of Fidalgo and Gravina. But it does show populations mixed with juveniles, females, and mature males throughout PWS.

Included in appendix, page 5:

- Figure 7 from “Bottom Trawl Surveys for Tanner Crab in PWS, 2017-2019” showing the location of male Tanner crab.

### **Proposal 32 - SUPPORT**

#### ***Reopen the subsistence and commercial Dungeness crab fisheries in Prince William Sound.***

ADFG continues to assert that it needs a stock assessment program to allow for a Dungeness fishery in PWS, despite allowing Dungeness fisheries throughout Alaska with no stock assessments.

Kodiak and westward saw similar decline to PWS's Dungeness crab populations throughout the early 2000's, with harvest declining to 69,001 lbs in 2013. Despite that low harvest and a CPUE of 2 in 2013, the Kodiak fishery never closed. It is now booming, with multiple harvests of more than 2 million pounds per year in the last 5 years.

This proposal's edits left it unclear what exact regulations we propose to be changed. We are asking for the commercial fishery to be opened by making the following changes to reflect traditional season dates in effect before the closure of the fishery: 5 AAC 32.210. Fishing seasons for Registration Area E [THERE IS NO OPEN FISHING SEASON FOR DUNGENESS CRAB IN THE PRINCE WILLIAM SOUND AREA.] In Registration Area E, male Dungeness Crab may be taken or possessed only from 12:00 noon March 20 through May 20 and from 12:00 noon August 25 through December 31.

Pot limits and buoy marking requirements for the commercial fishery are already in regulation. We are asking for the subsistence fishery to be opened by making the following changes:

5 AAC 02.215. Subsistence Dungeness Crab fishery in the subsistence taking of Dungeness crab in the Prince William Sound Area: [IS CLOSED UNTIL THE DUNGENESS CRAB STOCKS RECOVER ENOUGH TO PROVIDE A HARVESTABLE

SURPLUS AND REGULATIONS ARE ADOPTED BY THE BOARD OF FISHERIES THAT REOPEN THE FISHERY.]

- (1) Dungeness Crab may be taken from March 20 through May 20 and from August 25 through December 31
- (2) the daily bag and possession limit is 5 crab per person
- (3) only male Dungeness Crab six and one-half inches or greater in shoulder width may be taken or possessed; male Dungeness Crab less than the minimum legal size and female Dungeness Crab that have been taken must be immediately returned to the water unharmed; for the purposes of this paragraph, the shoulder width measurement of Dungeness Crab is the straight-line distance across the carapace immediately anterior to the tenth anterolateral spine, not including the spines;
- (4) a pot used to take Dungeness Crab under this section must have at least two escape rings that each are not less than four and three-eighths inches inside diameter; the escape rings must be located on opposite sides of the pot and the upper half of the vertical pane of the pot
- (5) no more than 10 ring nets or pots per person, with a maximum of 20 ring nets or pots per vessel, may be used to take Dungeness Crab.

### **Proposal 33 - OPPOSE**

***Adopt community-based subsistence harvest permits and reporting requirements for shellfish in the Prince William Sound Area.***

Community-based subsistence harvest permits are not granted for fish or shellfish. The commercial fishery is an open access fishery. Opening a small-scale commercial fishery provides opportunity for all users.

### **Proposal 34 - SUPPORT**

***Repeal the Registration Area E Tanner crab harvest strategy.***

The current Area E Tanner crab harvest strategy is unworkable, as it relies too heavily on trawl surveys and does not allow for a fishery in the majority of the PWS area. At the 2021 meeting the Area E Tanner crab harvest strategy was passed as a placeholder that allowed for a small fishery in 2022. ADFG assured fishermen that a more holistic Tanner crab harvest strategy was forthcoming, and would be presented for the 2024 meeting.



Figure 1 shows areas defined in the current harvest strategy, which has no defined area or harvest strategy for most outside waters or northern and western PWS. The shaded areas on the map show historic trawl survey locations.

Figure 8 from the 2021 PWS Trawl survey in Area 3 shows catches of legal male Tanner crab. That year in the 57 tows the total catch of legal males was 26, which resulted in an abundance estimate of 40,289 legal crab. This science is flawed. It's evident there are more than 40,000 legal crab in Area 3. The Commissioner's permit fishery harvested an average of 33,642 crab every year in just one portion of this area from 2018-2021. Trawl surveys in PWS are ineffective at making population estimates. ADFG staff comments state "Abundance estimates from the trawl survey decreased by 65% from these levels down to ~75,000 legal male crab in 2018 and ~63,000 legal male crab in 2019." 2019 was the second year the Commissioner's permit fishery was allowed in a small portion of the area. That year harvested 74,405 crab more than the department trawl survey results indicated was in the entirety of Area E. The following year, 2021, the Commissioner's permit fishery harvested 77,474 crab.

During the 2022 test fishery that occurred in Area 3 (shown in Figure 2022 PWS Tanner Crab Test Fishery Harvest), the vessel easily caught the 5000 lb quota with a CPUE of >30 legal male crab per pot. Note that Areas B, D, E and F in the chart are not part of the PWS Tanner crab harvest strategy, and are not surveyed with no mechanism to be opened.

CDFU encouraged fishermen to participate in the Tanner crab test fisheries over 4 years because the ADFG stated that they needed this data to create a harvest strategy for PWS. Instead, ADFG gave us a harvest strategy which did not use any test fishery data. This created no possibility of opening some of the best fishing grounds found in the test fisheries.

Included in appendix, pages 6-8:

- Figure 1, Northeastern, Central, and Southwestern PWS Tanner Crab Districts
- Figure 8, Catches of legal size and historical legal size male Tanner crab from the 2021 PWS Area trawl survey in Area E
- Table 3, PWS Commissioner's Permit Tanner crab fishery harvest and effort information by statistical area, 2018-2021
- Figure, 2022 PWS Tanner Crab Test Fishery Harvest

**Proposal 35 - SUPPORT*****Modify the harvest strategy for Prince William Sound Tanner crab.***

At the 2021 BOF meeting, ADFG and fishermen worked together at the last minute to create a flawed PWS Tanner crab management plan. The BOF, ADFG and CDFU expressed interest in working together to create a more workable plan before the 2024 BOF meeting.

CDFU reached out to ADFG multiple times in the last year to collaborate on proposals related to PWS Tanner crab but received extremely limited input. Proposal 35 is our best attempt to create a workable harvest strategy for PWS Tanner crab that will result in a sustainable fishery.

Included in appendix, pages 9-28:

- “Recommended Harvest Strategy for Southeast Alaska Golden King Crab”.

**Proposal 36 - SUPPORT*****Increase the pot limit in the Prince William Sound Tanner crab fishery.***

At the 2017 BOF meeting the pot limit was reduced from 75 pots to 30 pots. This was part of a large proposal by the ADFG to establish a new harvest strategy for PWS Tanner crab. No justification for the reduction was given by ADFG in their proposal or in ADFG staff comments. There was not public support for the reduction.

Pot limits should be set with input from the fleet. The pot limit reduction passed as part of a total rewrite of the Tanner crab management strategy. That harvest strategy was flawed in many ways, and working through that distracted from input on the pot reduction section.

Higher pot limits reduce handling of immature and female crabs because it increases soak times. This allows time for small crab to leave the pot via the escape rings. As we have in many different areas and other fisheries, Fishermen will ask the BOF to lower the pot limit if fishery participation increases and crowding becomes an issue from too many pots.

The small pot limit makes prospecting PWS exceptionally time consuming and expensive. Since the fishery reopened, there is a large portion of PWS, especially the outside waters, that have not been explored. Tanner crabs move in schools. They are easily missed when too few pots are spread over too large an area. This pot limit is

damaging to the resource because it increases the handling of undersized crab. It also is economically damaging to fishery participants because it increases the bait, fuel, and time required to execute the fishery.

### **Proposal 37 - SUPPORT**

***Establish a pot limit of 30 pots per vessel in the Prince William Sound Tanner crab fishery.***

ADFG does not need the ability to adjust pot limits to manage the fishery. For instance, the length of salmon seines isn't adjusted from season to season based on run size. The daily reporting requirement in regulation allows ADFG to closely monitor the pace of the fishery and close it when there is a danger of exceeding the GHL. There is no regulation allowing adjustment to pot limits by ADFG for Southeast or Kodiak, instead static pot limits are set by the BOF. In 2022 ADFG utilized this regulation to lower the pot limit to 25. This was a significant reason the fleet was unable to harvest the GHL that season. There are currently open access tanner crab fisheries which harvest small GHLs in Chignik and the South peninsula. ADFG does not have authority to adjust pot limits in either of these fisheries by EO.

### **Proposal 38 - SUPPORT**

***Allow vessels participating in the Prince William Sound Tanner crab fishery to also tender Tanner crab.***

Modern communications and reporting requirements eliminate the concerns that have restricted tenders in the past. Allowing tendering by participants in this fishery will allow fishermen to reduce fuel usage by combining their catch on one boat to run to deliver. In the current economic environment, the BOF should be considering all options to reduce fuel consumption and increase profitability of small scale fisheries. ADFG has the ability to manage a fishery in which fishery participants can also be tender vessels. Under the transporter regulation, it does this in the Kodiak Dungeness fishery and every salmon fishery in the state.

### **Proposal 39 - SUPPORT**

***Establish season dates for a commercial Golden King crab fishery.***

Southeast Alaska has a booming Golden King crab fishery without a fishery independent assessment.

“The Alaska Department of Fish and Game (department) evaluates stock status and establishes guideline harvest levels (GHLs) for each management area using fishery dependent data including: catch per unit of effort (CPUE), harvest and biological information (carapace length, weight, and maturity) from dockside sampling landings. No population abundance estimates are obtained for GKC stocks.” -from the Regional Information Report No. 1J21-10 2020 Golden King Crab Stock Status and Management Plan for the 2020/21 Season

Photos included show the amount of Golden King crab encountered during the Commissioner’s permit fishery for Tanner crab, the King crab test fishery, and subsistence fishing. Our fishermen have seen ample evidence of Golden King crab abundance. ADFG has no assessment for Golden King crab in PWS and to date has stated no intention of developing the harvest strategy current regulation stipulates. It seems that this fishery will stay closed forever without action by the BOF.

Included in appendix, pages 9-30:

- “Recommended Harvest Strategy for Southeast Alaska Golden King Crab”
- Regional Information Report No. 1J21-10 2020 Golden King Crab Stock Status and Management Plan for the 2020/21 Season.
- Photos, King Crab caught during the Commissioner’s permit Tanner crab fishery and subsistence fishing
- Photo, Golden King crab caught during Commissioner’s permit Tanner crab fishery
- Photo, King crab caught during 2020 King crab test fishery

#### **Proposal 40 - SUPPORT**

##### ***Adopt a harvest strategy for golden king crab in Prince William Sound.***

Golden King crab fisheries must depend on CPUE in the commercial fishery to set its GHL, because there is no good way to survey. This proposed harvest strategy is similar to the one being used with success in Southeast.

ADFG comments that “The harvest rates in these fishery and assessment programs suggest that there likely is not a commercially harvestable surplus of Golden King crab.” However Southeast Alaska has a commercial Golden King crab fishery that occurs with harvest rates the same or lower than have been seen in PWS in recent decades. The Southeast fishery also occurs without a fishery independent stock assessment.

As the fishery develops and distinct populations of Golden King crab are discovered, it will be prudent to break the area into districts. In the meantime, the statistical areas that are already in regulation allow for a reasonable starting point until the next BOF meeting cycle.

Local PWS economies are struggling following years of depressed fish prices, increased overhead costs for operations, and increased efforts of time for static harvests. It is imperative that the BOF direct ADFG to open these small scale fisheries, because they are simply not being proactively opened without BOF direction.

#### **Proposal 42 - OPPOSE**

***Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound.***

Crab fisheries close during the summer months because this is when crab are molting and most susceptible to mortality from handling.

We oppose the opening of a sport fishery for King or Tanner crab without also opening a commercial fishery.

#### **Proposal 43 - SUPPORT**

***Establish a directed octopus fishery in Prince William Sound.***

In recent years the GHL for PWS octopus has not been harvested but fishermen are interested in an octopus fishery.

#### **Proposal 46, 47 - SUPPORT**

***-Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.***

***-Require inseason reporting in subsistence and personal use fisheries.***

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting on the lower Copper River will cause any burden to subsistence users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

#### **Proposal 48 - OPPOSE**

##### ***Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.***

The commercialization of subsistence resources in Alaska goes against their intended use. No one should collect profits from a subsistence fishery. Additionally, competition by professional guides in a subsistence fishery increases the cost and difficulty for participants not using a guide service to be as productive.

Preventing the commercialization and guiding within the subsistence fishery is a precedent being set across Alaska. Prohibiting the commercialization of subsistence fisheries became statewide regulation in 2024; repealing this would need to be taken up at the statewide BOF meeting.

#### **Proposal 49 - SUPPORT**

##### ***Prohibit transport services in the Glennallen Subdistrict.***

We support this proposal but with an edit that would add the restriction of “transporting” but also retain “directing” in the regulation. Removing “directing” may create ambiguity in the regulation.

#### **Proposals 51, 52, 53 - OPPOSE**

***-Reduce commercial salmon fishing opportunity in the Copper River District.***

***-Reduce commercial salmon fishing opportunity in the Copper River District.***

***-Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.***

These proposals restrict ADFG from managing the fishery to their best potential by taking management tools from local fish biologists/manager. Management has



shown to already restrict early commercial effort. The objectives of these proposals will have severe economic impacts to the fleet and the region.

The 2012, 2013 and 2015 seasons saw huge escapement numbers that led to a negative spawner recruitment model for the returning years of 2017, 2018, and 2020. Without commercial harvest in the Copper River district, this could have led to an even more drastic over-escapement of the years that exacerbated a decline in spawner recruitment.

Additionally, the run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June 10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

Included in appendix, page 31:

- Figure A8, Minimum and maximum inriver sonar goal versus actual daily and cumulative salmon passage, Miles Lake sonar, 2013

### **Proposal 55 - SUPPORT**

#### ***Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.***

We favor how this proposal addresses a shared burden of conservation. It is irresponsible and unsustainable to allow commercial guiding operations to efficiently harvest king salmon upriver while downriver commercial users are restricted in an effort to allow these same kings into the river. As the author stated, commercial users throughout this river system should share the responsibilities when necessary to ensure the conservation of this resource.

**Proposal 56, 57 - COMMENT**

***-Allow permit stacking by Prince William Sound commercial salmon drift gillnet permit holders.***

***-Allow dual permit operations in the Prince William sound commercial drift gillnet salmon fishery.***

CDFU membership did not have a consensus on these proposals and therefore did not take a position. Proposals 56 and 57 would create a permit stacking regulation for the drift fleet where a fisherman who holds two permits could fish a 200 fathom net, or allow two permit holders to operate a 200 fathom net from the same vessel.

**Proposal 58 - OPPOSE**

***Amend the Copper River King Salmon Management Plan.***

With statewide concerns for king salmon, this is not a time to consider raising limits.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of sockeye, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**Proposal 59 - OPPOSE**

***Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.***

This proposal is a reallocation of a resource that is already at its allocation limit.

Personal use dip netting is not species-discriminative. Passing this proposal will mean more incidental harvest of king salmon, while the survival rates of salmon released from dip nets is not known. Releasing from a dip net on the Copper River often involves the fish being removed from the water and then dragged up a rocky cliff to be removed manually. Dip nets are made of gillnet web that tangle in a fish's gills and can cause further injury.

**Proposal 60, 61 - SUPPORT**

***-Modify the annual limit for the Chitina Subdistrict.***

***-Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.***



If the personal use fishery exceeds its allocation, there should be restrictions placed on this gear group to ensure conservation of the Copper River salmon population. With increased interest and growth in the personal use fishery, we must reduce the limits to allow all participants equal access, while also protecting this resource for future generations.

With no cap on personal use participants, the most direct way to protect the resource and remain within the allocation parameters is to reduce the annual bag limit.

### **Proposal 62 - SUPPORT**

#### ***Allow inseason adjustment of the Copper River personal use maximum harvest level.***

We favor how this proposal addresses a shared burden of conservation. We are in support of adopting a triggered regulation for conservation purposes. During times of concern, all user groups should be managed accordingly to ensure the long-term viability of this resource.

In years of low abundance, the commercial fishery typically bears the burden of conservation and sees significant reductions, but other user groups do not.

CDFU submitted a similar triggered-regulation proposal to the 2021 BOF meeting, which suggested a new section for regulation 5 AAC 77.591: if the Copper River District commercial harvest is 50% below the 10 year average by June 1, the maximum harvest level in the Chitina subdistrict will be reduced to 50,000 sockeye.

### **Proposal 63 - OPPOSE**

#### ***Amend the opening date of the Chitina Subdistrict personal use fishery.***

We share concerns about dip net pressure on Copper River stocks, however we do not support restricting management based on projected run timing curve. The run timing curve or “cumulative management objective” is not accurate and was created decades ago.

Run timing can vary drastically from season to season. A good example of this is the 2013 season, when the run was extremely late in going up the river. Fish did not start passing the sonar in large numbers until May 30th, at which point only 8,206 fish had passed but the cumulative management objective was 157,321. By June

10th, the extremely condensed run was charging up the river with the daily escapement count reaching a record level of 113,977 fish versus the anticipated daily count of 12,115. The final escapement count for the 2013 season was 1,267,060 versus the objective of 695,308. This drastic over-escapement event would have been much worse if the proposed regulation would have been in effect, as it would have prevented the harvest of an additional 320,337 sockeye.

#### **Proposal 64 - SUPPORT**

##### ***Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.***

Personal use limits were originally set based on what needs a participant may have for the year. Allowing a user to obtain their bag limits in multiple personal use fisheries is a loophole in state regulation that should be closed for conservation purposes. Commercial salmon boats must choose what state regulation area they will fish. In other instances in regulation, there are aggregate harvest limits based on area: In Game regulation, deer cannot be harvested to a full limit in PWS, Kodiak, and Southeast in one year.

#### **Proposal 65 - SUPPORT**

##### ***Require a weekly permit and inseason reporting in the Chitina Subdistrict.***

Timely and accurate reporting from all users along the Copper River is essential to understanding and managing the resource. Local area managers often take into account informal subsistence harvest reports to give indication of run strength when the commercial fishery is closed. Inseason reporting will increase the accuracy of harvest reports.

Existing regulations for reporting were written at a different time before fishermen had immediate access to cell phones and the internet. Commercial fisheries have required realtime reporting for years, proving it is possible. We do not believe requiring weekly reporting in the Chitina Subdistrict will cause any burden to its users. We cannot continue to wait until October 31st to understand the effects of any user group on the wild salmon populations.

Even if ADFG is not immediately ready to process this data, its collection will create the dataset for when they are ready to use better science in the future.

**Proposal 66 - SUPPORT**

***Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.***

Despite evidence of a strong return, the egg take goal for Gulkana hatchery was not achieved in 2024. It is imperative for all user groups to be managed for salmon resource goals. A similar regulation is in place for every other hatchery in the area and this regulation alignment will close a loophole as well as ensure efficient hatchery operations.

**Proposal 67 - SUPPORT**

***Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.***

This proposal encompasses good science. King salmon that are released must be given an opportunity to survive and spawn.

**Proposal 68, 69 - SUPPORT**

***-Prohibit dipnetting from a boat in the Chitina Subdistrict.***

***-Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.***

Regulation was written before the growing efficiency of this personal use fishery. We need to adapt regulation now to account for drastic changes in harvest and increased commercialization of the personal use fishery in recent years brought through guided express boat charters. Our Copper River king and sockeye resources simply cannot handle the impacts of an increased style of fishing prevalent in the Chitina subdistrict. The efficiency of the guided boat personal use dip net fishery has driven this gear group to be above their allocation.

**Proposal 70 - OPPOSE**

***Extend the lower boundary of the Chitina Subdistrict.***

The personal use dip net fishery has been exceeding its allocation in recent years. Instead of relieving pressure on the resource, this proposal to move a boundary would simply move pressure downriver: more area for the Chitina subdistrict will only increase effort by dipnetters and lead to more boats and pressure on the resource. There is a finite resource that is fully allocated, and we cannot continue to give more.

**Proposal 71 - SUPPORT*****Prohibit guiding in the Chitina Subdistrict.***

We are in support of this proposal that addresses the increased commercialization of the personal use fishery. A commercial gillnet fishery for Copper River salmon already exists: the Area E commercial gillnet fishery at the mouth of the Copper River. Anyone who would like to commercialize the harvest of fish can purchase an Area E gillnet permit.

Personal use only makes sense if Alaska residents are getting access to a resource for less than it would cost to purchase the resource. The commercialization of the personal use fishery through private guiding increases the cost to the average participant, as each fisherman is forced to either compete with skilled guides in powerful boats or pay upwards of \$400 dollars a day to ride along. When personal use fishermen invest in expensive guide services to harvest their fish, it easily equates to \$20 per fish or more. This is more than someone might pay purchasing fish at Costco! Obtaining fish by paying money in the personal use fishery more closely resembles sport, because it is a joke, one where commercial fishermen are a punchline.

Prohibiting guiding in the Chitina subdistrict is a straightforward and fair way to alleviate congestion and pressure on the resource.

**Proposal 72 - SUPPORT*****Close sport fishing for salmon based on water temperature in the Gulkana River.***

Heat stress on salmon is well-studied. Similar practices are being put in place throughout the US.

**Proposals 73, 74 - COMMENT**

***-Allow permit stacking by Prince William Sound commercial salmon purse seine permit holders***

***-Allow permit stacking in the Prince William Sound commercial salmon purse seine fishery***

CDFU membership did not have a consensus on these proposals and therefore did not take a position. Under current regulation, seine permit stacking must be in the names of two different persons on the same vessel. Proposals 73 and 74 would modify the permit stacking regulation for the purse seine fishery that was passed at

the 2021 BOF meeting by expanding it to allow one fisherman who holds two permits to fish a total net length of 250 fathoms.

### **Proposals 75, 76, 77 - COMMENT**

***-Amend the Prince William Sound Management and Salmon Enhancement Allocation Plan***

***-Amend the Prince William Sound Management and Salmon Enhancement Allocation Plan to increase access to the Port Chalmers Subdistrict by drift gillnet permit holders***

***-Include salmon produced by Valdez Fishery Development Association in the Prince William Sound Management and Salmon Enhancement Allocation Plan***

These proposals are allocative and therefore CDFU did not take a position.

Proposals 75, 76, and 77 seek to amend the Prince William Sound Management and Salmon Enhancement Allocation Plan to adjust the allocation of salmon between commercial fishing gear types.

### **Proposal 78 - OPPOSE**

***Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.***

There is no conclusive evidence to suggest this proposed decrease in pink and chum production. The BOF has repeatedly turned down similar anti-hatchery proposals for this very reason in the last twenty years. This proposal asks the BOF to modify regulation 5 AAC 24.370. However, this regulation does not address egg take level, nor does any regulation implemented by the BOF. For this reason, this proposal and any future proposals like it should be rejected.

Passing this proposal will result in serious economic harm to every salmon permit holder CDFU represents. The total economic impact of PWS hatcheries is significant, and reducing their production will mean immediate economic downturns on communities already beset with revenue losses due to depressed fish prices and fishery resource disasters. PWSAC activities alone are estimated to contribute approximately \$50 million in labor income and support roughly 2,400 jobs.

The goal of these hatcheries is not solely economic. They must achieve their corporate escapement goals to continue to operate and produce salmon for all user benefit. Their goal is to optimize Area E salmon production for the long-term wellbeing of all user groups, in addition to optimizing Alaska's wild salmon

resources. We all should be reminded of the benefits that these hatcheries provide for all user groups, including commercial, sport, personal use, and subsistence.

Included in appendix, pages 32-46:

- Economic Impact of the Prince William Sound Aquaculture Corporation, 2018
- Economic Impact of Alaska Salmon Hatcheries, 2024

### **Proposal 79 - SUPPORT**

#### ***Close Main Bay to all fishing during hatchery cost recovery operations.***

All common property users should cooperate to allow PWSAC to achieve its corporate escapement goals. We should all understand the importance of efficient cost recovery and brood take at the Main Bay Hatchery. All user groups depend on the accomplishment of these two goals for the future of this resource. It is counterproductive to have some user groups interfering with PWSAC's operations that are essential for the benefit of all. Eliminating conflict and maximizing efficiency during cost recovery and brood operations will only help all users. At times, there may only be a window of just a few days when optimal harvest by cost recovery can take place. If that is bogged down by subsistence or personal use fishing, opportunity is lost for all.

Passing this proposal still allows for sufficient access inside Main Bay to harvest sockeye salmon. There are many areas outside the AGZ in Main Bay where sockeye build up and allow for great harvest opportunities for sport and subsistence users. When PWSAC is actively working to collect brood and harvest cost recovery, the Main Bay Subdistrict is generally closed to commercial fishermen, and this allows exclusive access to sport and subsistence users. Until cost recovery efforts terminate, these user groups would still have sole access to this resource outside the THA within Main Bay.

Included in appendix, page 47:

- Table 80-1, Main Bay Harvest for commercial, sport and subsistence fisheries and Main Bay Hatchery broodstock collection and cost recovery, PWS Management Area, 2014-2023.

### **Proposal 80 - SUPPORT**



***Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.***

Increasing the sport fishing distance from the barrier seine is essential to eliminating the majority of the damage from boats and tackle to the hatchery barrier seine. If we do not increase this distance, the problem will not be solved. The current setback distance does not protect hatchery property or its staff, as fishermen still can easily reach the barrier seine with their snagging hooks. Moving this distance back to 250 feet should eliminate the negative impact on the hatchery, and anglers will still have sufficient opportunity to harvest sockeye in Main Bay.

By closing the area behind the barrier seine to all sport fishing, fish being staged for broodstock will no longer be harvested. Closing the area will also reduce the number of wounded fish that are compromised and must be culled from the brood stock.

We also want to ensure ADFG has the tools to work with hatchery staff to manage the sport fishery in Main Bay. A precedent for this exists at the Ship Creek Hatchery in Anchorage, where EO authority has been used to shut down the sport fishery to ensure the hatchery accomplished its brood goals.

The end goal is to collaboratively assist PWSAC in successfully achieving their corporate escapement goals each year, while reducing the damage to PWSAC property and the risk of injury to PWSAC staff.

Included in appendix, page 47:

- Table 80-1, Main Bay Harvest for commercial, sport and subsistence fisheries and Main Bay Hatchery broodstock collection and cost recovery, PWS Management Area, 2014-2023.

**Proposal 81 - SUPPORT**

***Modify the area open to sport fishing near the Main Bay Hatchery.***

We support PWSAC's effort to resolve this issue in Main Bay through their Proposal 81, but suggest adopting Proposal 80 to ensure the problem at hand is solved.

Included in appendix, page 47:

- Table 80-1, Main Bay Harvest for commercial, sport and subsistence fisheries and Main Bay Hatchery broodstock collection and cost recovery, PWS Management Area, 2014-2023.

### **Proposal 83 - OPPOSE**

#### ***Allow a resident sport angler to use two rods when fishing for salmon.***

There is already reasonable access in this fishery. The suggested regulation change could cause enforcement issues. How would enforcement know that only salmon are being retained while fishing with two rods?

### **Proposal 84 - SUPPORT**

#### ***Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.***

Sport harvest of saltwater kings and rockfish has been significantly increasing over the last ten years. This is increasingly concerning for our region which is vested in the conservation of Chinook salmon and rockfish. With a growing sport fish charter industry, it is not sustainable to continue to allow charter captains and crew to retain their bag limit while clients are on board. ADFG is already moving in this direction in Proposal 29, and the precedent is already set in Kodiak, Southeast, and federally for halibut. This would bring PWS into alignment.

Included in appendix, page 48:

- Alaska Sport Fishing Survey, Regional Summary Estimates, 2014-2023

### **Proposal 85 - OPPOSE**

#### ***Modify the bag and possession limit for coho salmon.***

This proposal is an allocative grab by the author to take a larger portion of the resource for the benefit of their company and clients. This year, ADFG reduced the bag limit to one coho salmon. This is not the time to double the bag limit from three fish to six fish.

The author also suggests this regulation change to target hatchery-bound coho salmon. There is already an expanded coho take in Valdez Arm to target these hatchery fish. Increasing the bag limit across the region has the potential to negatively impact many small wild coho streams around PWS.



**Proposal 86 - SUPPORT*****Modify the sport fishing area and season dates in Ibeck Creek.***

With increased effort later in the season on Ibeck Creek, we support this proposal to protect spawning coho salmon. It does not make sense to allow fishing in spawning beds. These fish have already been counted as escapement by ADFG aerial surveys, and should be left to spawn and ensure future runs.

**Proposal 87 - SUPPORT*****Modify the sport fishing area and season in a Copper River Delta system.***

We firmly support protections for spawning coho salmon in the Copper River Delta.

**Proposal 88 - SUPPORT*****Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.***

We support this proposal that addresses a shared burden of conservation to protect our salmon fisheries. If the commercial fleet is restricted to protect coho salmon during years of low run entry and low aerial survey counts, the sport fishery should be similarly restricted to protect coho in the Copper River Delta. During years of low returns, we must all work together to reach escapement goals and ensure future healthy salmon runs.

**Proposal 96 - SUPPORT*****Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.***

The rebound of PWS herring populations needs action by the BOF to ensure the maximum value of the species. Changing the annual season dates to align more with the calendar year and begin with the spring sac roe fishery will enable processors and fishermen to best plan for how to participate. Instituting the rollover of quota from the sac roe fishery to the food and bait fishery will solve the dilemma that exists in other Alaska herring fisheries.

**Proposal 97 - SUPPORT*****Reduce the minimum herring spawning biomass threshold.***

Biomass thresholds are normally set based on a population's unfished size. There are now 30 years of population estimates where no fishery occurred. This data should be used to set fishery limits and exploitation rates.

The PWS and Gulf of Alaska ecosystems have changed drastically in the last 30-50 years, and will continue to change. There is no reason to keep the herring fishery closed until it achieves those historical population numbers. Environments are ever-changing and managers need to have an ability to adapt to outdated management strategies.

Included in appendix, page 49:

- Table, Herring Biomass over time
- ICES Study "Management strategy evaluation of harvest control rules for Pacific Herring in Prince William Sound, Alaska"

#### **Proposal 98 - SUPPORT**

##### ***Align Prince William Sound herring and salmon management area descriptions.***

Defining salmon and herring areas in alignment will simplify regulation and bring consistency for participants in both fisheries.

#### **Proposal 99 - SUPPORT**

##### ***Define commercial herring fishery districts in Prince William Sound.***

The recent discovery of a large new herring population at Kayak Island needs defined waters to operate an exploratory herring fishery.

Included in appendix, pages 50-51:

- Photos, herring spawn at Kayak Island

#### **Proposal 100 - SUPPORT**

##### ***Adopt a Kayak Island District herring management plan.***

A Kayak Island herring population was never included in the historic fishery or PWS herring management plan. As the ecosystem and climate changes, the BOF and ADFG must act rapidly to allow for new fisheries to be conducted.

#### **Proposal 102 - SUPPORT**

***Allow commercial fishery permit holders to harvest herring for the own use as bait.***

A regulation like this exists in most other areas in Alaska. Here are examples:

- *Southeast: 5 AAC 27.170. Harvest of bait by commercial permit holders in Southeastern Alaska Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held*
  - *Yakutat: 5 AAC 27.270. Harvest of bait by commercial permit holders in Yakutat Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:*
  - *Kodiak: 5 AAC 27.545. Harvest of bait by commercial permit holders in Kodiak Area. The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:*
-

## Appendix for Proposal 5 - OPPOSE

ADF&G Home » Sport Fishing Survey » Southcentral Alaska » 2014-2023 Rockfish harvest summary


### Alaska Sport Fishing Survey

#### Regional Summary Estimates

Study Years: 2014-2023 ▾

Estimates of Southcentral Alaska sport Rockfish harvest, 2014–2023.

SOUTHCENTRAL	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
(J) North Gulf Coast/Prince William Sound	88,009	90,767	113,324	72,667	76,663	96,852	84,578	96,362	99,569	68,034
(K) Knik Arm	0	0	0	0	0	0	0	0	0	0
(L) Anchorage	0	0	0	0	0	0	0	0	0	0
(M) Susitna River drainage	0	0	0	0	0	0	0	0	0	0
(N) West Cook Inlet drainages	0	0	0	0	0	0	0	0	0	0
(PF) Kenai Peninsula freshwater	0	0	0	0	0	0	0	0	0	0
(PS) Cook Inlet saltwater	22,622	26,218	32,905	32,254	40,149	47,793	32,201	48,434	48,284	41,334
(PU) Kenai Peninsula Personal Use Dipnet										0
(PX) Cook Inlet (Shellfish only)	0	0	0	0	0	0	0	0	0	0
(Q) Kodiak	29,733	25,786	26,339	23,448	26,513	27,531	14,431	34,238	31,411	28,484
(R) Alaska Peninsula/Aleutian Islands	1,444	2,086	1,023	339	1,970	1,929	1,093	557	647	568
(S) Kvichak River drainage	0	0	0	0	0	0	0	0	0	0
(T) Nushagak, Wood River and Togiak	0	0	0	0	0	0	0	0	0	0
<b>Southcentral Total</b>	<b>141,808</b>	<b>144,857</b>	<b>173,591</b>	<b>128,708</b>	<b>145,295</b>	<b>174,105</b>	<b>112,303</b>	<b>179,591</b>	<b>179,911</b>	<b>138,420</b>

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ADF&G Home » Sport Fishing Survey » Southcentral Alaska » 1996-2005 Rockfish harvest summary

### Alaska Sport Fishing Survey

#### Regional Summary Estimates

Study Years: 1996-2005 ▾

Estimates of Southcentral Alaska sport Rockfish harvest, 1996–2005.

SOUTHCENTRAL	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
(J) North Gulf Coast/Prince William Sound	33,837	35,789	34,308	36,893	47,828	48,364	56,240	48,503	73,947	63,985
(K) Knik Arm	0	0	0	0	0	0	0	0	0	0
(L) Anchorage	0	0	0	0	0	0	0	0	0	0
(M) Susitna River drainage	0	0	0	0	0	0	0	0	0	0
(N) West Cook Inlet drainages	0	0	0	0	0	0	0	0	0	0
(PF) Kenai Peninsula freshwater	0	0	0	0	0	0	0	0	0	0
(PS) Cook Inlet saltwater	5,195	4,491	4,004	6,229	6,124	4,626	5,835	7,515	9,756	11,607
(PU) Kenai Peninsula Personal Use Dipnet										
(PX) Cook Inlet (Shellfish only)	0	0	0	0	0	0	0	0	0	0
(Q) Kodiak	6,551	6,164	4,545	5,480	7,125	5,506	7,556	6,166	7,844	15,392
(R) Alaska Peninsula/Aleutian Islands	582	1,689	436	138	1,430	745	1,018	678	933	2,759
(S) Kvichak River drainage	0	0	0	0	0	0	0	60	0	0
(T) Nushagak, Wood River and Togiak	0	0	0	0	0	0	0	0	0	0
<b>Southcentral Total</b>	<b>46,165</b>	<b>48,133</b>	<b>43,291</b>	<b>48,740</b>	<b>62,507</b>	<b>59,241</b>	<b>70,649</b>	<b>62,922</b>	<b>92,480</b>	<b>93,743</b>

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Table 3.—Prince William Sound Area commercial rockfish harvest by gear type, including black and dark rockfish from federal waters, 1988–2019.

Year	Vessels	Landings	Harvest (lb)					Pots
			Jig	Trawl	Trawl %	Longline	Longline %	
1988	80	195	54,097	228,417	54%	144,228	34%	0
1989	39	103	<sup>a</sup>	997	1%	104,633	99%	0
1990	96	402	30,088	20,238	4%	455,789	90%	<sup>a</sup>
1991	89	247	15,624	11,162	7%	129,864	83%	0
1992	114	299	9,946	28,510	15%	152,945	80%	<sup>a</sup>
1993	80	209	13,905	12,610	12%	81,978	76%	<sup>a</sup>
1994	92	211	94,588	<sup>a</sup>		104,799	53%	<sup>a</sup>
1995	148	284	168,777	267	0%	127,616	43%	<sup>a</sup>
1996	99	257	57,103	3,507	2%	124,077	67%	0
1997	106	266	34,047	1,294	1%	130,141	79%	<sup>a</sup>
1998	88	220	2,903	1,079	1%	104,889	96%	<sup>a</sup>
1999	92	244	1,130	1,951	3%	68,906	96%	0
2000	100	284	2,401	2,061	2%	117,210	96%	247
2001	101	233	1,165	4,495	6%	68,400	92%	<sup>a</sup>
2002	87	190	0	30,553	41%	44,059	59%	0
2003	89	243	256	4,752	10%	42,982	90%	0
2004	71	197	283	3,735	7%	48,783	92%	0
2005	80	206	<sup>a</sup>	8,863	15%	51,547	85%	0
2006	72	226	1,008	12,391	16%	62,866	82%	<sup>a</sup>
2007	73	213	1,215	10,970	13%	69,419	85%	0
2008	71	207	<sup>a</sup>	21,656	20%	85,113	80%	0
2009	88	256	<sup>a</sup>	22,359	19%	95,663	81%	<sup>a</sup>
2010	87	262	<sup>a</sup>	6,500	6%	98,117	94%	<sup>a</sup>
2011	81	232	<sup>a</sup>	8,113	7%	110,497	93%	<sup>a</sup>
2012	94	245	881	18,054	16%	94,587	83%	<sup>a</sup>
2013	85	278	<sup>a</sup>	29,680	20%	119,561	80%	<sup>a</sup>
2014	90	211	0	69,132	44%	88,419	56%	0
2015	79	280	0	23,293	15%	128,835	85%	0
2016	87	265	966	25,110	16%	135,436	84%	<sup>a</sup>
2017	66	202	433	4,413	7%	54,859	92%	<sup>a</sup>
2018	91	203	129	4,402	8%	51,920	92%	0
2019	100	230	865	9,715	14%	61,307	85%	<sup>a</sup>
Average								
2010–2019	86	241	468	19,841	15%	94,354	84%	0
2017–2019	86	212	476	6,177	10%	56,029	90%	0

## Prince William Sound Rockfish

Guideline harvest level (GHL) and Harvest are round weight in pounds.

Year▲▼	GHL	State Managed Harvest
2024	150,000	122,737
2023	150,000	163,254
2022	150,000	196,843
2021	150,000	142,136
2020	150,000	82,234
2019	150,000	71,976
2018	150,000	56,452
2017	150,000	59,714
2016	150,000	161,510
2015	150,000	152,128
2014	150,000	157,458
2013	150,000	149,161
2012	150,000	113,877
2011	150,000	118,755
2010	150,000	104,901

There is no directed rockfish fishery - retained as bycatch to other directed groundfish and halibut fisheries.

Includes black and dark rockfish from federal waters. Mandatory retention required for all rockfish in PWS.



## Appendix for Proposal 7 - OPPOSE

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### Prince William Sound Lingcod

Guideline Harvest Level (GHL) and Harvest weight in pounds.

Year	GHL	DISTRICT	Harvest
2024	7,300	INSIDE	3,701
	25,300	OUTSIDE	23,250
2023	7,300	INSIDE	5,483
	25,300	OUTSIDE	24,146
2022	7,300	INSIDE	5,692
	25,300	OUTSIDE	19,475
2021	7,300	INSIDE	2,341
	25,300	OUTSIDE	20,002
2020	7,300	INSIDE	3,052
	25,300	OUTSIDE	22,795
2019	7,300	INSIDE	7,388
	25,300	OUTSIDE	19,020
2018	7,300	INSIDE	6,688
	25,300	OUTSIDE	22,867
2017	7,300	INSIDE	460
	25,300	OUTSIDE	12,162
2016	7,300	INSIDE	404
	25,300	OUTSIDE	13,690
2015	7,300	INSIDE	2,968
	25,300	OUTSIDE	17,396
2014	7,300	INSIDE	4,199
	25,300	OUTSIDE	11,672
2013	7,300	INSIDE	1,527
	25,300	OUTSIDE	28,804
2012	7,300	INSIDE	4,114

## Appendix for Proposal 31 - SUPPORT

Source: "Bottom Trawl Surveys for Tanner Crab in Prince William Sound, 2017–2019"

Closure area is north and east of red lines

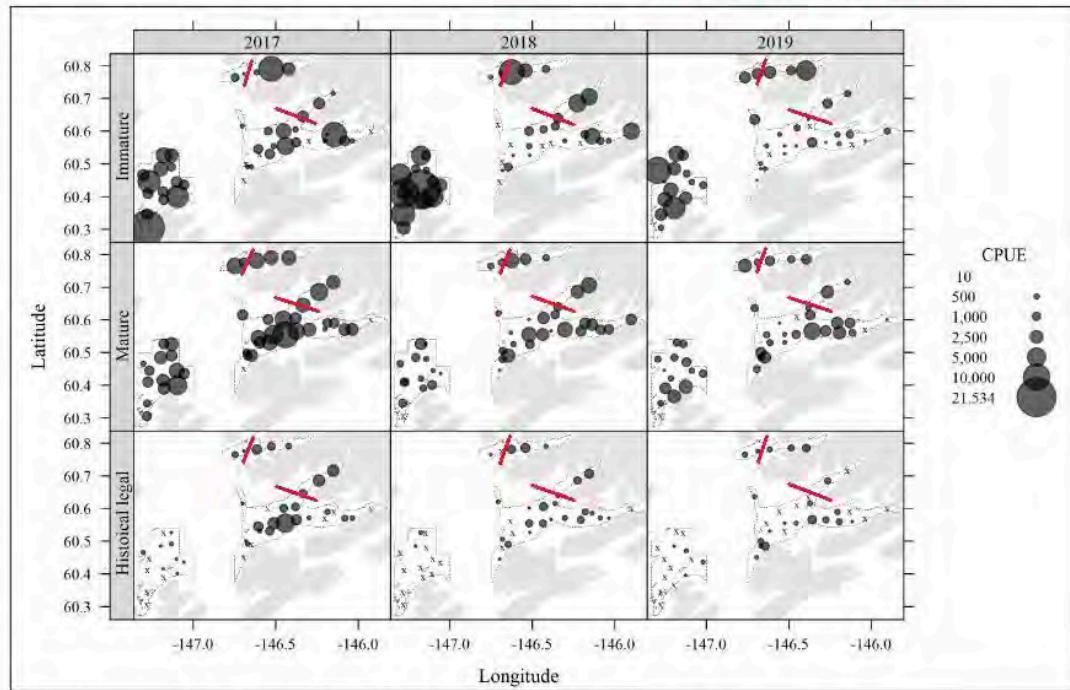
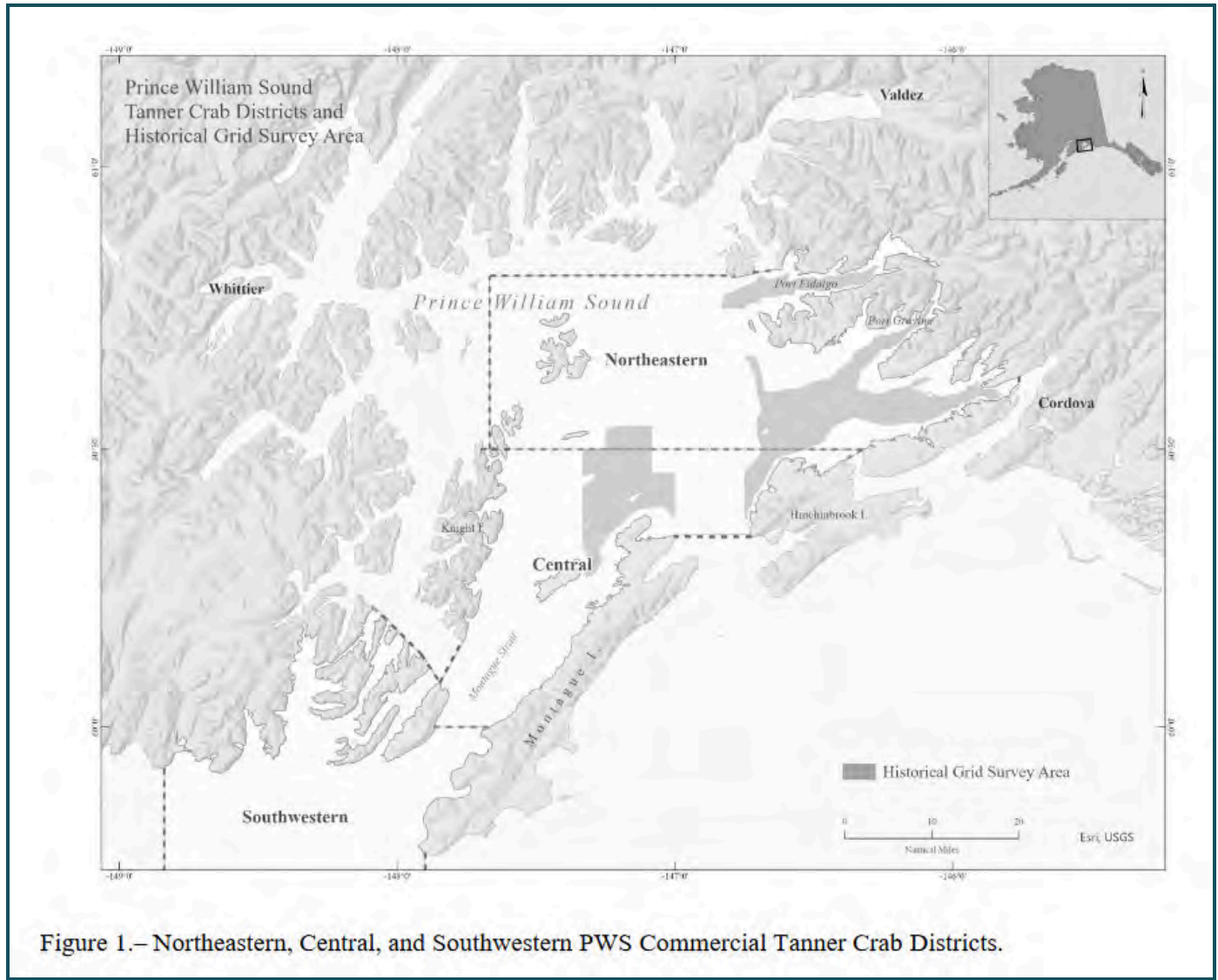


Figure 7.—Location of male Tanner crab caught in the 2017–2019 Prince William Sound Area trawl surveys.

Note: CPUE is crab per square nautical mile.



## Appendix for Proposal 34 - SUPPORT



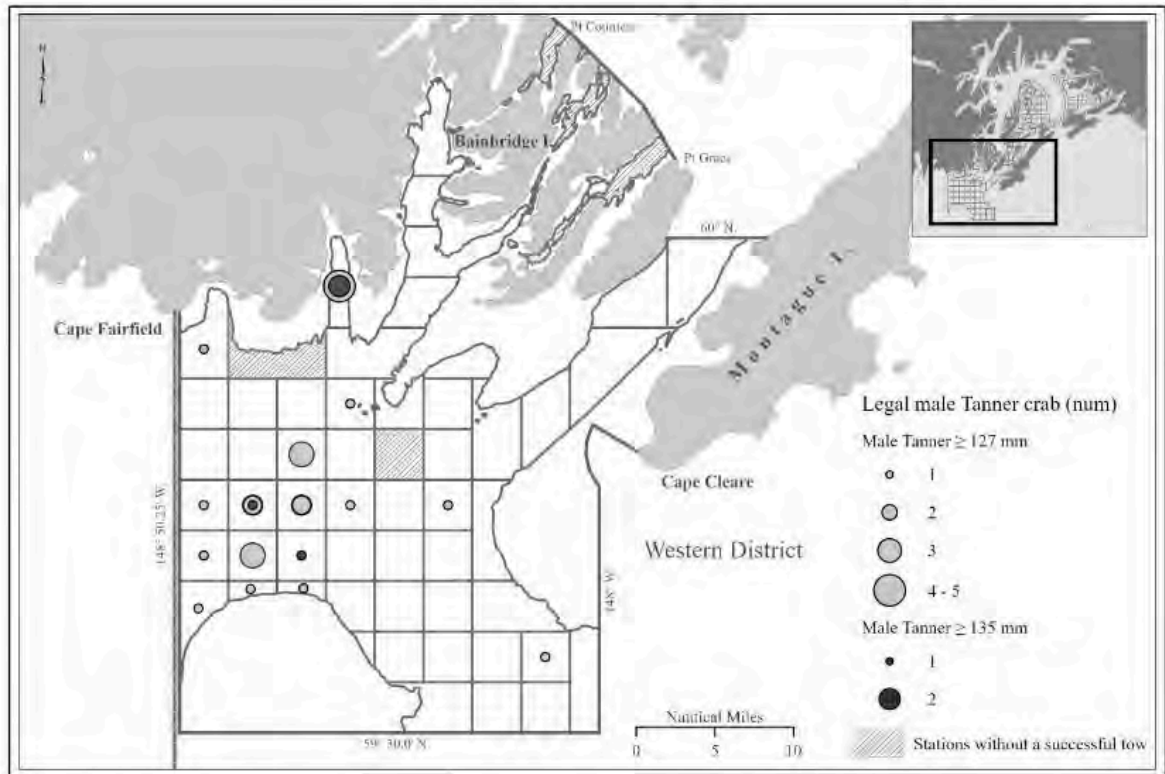
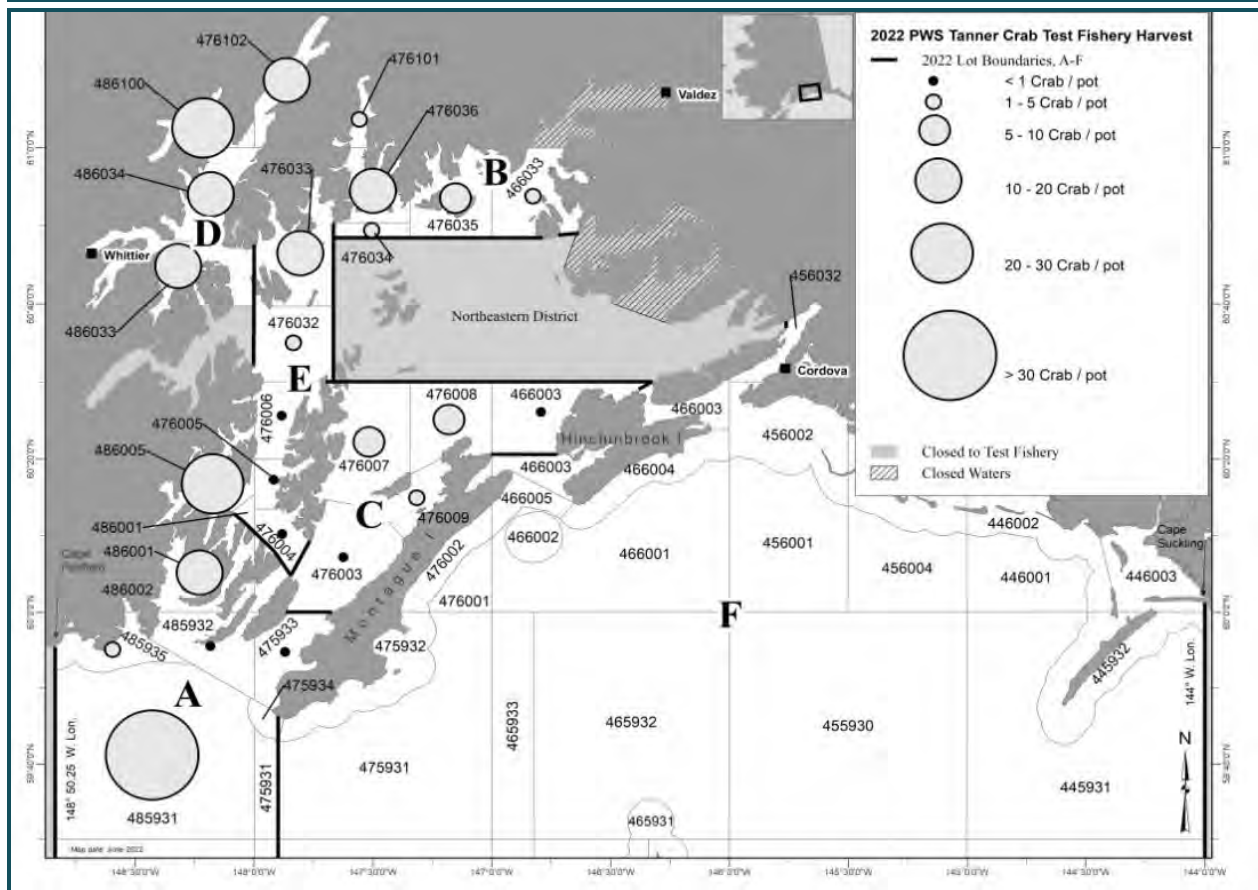


Figure 8.—Catches of legal-size ( $\geq 127$  mm) and historical legal-size ( $\geq 135$  mm) male Tanner crab from the 2021 Prince William Sound Area trawl survey in Area 3.

Table 3.—Prince William Sound Commissioner's Permit Tanner crab fishery harvest and effort information by statistical area, 2018–2021.

Statistical Area 486005						
Year	Pot lifts	Harvest (No. of crab)	Harvest (lb)	CPUE (crab per pot)	Vessels	Percent of total harvest
2018	1,071	14,868	29,853	13.9	11	36%
2019	551	5,324	10,254	9.7	9	8%
2020	588	3,560	7,088	6.1	10	7%
2021			Closed			
Average	737	7,917	15,732	9.9	10	17%
Statistical Area 485931						
2018	732	16,036	25,813	21.9	3	31%
2019	2,635	51,994	83,837	19.7	9	67%
2020	2,873	39,436	65,948	13.7	15	61%
2021	1,862	27,099	45,111	14.6	8	80%
Average	2,026	33,642	55,177	17.5	9	59%



**Appendix for Proposal 35 - SUPPORT****Appendix for Proposal 39 - SUPPORT**

## **Recommended Harvest Strategy for Southeast Alaska Golden King Crab (*Lithodes aequispinus*)**

by

Andrew Olson—Southeast Alaska Groundfish-Shellfish Coordinator

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and

Katie Palof—Shellfish Biometrician

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### **BACKGROUND**

The Alaska Department of Fish and Game (Department) golden king crab (GKC) fishery in Southeast Alaska is a data-limited fishery that is managed based on a 3-S management system (sex, size, and season). The management has been further developed by limiting the number of participants and gear, establishing guideline harvest levels (GHLs) that are set within guideline harvest ranges (GHRs) for each management area (Table 1), and allowing closure of management areas if there are stock health concerns. Most of the harvest occurs in the commercial sector where the fishery extends across seven management areas (Northern, Icy Strait, North Stephens Passage, East Central, Mid and Lower Chatham Strait, and Southern). The Department annually evaluates stock status and establishes GHLs for each management area using fishery dependent data (Stratman et al. 2017; Olson et al. 2018).

The commercial GKC fishery rapidly developed after the collapse of the red and blue king crab fisheries in the early 1980s. Harvest subsequently peaked in the late 1980s and early 2010s, experiencing a period of collapse in the 1990s. Harvest has been steadily declining since 2011 and many of the management areas are currently closed due to historically low fishery performance (Stratman et al. 2017; Olson et al. 2018; Stratman 2020).

Table 1.—Golden king crab guideline harvest ranges for Registration Area A [5 AAC 34.115].

<b>Management Area</b>	<b>Guideline Harvest Range (lbs)</b>
Northern	0–145,000
Icy Strait	0–55,000
North Stephens Passage	0–25,000
East Central	0–225,000
Mid-Chatham Strait	0–150,000
Lower Chatham Strait	0–50,000
Southern	0–25,000

## BIOLOGY

Golden king crab are relatively long-lived slow growing species that have an asynchronous 20-month reproductive cycle (Somerton and Otto 1986; Long and Van Sant 2016), morphometric maturity at approximately 8 years of age (Koeneman and Buchanan 1985; Paul and Paul 2001; Hebert et al. 2008), lecithotrophic larvae that remain at depth (Sloan 1985; Shirley and Shijie 1997; Long and Van Sant 2016). Golden king crab exhibit spatial variability in size at maturity across the North Pacific and among the seven management areas within Southeast Alaska where size at maturity increases with increases in latitude (Jewett et al. 1985; Somerton and Otto 1986; Nizyaev 2005; Olson et al. 2018). Certain aspects of this species' life history are well documented whereas other critical components such as, growth rates, age at maturity, longevity, etc. are unknown.

## PURPOSE

The purpose of this document is to lay the framework for a consistent and transparent inseason and postseason approach to determine GHs and close fisheries when warranted. The harvest strategy described herein remains consistent with the Board of Fisheries' Policy on King and Tanner Crab Resource Management (90-04-FB, March, 1990) [5 AAC 34.080], the Southeast Alaska Golden King Crab Management Plan [5 AAC 34.114], and will be treated as a guideline for managing GKC and not a prescriptive step by step approach. Many factors and sources of information can affect determining GHs or closing of fisheries that cannot be captured in a prescriptive framework.

## MANAGEMENT GOALS AND OBJECTIVES

The primary goal and objective is to recommend a harvest strategy for Southeast Alaska GKC to improve and stabilize fishery performance using transparent and repeatable metrics (and their rationale) to evaluate stock health and measure performance for more consistent inseason and postseason management. Additional goals and objectives include minimizing and mitigating ecological risks from fishing related activities, maintaining various size and age compositions of stocks in order to maintain long-term reproductive viability; minimizing handling and unnecessary mortality of non-legal GKC and non-target species; and reducing dependency on annual recruitment.

Harvest strategies have been implemented for the GKC fisheries in the Aleutian Islands and Pribilof Islands to improve fisheries management and sustainability. These harvest strategies are comprised of biological, fishery dependent and independent reference points (i.e. mature male biomass, CPUE, annual recruitment, etc.) that are used in recommending the total allowable catch (TAC) or GH for a given management area and season (Daly et al. 2019; Daly and Jackson 2020; Siddeek et al. 2020).

## PROPOSED PLAN

Here we propose a harvest strategy plan that informs inseason and postseason management using fishery dependent performance indicators and management decision rules.

## Performance Indicators

The primary performance indicator used in this harvest strategy is commercial catch rate defined as logbook catch of GKC per unit of effort (CPUE):

$$CPUE_{le} = \frac{catch}{effort} \quad (1)$$

where *CPUE* is the catch of legal size male GKC per unit of *effort (pot lifts)* for each logbook entry (*le*). Equation (1) is then applied to all logbook entries and averaged for a given management area and season where:

$$\overline{CPUE}_{a,s} = \frac{\sum CPUE_{le}}{n} \quad (2)$$

where *a* is a given management area, *s* is a given season, and *n* is the total number of logbook entries. Future iterations will incorporate soak time in order to standardize CPUE.

Due to the GKC and Tanner crab fishery occurring concurrently, it is difficult to differentiate between GKC that are harvested as bycatch or directly targeted. GKC that are harvested as bycatch can bias logbook CPUE and consequently trigger management actions during and after the season. To evaluate this concern a proportion of  $\geq 60\%$  will be applied to GKC catch from commercial logbooks:

$$catch_{le}^{\geq 0.6} = \frac{crab_{gkc}}{(total\ crab_{gkc+tc})} \quad (3)$$

where *catch* is for a given logbook entry (*le*), *gkc* is golden king crab and *tc* is Tanner crab. Then subsequently Equations (1) and (2) will be applied to calculate CPUE.

A secondary performance indicator that will be used in this harvest strategy is commercial catch rate obtained from fish ticket data. With fish ticket data, CPUE is calculated using each harvest landing for the entire season divided by the difference between the first and last catch date (which is defined as active fishing season). This secondary CPUE indicator is defined as "pounds per pot day" and will aid in understanding catch rates over time:

$$active\ fishing\ season(days) = (date_{first\ catch} - date_{last\ catch}) \quad (4)$$

$$CPUE_f = \frac{harvest(lbs)}{active\ fishing\ season(days)} \quad (5)$$

where *CPUE* is the harvest (lbs) per day for each fish ticket landing (*f*). Equation (5) is then applied to all fish ticket landings and averaged for a given area and season where:

$$\overline{CPUE}_{a,s} = \frac{\sum CPUE_f}{n} \quad (6)$$

where *a* is a given management area, *s* is a given season, and *n* is the total number of fish ticket landings.

Supplementary information that may be evaluated in this harvest strategy includes biological, local ecological knowledge (LEK), and other anecdotal information that may not be captured quantitatively in this harvest strategy framework.

- Biological information will be evaluated by analyzing carapace length (CL) mm frequencies by area and season for recruit classes of GKC sampled during commercial landings. Size of GKC is defined as the CL measurement. Recruit class is used as an indicator of shell age and is defined as recruit (new shell and a CL of 151–166mm) and postrecruit (new or old shell and a CL  $\geq 167$  mm).

- LEK is experiential information from fishermen and the fishing industry about the natural environment as it pertains to GKC. LEK will be evaluated and reviewed through permit holder comments in logbooks, communication with permit holders and industry representatives, and discussion at annual industry meetings (Ainsworth 2011; Beaudreau and Levin 2014). Examples of LEK include lots of crab (recruits, females, and undersized), females with full clutches, softshell, sand fleas, bad weather, large tides, and parasitized crab.

## Reference Points

The primary indicator Target Reference Point ( $RP_{\text{targ}}$ ) for each management area and is set at the average logbook CPUE for the years 2000-2017 because these years capture logbook requirements for the fishery in 2000 and represents contrasting data (highs and lows) in fishery performance. The exception to this includes North Stephens Passage (excludes 2000) and Lower Chatham (excludes 2013) due to having substantial outliers in those given years that influenced the Target Reference Point. The Trigger Reference Point ( $RP_{\text{trig}}$ ) is set between the Target and Limit Reference Point that prompts management actions and is set at 75% of the  $RP_{\text{targ}}$ . The Limit Reference Point ( $RP_{\text{lim}}$ ) is set at the level at which stocks are considered in a danger zone and are no longer resilient to fishing pressure and is set at 50% of the  $RP_{\text{targ}}$ .

## MONITORING STRATEGY

Herein lies a monitoring strategy with associated decision rules for inseason and post season management of GKC.

## Decision Rules

As the primary performance indicator is the most readily available estimate of fishery performance the following decision rules will guide inseason and postseason management decisions.

### Inseason

- Fishery performance will be assessed biweekly and/or with a minimum requirement of 500 pot lifts before taking management action whichever is the least restrictive under the following guidelines:
  - If logbook CPUE is  $\geq RP_{\text{targ}}$  manage to GHL.
  - If logbook CPUE is  $\geq RP_{\text{trig}}$  but  $< RP_{\text{targ}}$  manage to GHL and monitor closely.
  - If logbook CPUE is  $\geq RP_{\text{lim}}$  and  $< RP_{\text{trig}}$  fishery close early.
  - If logbook CPUE is  $< RP_{\text{lim}}$  close fishery early **and** subsequent closure of management area for a minimum of 1 year for commercial and personal use fisheries the following season, depending upon a postseason review.
- GHLs will not be changed inseason and are only subject to change per postseason decision rules.

### Postseason

#### Increase in a GHL

- If the most recent logbook CPUE is  $>$  than the most recent previous season and is  $> RP_{\text{targ}}$  the GHL may increase up to a maximum of 20% the following season.
- If the most recent logbook CPUE is  $>$  than the most recent previous season and  $\leq RP_{\text{targ}}$  and  $> RP_{\text{trig}}$  the GHL may increase up to a maximum of 10% the following season.
- If the most recent logbook CPUE is  $>$  than the most recent previous season and is  $\leq RP_{\text{trig}}$  and  $> RP_{\text{limit}}$  the GHL may increase up to a maximum of 5% the following season.
  - New GHLs may not exceed respective management area GHRs.

#### Decrease in a GHL

- **If the fishery closed short of a GHL inseason due to poor fishery performance and/or the most recent CPUE is  $<$  than the previous season the GHL will be decreased based on the following conditions:**
  - If CPUE is  $<$  than the most recent previous season and is  $> RP_{\text{trig}}$  and  $\leq RP_{\text{targ}}$  the GHL may be reduced up to a maximum of 40% the following season.
  - If the fishery closed short in-season due to poor fishery performance and CPUE is  $<$  than the most recent season and  $> RP_{\text{lim}}$  then the GHL decrease the following season may be within 20% of the total harvest at the time of closure during the most recent previous season, but not less than 7,500 lbs.

**Closure and Re-opening**

- If logbook CPUE is  $< \text{RP}_{\text{lim}}$  further management action may be required by implementing an area closure of a minimum of 1 year to reduce the risk of localized depletion.
- Upon re-opening an area after a closure, the GHL will be equal to the harvest at the time of closure rounded to the nearest 1,000 lbs and must not be less than 7,500 lbs whichever is greatest.

**Review of GHLs or Decision Rules**

If and when new information becomes available indicating that the harvest strategy framework and GHL setting decision rules are not consistent with the Board's policy of managing a sustainable GKC resource, the decision rules must be reviewed and the reference points must be adjusted accordingly.

**Other Considerations for Management and Future Recommendations**

Logbook CPUE currently lacks a soak time data field and cannot be standardized for comparison across years. Soak time was introduced as a reporting field in logbooks for the 2020 fishing season and will be used to inform this harvest strategy in future iterations. This harvest strategy may be amended in future iterations as more information and tools become available. This harvest strategy is a first step to increase transparency regarding management metrics utilized for inseason and postseason decisions. We recommend that this harvest strategy is further developed using a management strategy evaluation (MSE). A MSE is a tool that uses simulation to test how well a harvest strategy performs and if the objectives of the harvest strategy are being achieved (Punt et al. 2016; Goethel et al. 2019).



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## MANAGEMENT AREA REPORTS

Each management area report will provide an overview of seasonal trends in fishery performance through the most recent season. This includes comparing harvest (lbs) to corresponding GHs, logbook CPUE compared to reference points (i.e. target, trigger, and limit), reviewing Tanner crab harvest influence, and spatial distribution of incidental catch during the annual Tanner crab stock assessment survey in Holkham Bay. Confidential harvest and effort data have been excluded from figures if less than 3 permit holders participated in a given management area for a given year.

### NORTHERN

#### Season Overview

The Northern management area was closed for the 2019 and 2020 seasons.

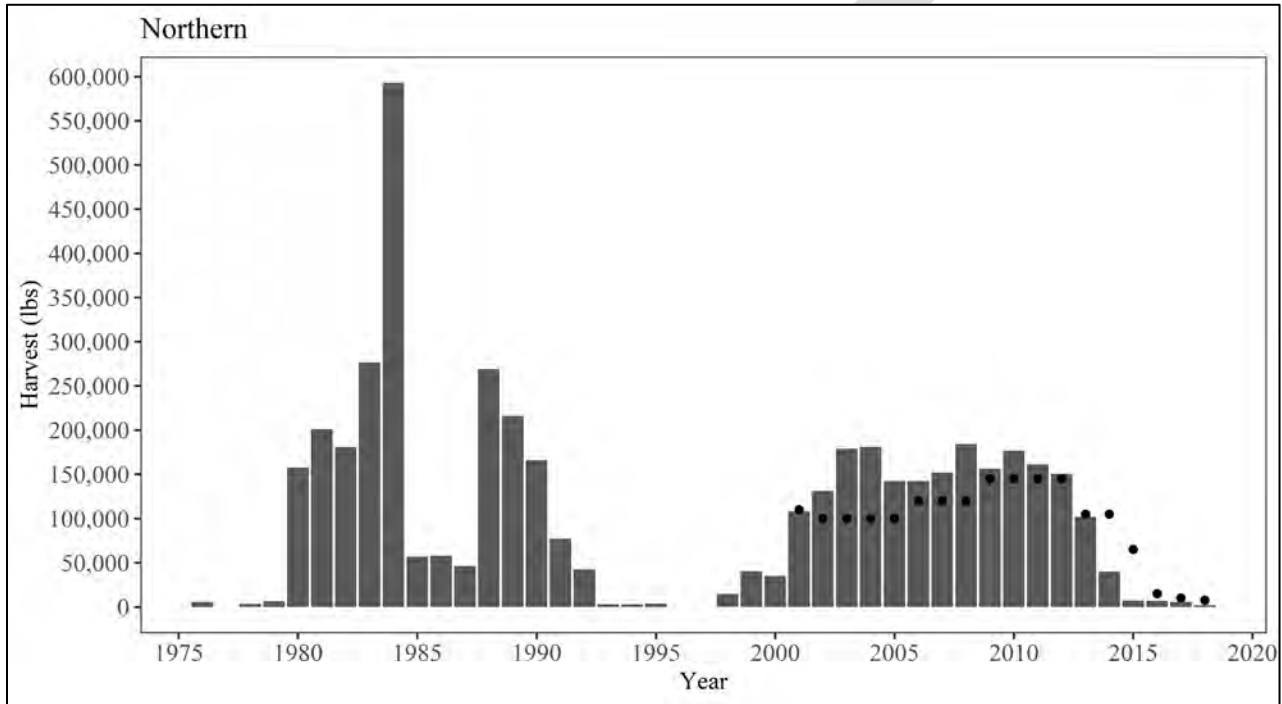


Figure 1.—Commercial GKC fishery harvest from the Northern management area. Dots represent the GH in a given year (2001–present).

#### Reference Points

Table 2.—Golden king crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
Target Reference Point	2.7 crab/pot	Average Commercial Logbook CPUE from 2000–2017
Trigger Reference Point	2.0 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.3 crab/pot	50% of the Target Reference Point

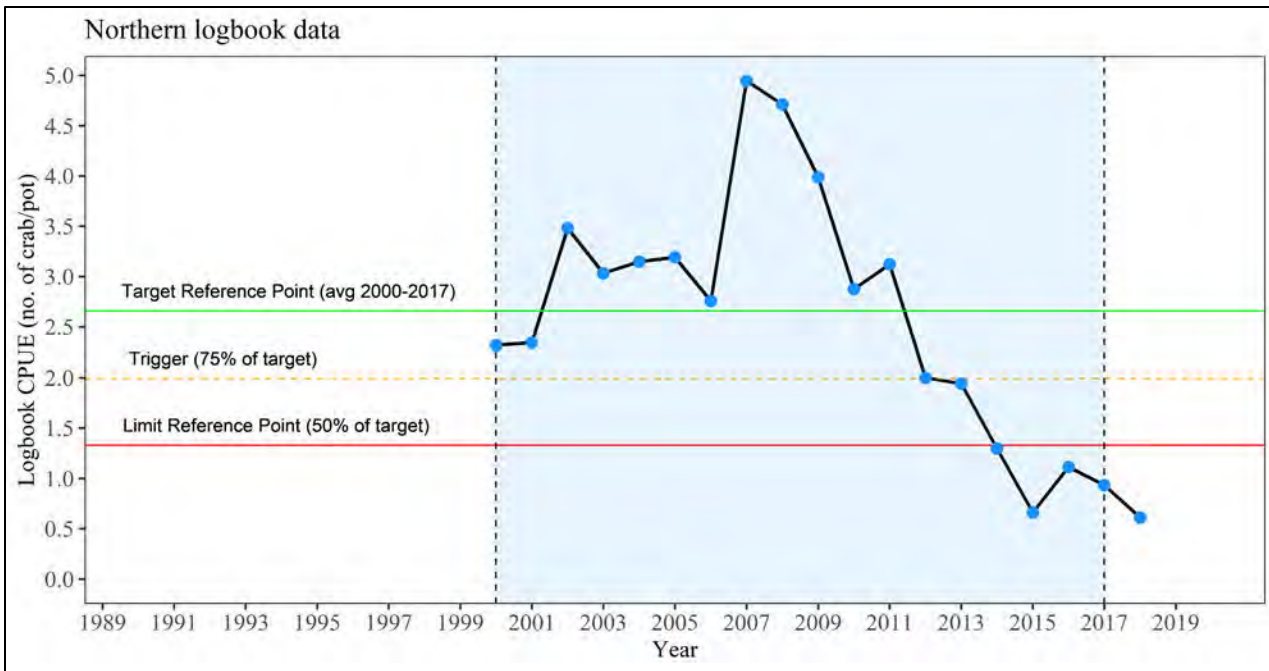


Figure 2.—Northern golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.

## ICY STRAIT

### Season Overview

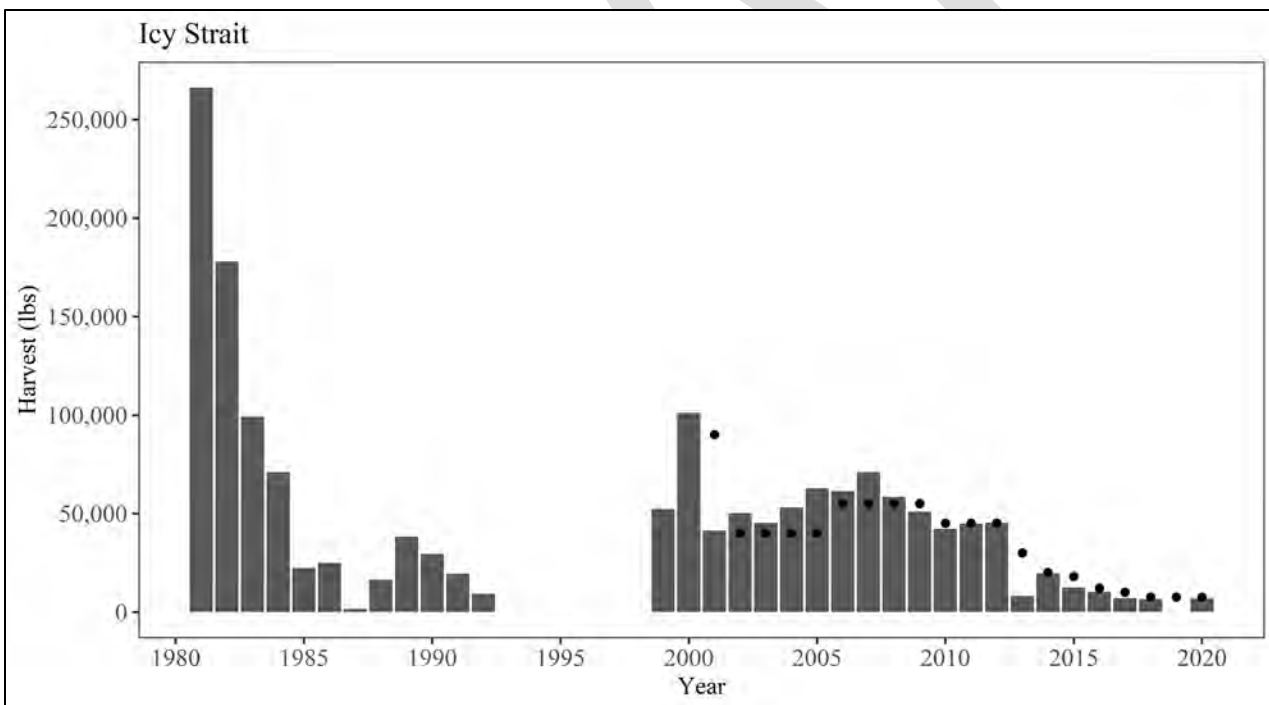


Figure 3.—Commercial GKC fishery harvest from the Icy Strait management area. Dots represent the GHL in a given year (2001–Present).

## Reference Points

Table 3.— Golden king crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
Target Reference Point	2.2 crab/pot	Average Commercial Logbook CPUE from 2000–2017
Trigger Reference Point	1.6 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.1 crab/pot	50% of the Target Reference Point

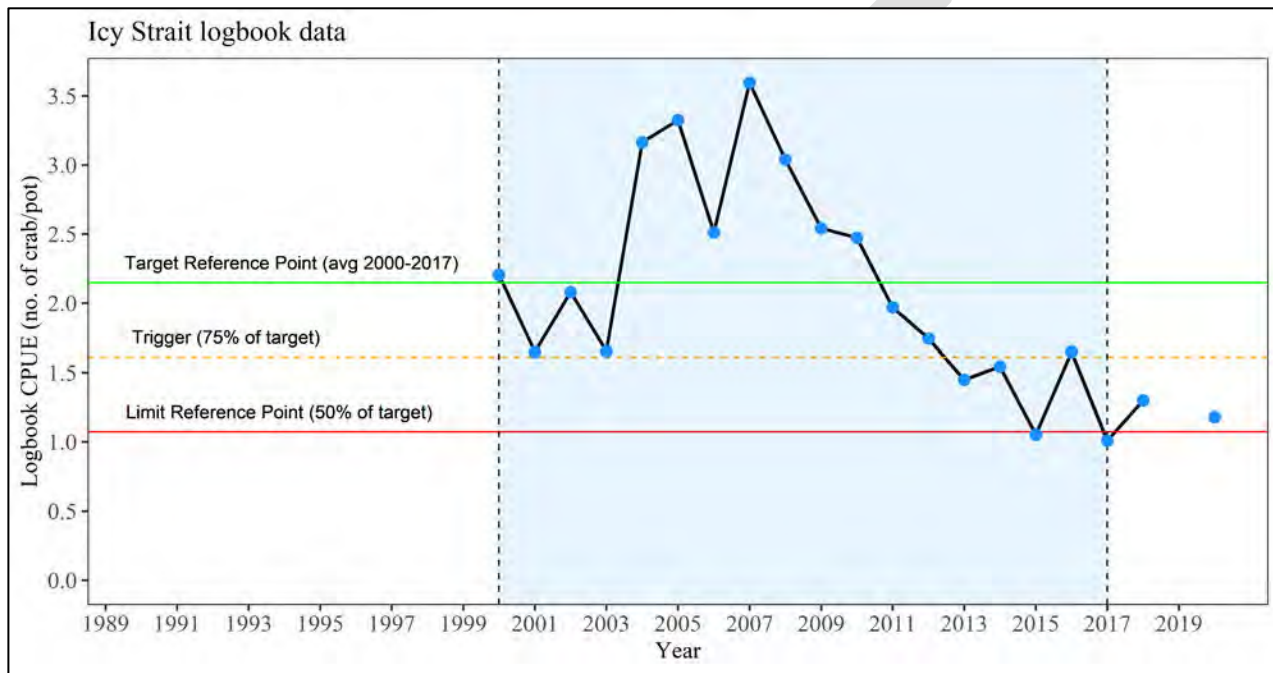


Figure 4.—Icy Strait golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.



Figure 5.—Icy Strait golden king crab logbook CPUE and pot lift proportions based on reduction of Tanner crab harvest influence.

NORTH STEPHENS PASSAGE

Season Overview

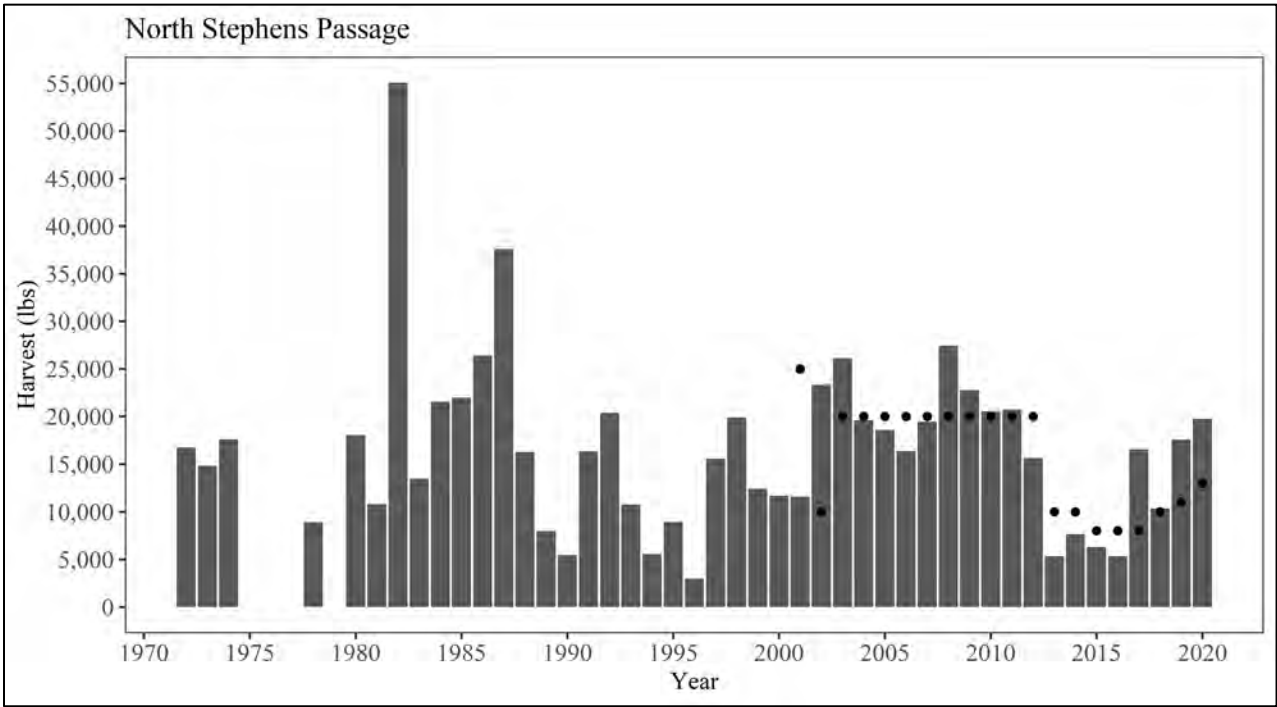


Figure 6.—Commercial GKC fishery harvest from the North Stephens Passage management area. Dots represent the GHF in a given year (2001–Present).

Reference Points

Table 4.—Golden king crab logbook catch per unit of effort (CPUE) reference points.		
Indicators	Reference Point	Description
Target Reference Point	1.6 crab/pot	Average Commercial Logbook CPUE from 2001–2017 (excluding 2000)
Trigger Reference Point	1.2 crab/pot	75% of the Target Reference Point
Limit Reference Point	0.8 crab/pot	50% of the Target Reference Point

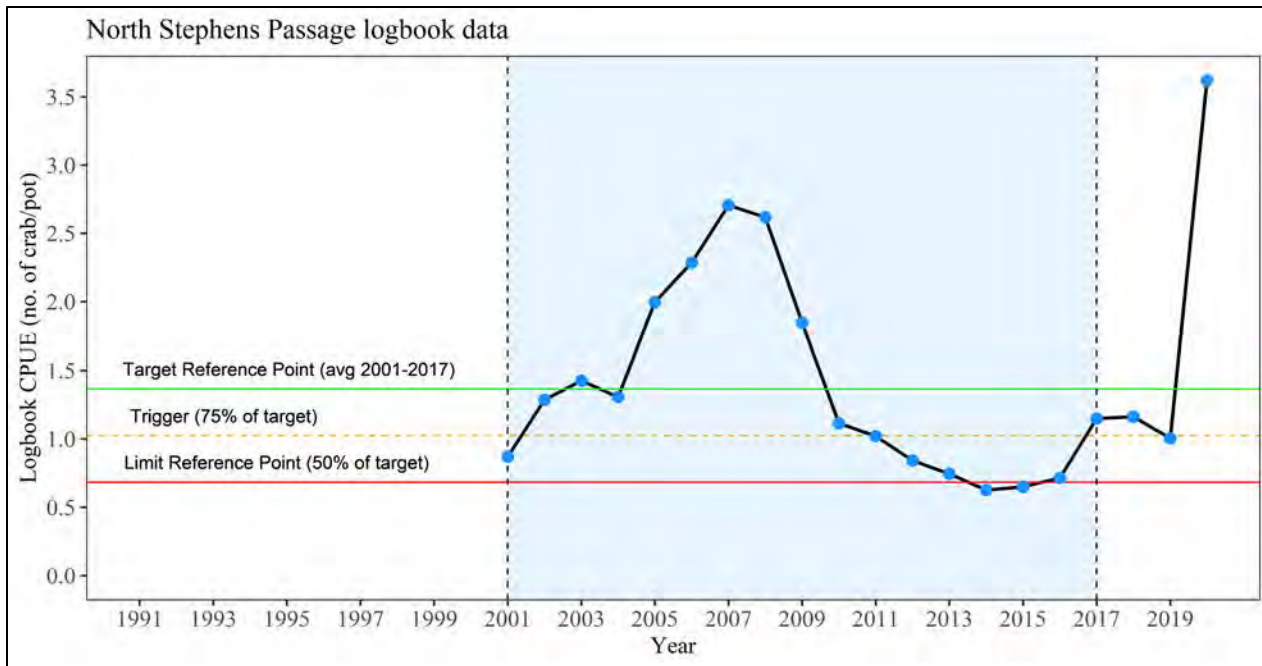


Figure 7.—North Stephens Passage golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.

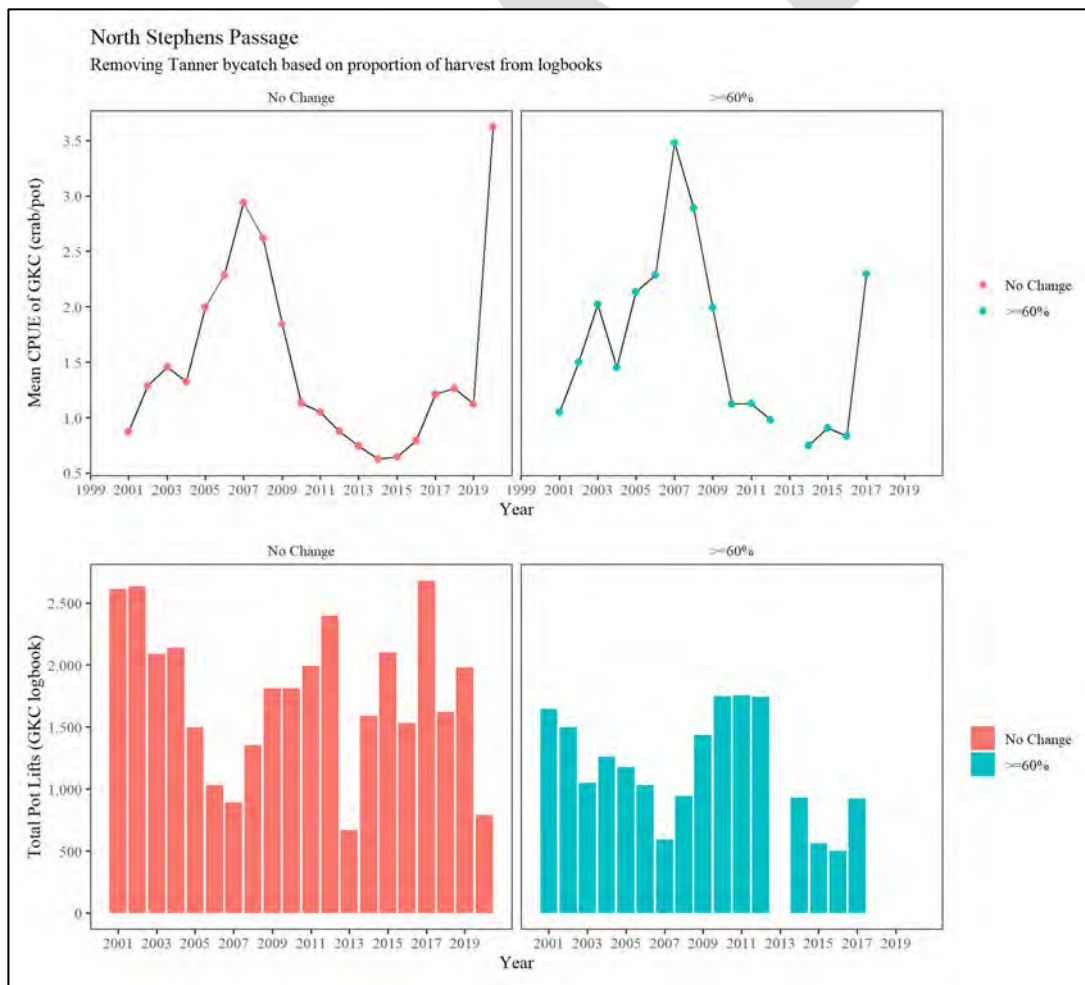


Figure 8.—North Stephens Passage golden king crab logbook CPUE and pot lift proportions based on reduction of Tanner crab harvest influence.



### Information from Annual Tanner Crab Stock Assessment Survey

The Department conducts an annual stock assessment survey in Holkham Bay where GKC have been caught incidentally. Data presented here includes spatial distribution and quantity of catch and by sex and recruit status.

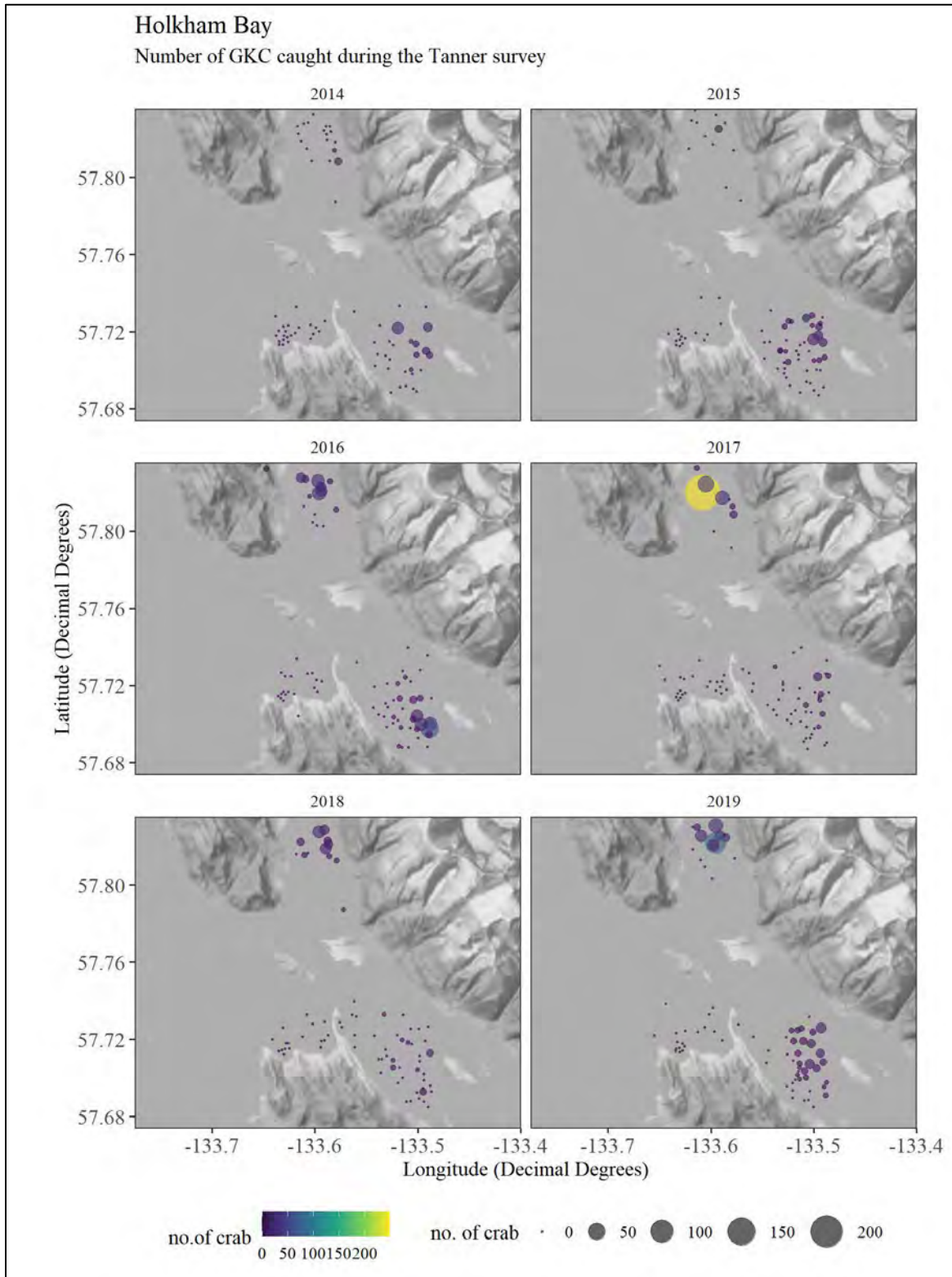


Figure 9.—Number of golden king crab caught during the annual Tanner crab stock assessment survey in Holkham Bay (2014–2019).



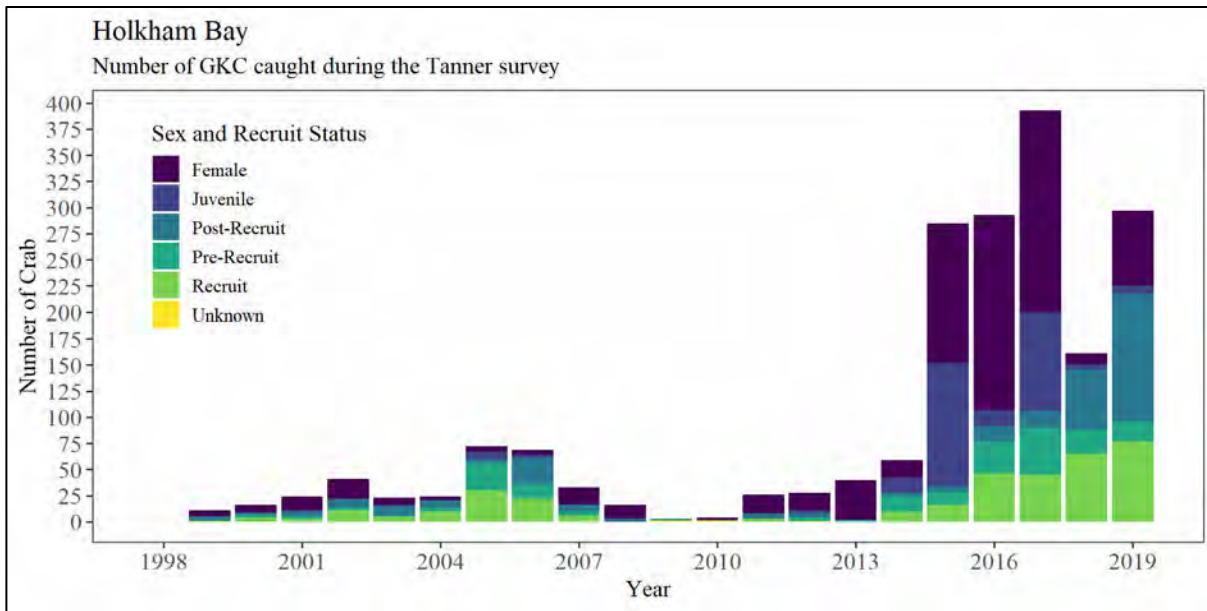


Figure 10.—Number of golden king crab caught during the annual Tanner crab stock assessment survey in Holkham Bay by sex and recruit status (1999-2019).

## EAST CENTRAL

### Season Overview

The East Central management area was closed for the 2018 and 2020 seasons.

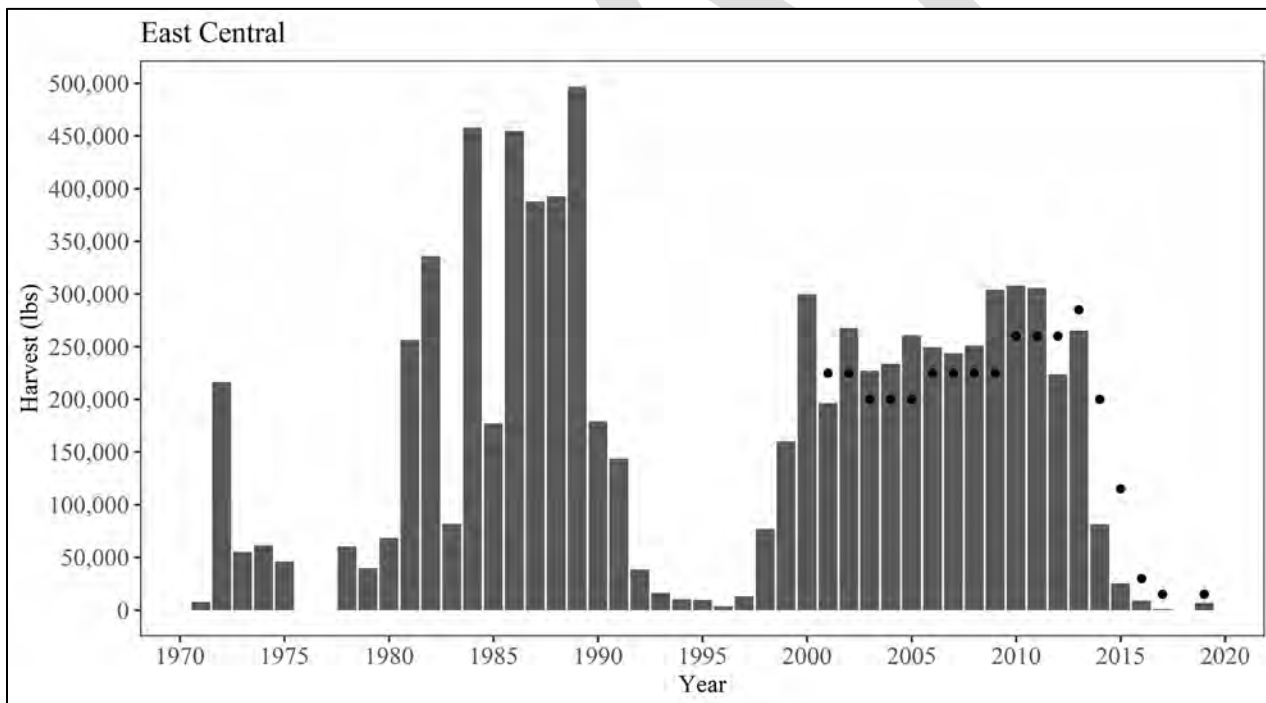


Figure 11.—Commercial GKC fishery harvest from the East Central management area. Dots represent the GHL in a given year (2001–Present).

## Reference Points

Table 5.—Golden king crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
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Target Reference Point	3.4 crab/pot	Average Commercial Logbook CPUE from 2000–2017
Trigger Reference Point	2.5 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.7 crab/pot	50% of the Target Reference Point

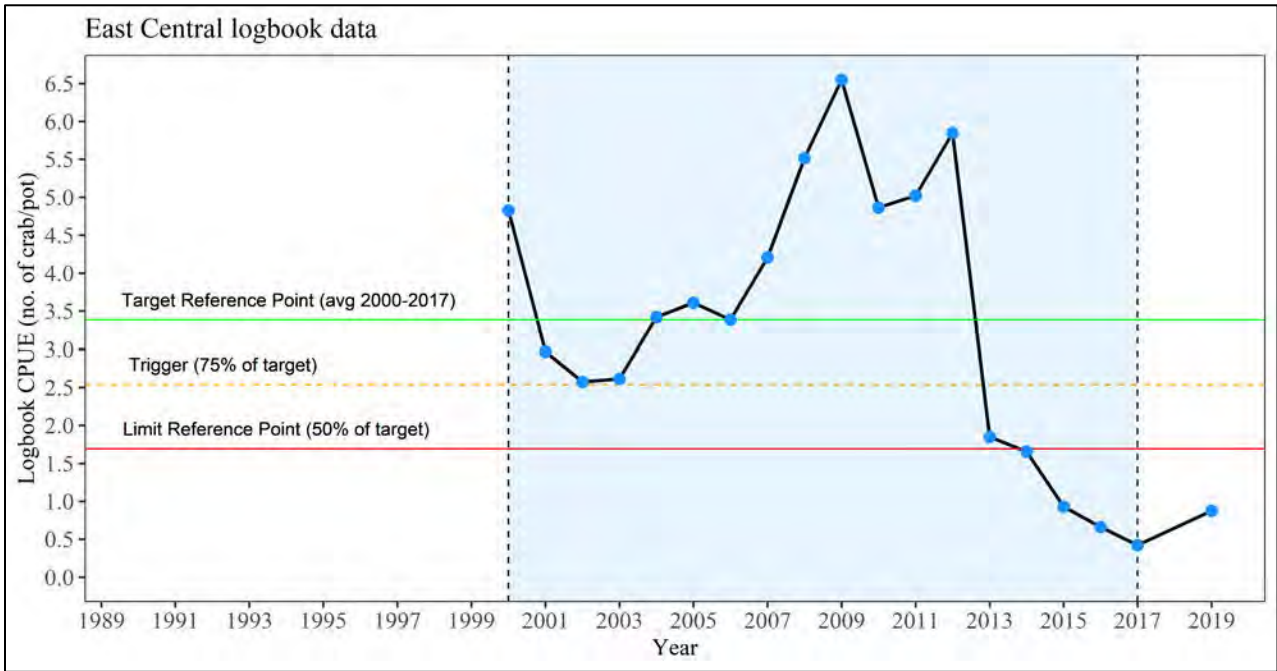


Figure 12.—East Central golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.

MID-CHATHAM STRAIT

Season Overview

The Mid-Chatham Strait management area was closed for the 2020 season.

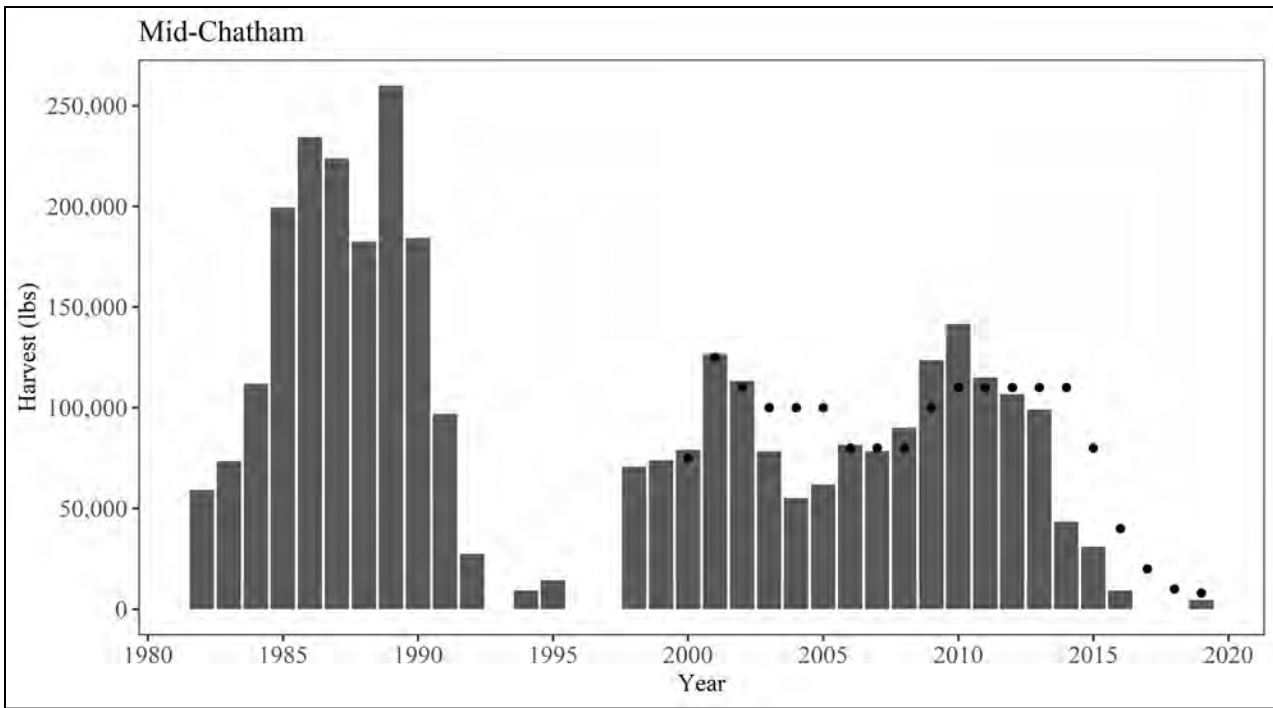


Figure 13.—Commercial GKC fishery harvest from the Mid-Chatham Strait management area. Dots represent the GHL in a given year (2001–Present).

Reference Points

Table 6.—Golden king crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
Target Reference Point	3.4 crab/pot	Average Commercial Logbook CPUE from 2000–2017
Trigger Reference Point	2.5 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.7 crab/pot	50% of the Target Reference Point

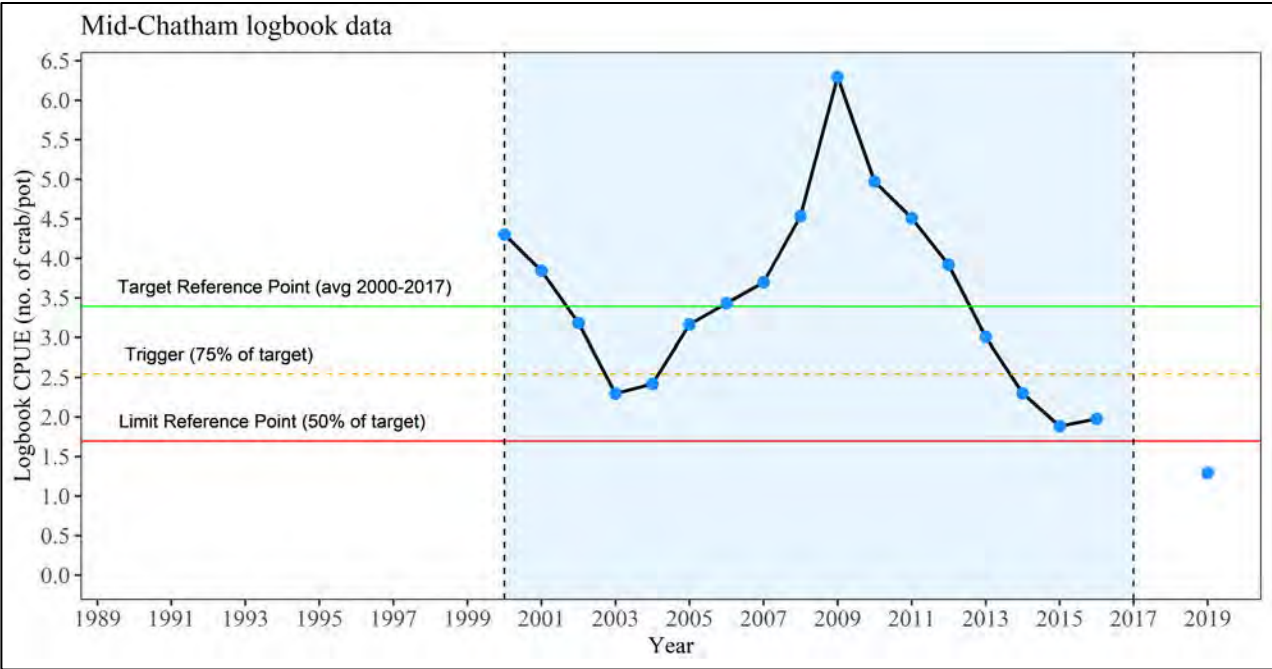


Figure 14.—Mid-Chatham Strait golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.

LOWER CHATHAM STRAIT

Season Overview

The Lower Chatham Strait management area was closed for the 2020 season.

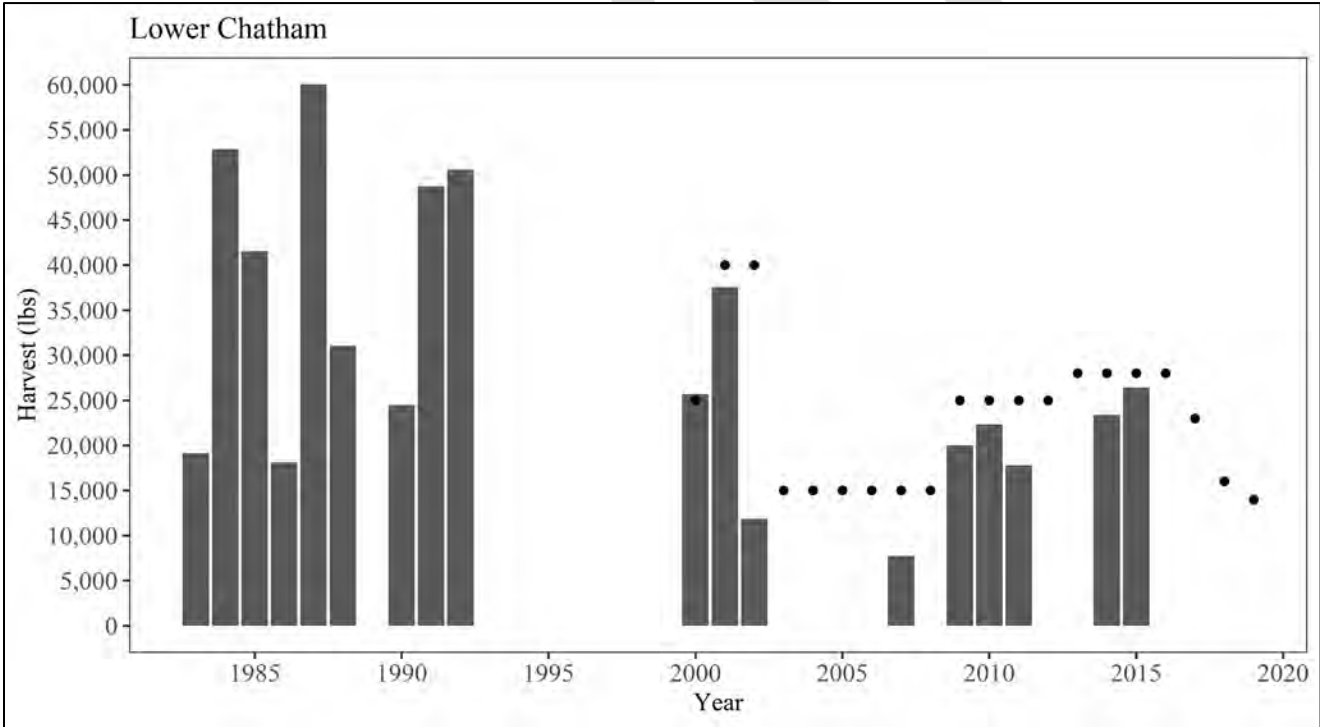


Figure 15.—Commercial GKC fishery harvest from the Lower Chatham Strait management area. Dots represent the GHL in a given year (2001–Present).

Reference Points

Table 7.—Golden King Crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
------------	-----------------	-------------

Target Reference Point	3.1 crab/pot	Average Commercial Logbook CPUE from 2000–2017 (excluding 2013)
Trigger Reference Point	2.3 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.6 crab/pot	50% of the Target Reference Point

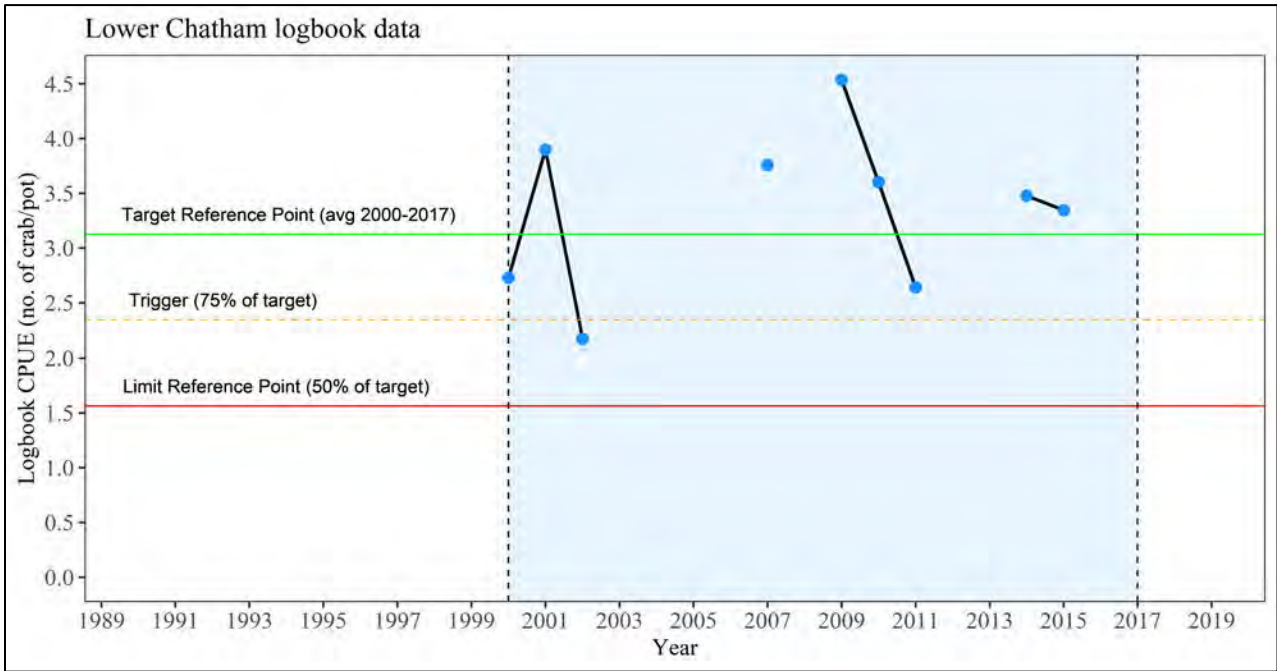


Figure 16.–Lower Chatham Strait golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.

SOUTHERN

Season Overview

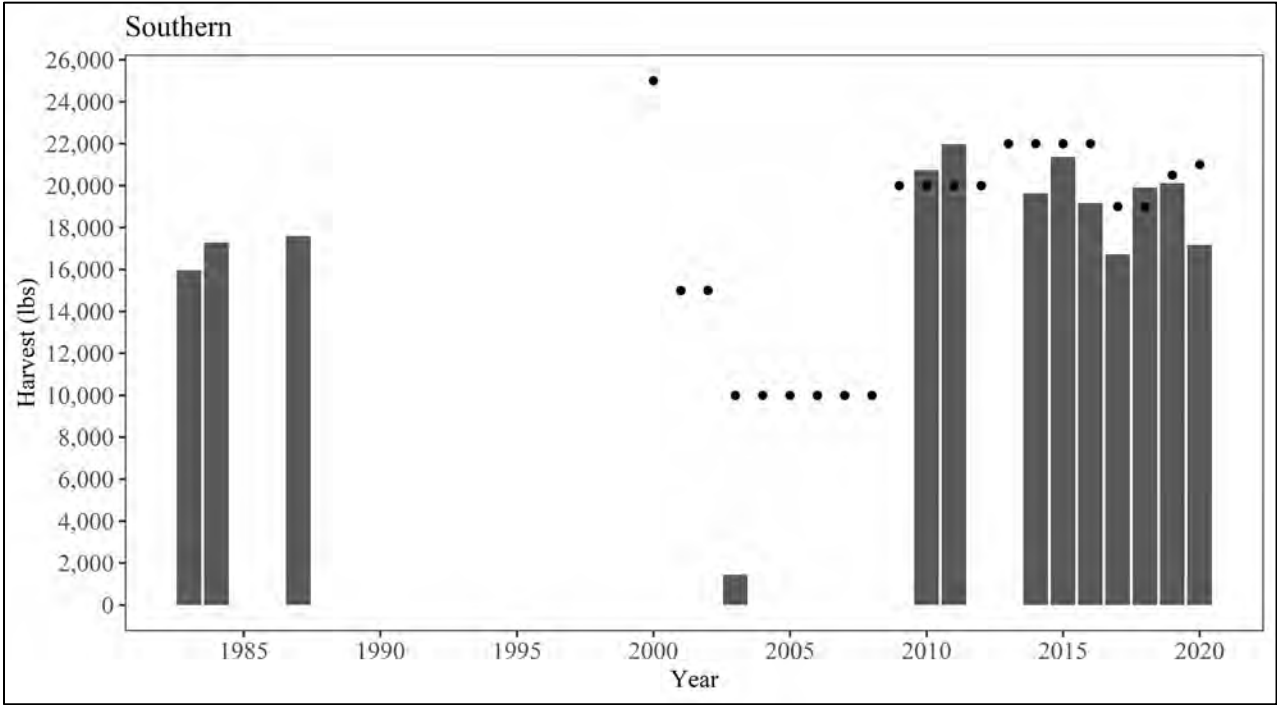


Figure 17.—Commercial GKC fishery harvest from the Southern management area. Dots represent the GHL in a given year (2001–Present).

Reference Points

Table 8.—Golden king crab logbook catch per unit of effort (CPUE) reference points.

Indicators	Reference Point	Description
Target Reference Point	4.1 crab/pot	Average Commercial Logbook CPUE from 2000-2017
Trigger Reference Point	3.1 crab/pot	75% of the Target Reference Point
Limit Reference Point	2.0 crab/pot	50% of the Target Reference Point

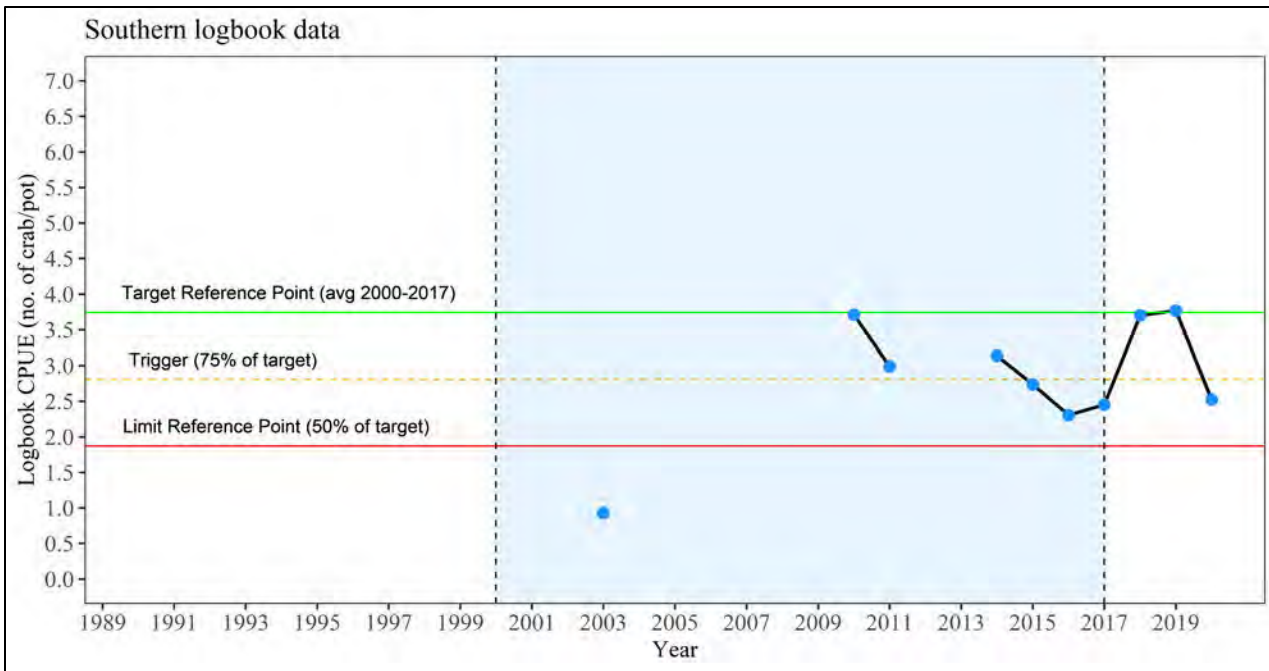


Figure 18.—Southern golden king crab reference points (Target, Trigger, and Limit) and fishery performance utilizing logbook CPUE.



Appendix for Proposal 39 - SUPPORT





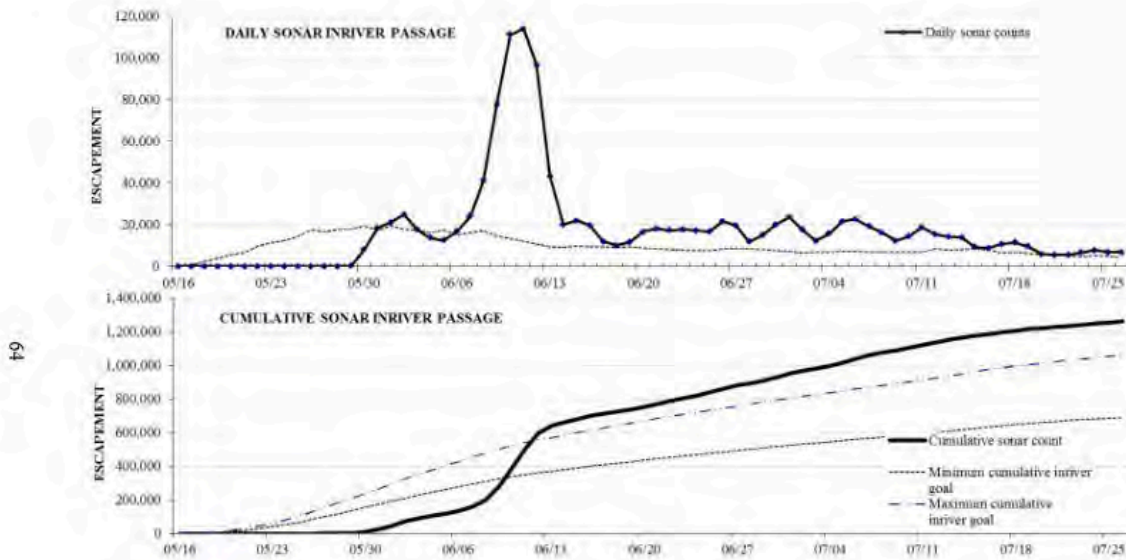


King crab caught during commissioner's permit tanner fishery



King Crab caught during 2020 king crab test fishery

## Appendix for Proposals 51, 52, 53 - OPPOSE



Appendix A8--Minimum and maximum inriver sonar goal versus actual daily and cumulative salmon passage, Miles Lake sonar, 2013.

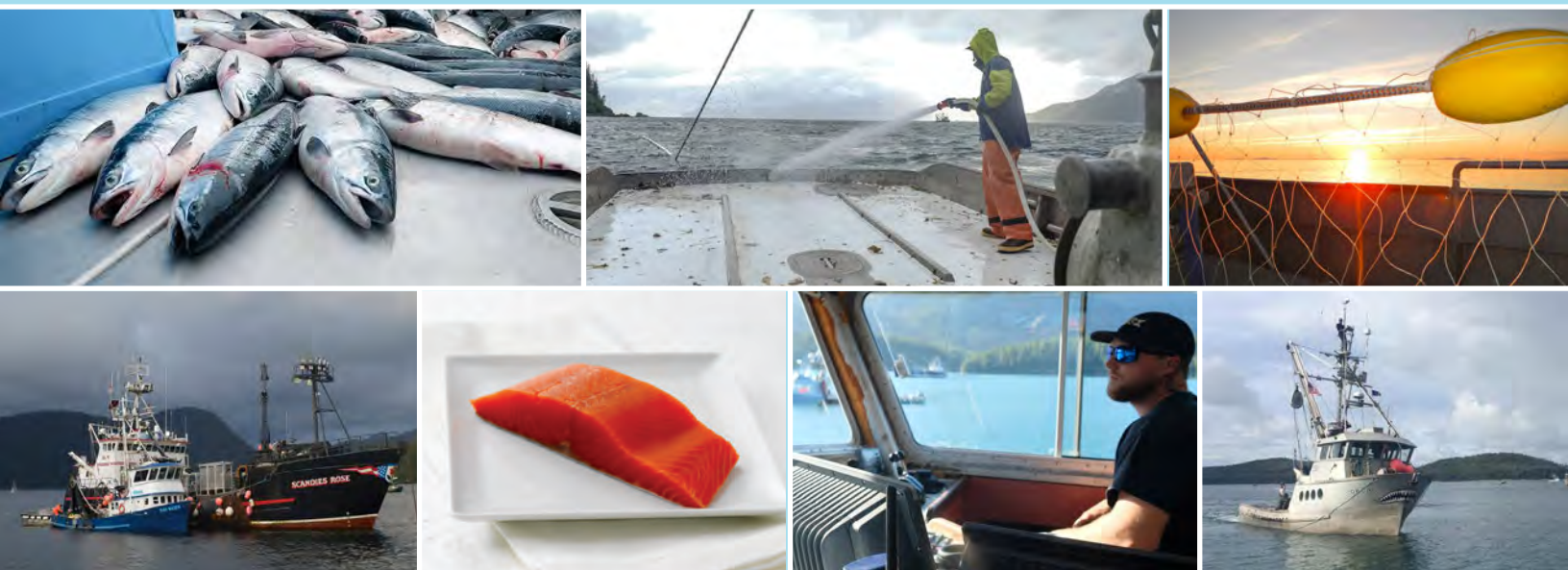
# Appendix for Proposal 78 - OPPOSE

Economic Impact of the

# Prince William Sound Aquaculture Corporation

September 2018

Prepared for  
**Prince William Sound  
Aquaculture Corporation**



Prepared by  
**McDowell  
GROUP**





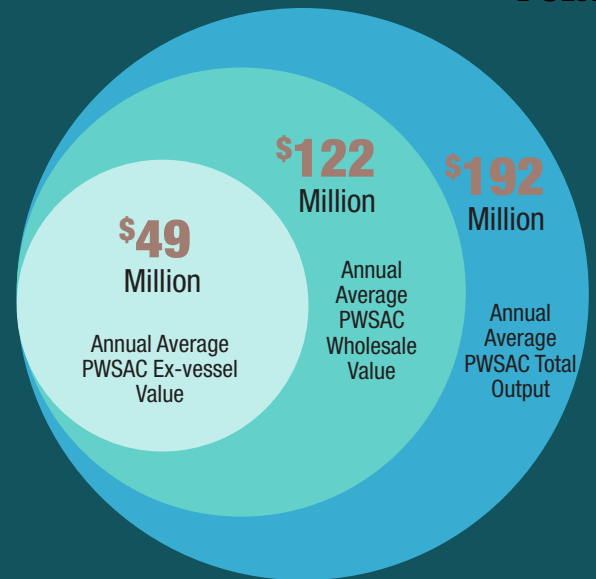




By the Numbers

# Prince William Sound Aquaculture Corporation

2012-2017



539 million pounds

90 million pounds

\$296 million

\$49 million

\$59 million

43%

\$730 million

\$122 million

1,405 jobs  
direct, indirect, and induced

\$68 million  
including all multiplier effects

\$192 million

Cumulative common property harvest volume of PWSAC salmon

Annual average volume of PWSAC salmon common property harvest

Cumulative common property harvest value of PWSAC salmon

Annual average value of PWSAC salmon common property harvest

Annual average odd-year value of PWSAC common property harvest

PWSAC salmon share of total PWS commercial salmon harvest value, 2012-2017

Cumulative first wholesale value of PWSAC-produced salmon products

Annual average first wholesale value of PWS-produced salmon products

Annual average employment supported by PWSAC

Total annual labor income supported by PWSAC

Total annual economic output generated by PWSAC produced salmon



# Introduction

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This report details the broad economic impact on Alaska of Prince William Sound Aquaculture Corporation (PWSAC). This is the sixth impact report prepared by McDowell Group for PWSAC since 2001.

PWSAC was founded in 1974 by local Prince William Sound (PWS) fishermen. The private non-profit corporation's mission is to optimize salmon production in PWS for all user groups, including commercial, sport, personal use, and subsistence. PWSAC produces all five salmon species from five hatcheries, four located in PWS and one located inland on the Gulkana River. PWSAC manages and operates three facilities owned by the Alaska Department of Fish & Game at no cost to the state.

## Armin F. Koernig Hatchery

Originally the site of a salmon cannery, the Armin F. Koernig Hatchery is located about 90 miles west of Cordova on Evans Island. The facility was PWSAC's first hatchery and began operations in 1974.

## Wally Noerenberg Hatchery

The Wally Noerenberg Hatchery is located approximately 20 miles east of Whittier in Lake Bay. Built in 1985, the hatchery is one of the largest salmon production facilities in North America.

## Cannery Creek Hatchery

The Cannery Creek Hatchery was built in 1978 by the Alaska Department of Fish and Game (ADF&G). In 1988 PWSAC took over management and operations (ADF&G still owns the hatchery.) The facility is located about 40 miles east of Whittier in Unakwik Inlet.

## Main Bay Hatchery

Built in 1981 by ADF&G and still owned by the state, PWSAC began providing management and operation services in 1991. Main Bay Hatchery is located 40 miles southwest of Whittier.

## Gulkana Hatchery

The Gulkana Hatchery is located on the Gulkana River near Paxson, 250 miles northeast of Anchorage. Established by ADF&G in 1973, PWSAC manages the facility which focuses primarily on sockeye salmon.

## Administrative Operations

PWSAC's main administrative offices are in Cordova. The organization also operates a distribution center in Anchorage used to consolidate and expedite supplies to hatcheries. That center also houses administrative staff.

# Commercial Fisheries Impact

Prince William Sound commercial seine and gillnet fishermen harvest significant volumes of salmon produced by PWSAC.

## Common-property Commercial Harvest and Ex-vessel value

- ▶ Between 2012 and 2017, PWS commercial fishermen (all gear types) harvested a cumulative total of 539 million pounds of PWSAC-produced salmon worth \$296 million. The annual commercial harvest of PWSAC fish averaged 90 million pounds worth \$49 million.
- ▶ PWSAC salmon accounted for 43 percent of the total PWS salmon harvest volume over the 2012 to 2017 period (1.2 billion pounds) and 45 percent of the total value (\$642 million).
- ▶ By volume and value, pink salmon is the most important species produced by PWSAC. Commercial fishermen harvested 390 million pounds (120 million pink salmon) from PWSAC between 2012 and 2017 worth about \$131 million. The annual commercial harvest of PWSAC pink salmon averaged 65 million pounds worth \$22 million.
- ▶ Over the 2012–2017 period, more than one in three pink salmon harvested in PWS came from PWSAC.
- ▶ Sockeye salmon are the most valuable species produced by PWSAC on a per pound basis. Over the study period, 44 million pounds were harvested worth \$94 million. About 7.3 million pounds of sockeye worth \$16 million were harvested annually.
- ▶ Chum are valued primarily for their roe, but flesh markets have developed in recent years. About 104 million pounds of this PWSAC-sourced chum worth \$68 million were harvested between 2012 and 2017, or an annual average of 17 million pounds worth \$11 million.
- ▶ PWSAC also produces coho: about 2.2 million pounds worth \$2.3 million were harvested over the study period. Nearly 375,000 pounds were harvested annually worth about \$390,000.





## Seine Harvest of PWSAC Salmon

- ▶ Seine vessels focus primarily on pink and chum salmon fisheries in PWS. About 220 vessels with 900 crew and captains harvest PWSAC fish.
- ▶ Between 2012 and 2017, seiners harvested about 996 million pounds of salmon in PWS worth \$347 million. PWSAC fish accounted for 404 million pounds or 41 percent of total volume. These hatchery fish were valued at \$148 million, 43 percent of the total seine harvest.
- ▶ For the individual PWS seine permit holder, earnings over this period totaled \$1.6 million, or an annual average of \$265,000. Harvest of PWSAC fish contributed about \$682,000 (annual average of \$114,000) to this total.

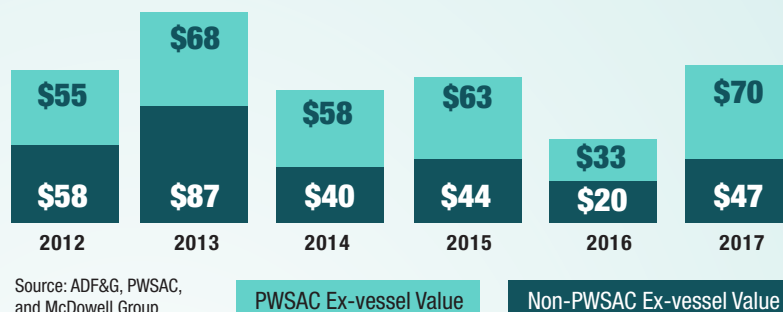
### Ex-vessel Earnings from PWSAC Salmon 2012-2017 (millions of dollars)

Year	Seine	Gillnet	Total
2012	\$23	\$35	\$58
2013	\$58	\$29	\$87
2014	\$14	\$25	\$40
2015	\$25	\$19	\$44
2016	\$2	\$18	\$20
2017	\$25	\$22	\$47
<b>Total</b>	<b>\$148</b>	<b>\$148</b>	<b>\$296</b>

Source: ADF&G, PWSAC, and McDowell Group Estimates.

## Value of Prince William Sound Common-Property Salmon Harvest

by Source, 2012-2017 (millions of dollars)



## Gillnet (Drift and Setnet) Harvest of PWSAC Salmon

- ▶ Gillnetters harvest less volume than seiners but capture higher value sockeye and coho. Nearly 520 drift vessels with about a thousand crew and captains harvest fish in PWS, in addition to roughly 30 setnet sites with 90 crew and permit holders.
- ▶ PWS gillnet fishermen harvested 220 million pounds of salmon between 2012 and 2017, an annual average of 37 million pounds. This harvest was worth \$295 million, an annual average of \$49 million per year. Of this total, salmon from PWSAC contributed 135 million pounds worth \$148 million, or 61 percent of total volume and 50 percent of earnings.
- ▶ For the average permit holder, earnings over this 6-year period totaled \$538,000. Harvest of PWSAC fish accounted for \$270,000 of this amount, or about \$45,000 annually.



## Processing Impact

- ▶ Salmon from PWSAC is processed primarily in Cordova and Valdez, in addition to Seward, Kodiak, and other communities.
- ▶ The PWS seafood processing sector includes shoreside plants, floating processors, and direct marketers.
- ▶ Between 2012 and 2017, PWS processors sold \$1.63 billion worth of seafood products; \$1.58 billion (97 percent) came from salmon. Halibut, sablefish, Pacific cod, and other species composed the remainder.
- ▶ Between 2012 and 2017, the first wholesale value of salmon products originating from PWSAC salmon totaled more than \$730 million, or an annual average of about \$122 million. Pink salmon products were the largest component, contributing an annual average of more than \$70 million.
- ▶ Processors added \$434 million in value to PWSAC-produced salmon over the 2012-2017 period. This value-added (or gross margin) is total value (\$730 million) minus the cost of purchasing the fish (\$296 million).
- ▶ Most PWSAC pink salmon is processed into frozen headed and gutted (H&G) form and shipped to a reprocessing facility. A declining portion of pink salmon are canned. In 2012 about half of all Alaska pink salmon were canned; in 2017 this proportion had declined to about a quarter.
- ▶ Nearly all PWSAC chum leave Alaska as frozen H&G. The primary coho and sockeye products are also primarily frozen, but with more value-add such as fillets and vacuum sealed. These two species also serve the fresh market, especially sockeye in the early season.
- ▶ Utilization of PWS salmon has increased as markets have been developed for different grades of salmon flesh products. Increased regional capacity for fish meal and fish oil production has also increased utilization.

## Sport, Personal Use, and Subsistence Impact

### Sport

- ▶ PWSAC salmon are commonly harvested by charter boat operators from Seward.
- ▶ Nearly 40,000 PWSAC coho were harvested by anglers over the 2012-2017 period, equal to about 2,200 daily bag limits annually; 7,500 PWSAC sockeye were harvested as well, or more than 200 daily bag limits per year.
- ▶ Residents of more than 50 Alaska communities harvested more than 325,000 PWSAC-produced sockeye salmon from 2012 through 2017, including:
  - Fairbanks: **115,000 fish**
  - Anchorage: **80,000 fish**
  - Matanuska-Susitna: **60,000 fish**
  - Copper River Valley: **50,000 fish**

### Personal Use and Subsistence

- ▶ Personal use and subsistence users harvest sockeye salmon produced by PWSAC's Gulkana hatchery in the Copper River. Between 2008 and 2017, PWSAC was the source of nearly two-in-five sockeye salmon harvested in these fisheries.
- ▶ Assuming the average 4-person family eats 40 salmon per year, PWSAC's annual contribution to personal use and subsistence fisheries helps feed 5,400 Alaskans annually.
- ▶ Harvest of PWSAC salmon attracts users who support hospitality, retail, and guiding businesses in the Copper River Valley.

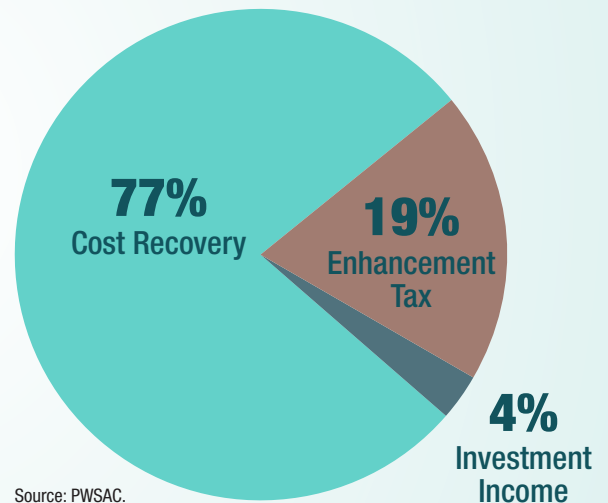


## PWSAC Operations

PWSAC is funded primarily through revenue generated from cost recovery operations when a portion of returning hatchery fish are sold directly to seafood processors. Other sources of operating revenue include a 2.0 percent enhancement tax paid by area fishermen and investment revenue. PWSAC periodically receives capital grants from the State of Alaska to support improvements at state-owned facilities.

- ▶ In 2017, operating revenue totaled \$12.6 million. Cost recovery was the largest component, contributing \$10.1 million or 80 percent of the total. Enhancement tax revenue of \$2.0 million (16 percent) and investment income of \$0.6 million (4 percent) accounted for the remainder.
- ▶ Over the 2012-2017 period, operating revenue from all sources averaged \$12.0 million. Cost recovery revenue contributed an annual average of \$9.3 million, or 77 percent of the total. Enhancement tax generated an average of \$2.3 million (19 percent) per year and investment income totaled \$0.4 million (4 percent) annually.

**PWSAC Operating Revenue Sources**  
2012-2017 Annual Average



Source: PWSAC.





# Economic Impact of PWSAC in Alaska

- ▶ PWSAC accounted for an annual average of 1,405 direct, indirect, and induced jobs over the 2012-2017 period. Total annual labor income averaged \$68 million over this time, including all multiplier effects.
- ▶ PWSAC's employment impacts include 610 annual-equivalent jobs connected with commercial fishing, 645 jobs associated salmon processing, and 150 jobs related to hatchery administration and operations.
- ▶ PWSAC's impacts include \$39 million in labor income connected with commercial fishing, \$24 million associated salmon processing, and \$6 million related to hatchery administration and operations.
- ▶ Total economic output associated with PWSAC, including all direct, indirect, and induced spending and wages, is estimated at \$192 million annually.
- ▶ The total number of people earning income as a result of PWSAC operations and production is more than double the annual average of 1,405, including fishermen, seasonal processing workers, seasonal and year-round hatchery employees, and support sector workers.

## Annual Average Economic Impact of PWSAC 2012-2017

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
<b>Commercial Fishing</b>			
Employment	420	190	610
Labor Income	\$29.4 million	\$9.2 million	\$38.6 million
<b>Seafood Processing</b>			
Employment	425	220	645
Labor Income	\$16.8 million	\$7.0 million	\$23.8 million
<b>PWSAC Operations</b>			
Employment	85	65	150
Labor Income	\$3.5 million	\$2.2 million	\$5.7 million
<b>Total Economic Impact</b>			
Employment	930	475	1,405
Labor Income	\$49.6 million	\$18.4 million	\$68.0 million
Output	\$123.2 million	\$69.0 million	\$192.2 million

Note: Totals may not sum due to rounding.  
Source: McDowell Group estimates using IMPLAN, ADF&G, DOLWD, and PWSAC data.



## Distribution of Economic Impacts

The economic impact of PWSAC extends well beyond Prince William Sound. PWS seine and gillnet permit holders come from many Alaska communities:

- ▶ In 2017, PWS seine permit holders were from 22 Alaska communities; residents of 30 Alaska communities held PWS gillnet permits.
- ▶ In 2017, Anchorage and Matanuska Borough residents held 115 limited entry permits for PWS.
- ▶ After Cordova, Homer residents generate the most commercial fishing income (more than \$21.6 million in 2017) from PWS salmon fisheries. Resident of Kenai Peninsula Borough earned a total of \$31.9 million.
- ▶ Municipality of Anchorage residents rank third in terms of PWS commercial fishing income, with \$13.7 million in earnings in 2017, while Mat-Su Borough residents earned more than \$3.5 million.

With PWSAC accounting for 45 percent of the value of PWS salmon fisheries over the 2012-2017 period (including 40 percent in 2017), it is evident that income generated by harvest of PWSAC salmon is broadly distributed.

PWSAC's economic impact outside of PWS also stems from its purchases of supplies, professional services, freight services, and many other goods and services from vendors throughout Southcentral Alaska.

In 2017, PWSAC spent \$4.0 million on with 158 different vendors in 23 Alaska communities, including \$1.5 million in Anchorage with 102 different vendors. Other spending occurred in Whittier, Seward, Fairbanks, Palmer, Eagle River, and Kenai, among others.

PWSAC has more direct economic impact in the Anchorage/Mat-Su area as well, employing 16 individuals from the region with annual wages of nearly \$600,000. PWSAC maintains an office in Anchorage, with 7 employees.

Local processors handling PWSAC salmon supported further economic impacts in Southcentral Alaska outside PWS through purchases of supplies, utilities, and other services.

### Residency of PWS Salmon Permit Holders with Ex-vessel Earnings, 2017

Location	Permits Owned	Ex-vessel Earnings
<b>Valdez/Cordova Census Area</b>	<b>325</b>	<b>\$36,865,213</b>
Cordova	301	\$33,093,490
Valdez	21	n/a
Chitina	1	n/a
Copper Center	1	n/a
Whittier	1	n/a
<b>Kenai Peninsula Borough</b>	<b>155</b>	<b>\$31,853,416</b>
Homer	97	\$21,627,598
Seward	22	\$4,238,507
Soldotna	6	\$282,171
Kasilof	7	\$269,402
Kenai	7	n/a
Anchor Point	5	n/a
Sterling	5	n/a
Moose Pass	3	n/a
Ninilchik	1	n/a
Nikolaevsk	1	n/a
Seldovia	1	n/a
<b>Municipality of Anchorage</b>	<b>81</b>	<b>\$13,735,376</b>
Anchorage	48	\$4,352,712
Girdwood	22	\$6,224,356
Eagle River	8	n/a
Chugiak	3	n/a
<b>Mat-Su Borough</b>	<b>34</b>	<b>\$3,546,537</b>
Wasilla	26	\$2,117,088
Palmer	3	n/a
Willow	3	n/a
Sutton	2	n/a
<b>All Other Alaska</b>	<b>27</b>	<b>\$2,606,806*</b>
Juneau	6	n/a
Kodiak	5	\$1,964,499
Delta Junction	5	\$642,307
Fairbanks	3	n/a
Petersburg	3	n/a
Dillingham	2	n/a
Dutch Harbor	1	n/a
Haines	1	n/a
Hoonah	1	n/a
<b>Alaska Resident Total</b>	<b>622</b>	<b>\$90,580,317</b>

\*Subtotal does not include confidential values.

Note: n/a means values are confidential. **Alaska Resident Total** includes confidential data.  
Source: CFEC



# Tax Revenue Associated With PWSAC

## PWSAC salmon production generates significant state and local taxes

- ▶ Between 2012 and 2017, harvest of PWSAC salmon generated about \$10.6 million through the State of Alaska's Fisheries Business Tax. Half of this total is shared with communities where PWSAC salmon are landed (\$5.3 million) and the State retains the remainder. Cordova and Valdez receive most of these funds.
- ▶ Other tax revenue is directly generated when PWSAC-sourced fish are landed in a community with a raw fish tax (e.g., Kodiak). Communities with sales tax (e.g., Cordova and Seward) are also supported indirectly when the harvest and processing sector purchase goods and services locally.
- ▶ Property tax revenue is also generated indirectly through processing of salmon. Silver Bay Seafoods and Peter Pan Seafood are among the largest non-oil property tax payers in Valdez. Trident Seafoods, Ocean Beauty Seafoods, and Copper River Seafoods paid nearly \$250,000 in 2018 property taxes to the City of Cordova.

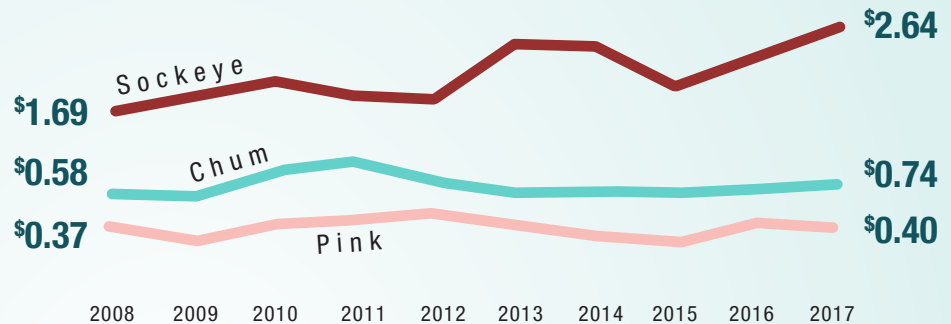




# Market Outlook for Wild Alaska Salmon

- ▶ The near-term market outlook for wild Alaska salmon is positive. Strong consumer demand for Alaska-caught fish combined with processor innovations and a focus on quality have strengthened Alaska's place in the competitive global market.
- ▶ Over the last decade ex-vessel prices have generally been stable or trended higher. Nominal ex-vessel pink salmon prices averaged \$0.39 per pound in PWS, ranging from a high of \$0.53 in 2012 to a low of \$0.23 in 2015. Relatively weak statewide harvest levels for pink salmon in 2018 will help support demand and a stable or elevated price.
- ▶ Chum salmon prices averaged \$0.67 per pound over the same period, including a high of \$0.87 in

Average Nominal Prince William Sound  
Ex-vessel Salmon Prices (per pound), 2008-2017



Source: ADF&G

2011. Average PWS sockeye prices per pound have grown, reaching \$2.64 in 2017.

- ▶ Near-term threats to the Alaska salmon industry include currency fluctuations, trade disruptions, and run failures. Competition with farmed salmon remains a long-term challenge.



## Methodology and Sources

All photos are from ASMI, Franklyn Dunbar, and McDowell Group.

The data used in this report comes from a variety of sources, including PWSAC, Alaska Commercial Fisheries Entry Commission (CFEC), Alaska Department of Fish and Game (ADF&G), Alaska Department of Labor and Workforce Development (DOLWD), and Alaska Department of Revenue (DOR). In addition, interviews were conducted with PWSAC staff, ADF&G employees, and other experts. Estimates provided in this report are based on the best available data. The study team used data from these sources, in addition to proprietary research, to develop economic models to estimate direct, indirect, and induced employment and labor income.



# Appendix for Proposal 78 - OPPOSE

PC152

ECONOMIC IMPACT OF

# ALASKA SALMON HATCHERIES

Private nonprofit (PNP) salmon hatcheries play an important role in Alaska's seafood industry, the sport and subsistence harvests, and the regional economies of Southeast Alaska, Prince William Sound, Cook Inlet, and Kodiak.

Alaska's PNP hatchery associations contracted with McKinley Research Group to update previous research on the economic impact of hatcheries. This update covers 2018-2023. The research found that annually on average, Alaska's hatcheries accounted for:

**4,200 Jobs**  
(ANNUALIZED)



**\$219M**  
LABOR INCOME

**\$103M** EX-VESSEL VALUE

**=16%**

SHARE OF  
TOTAL  
STATEWIDE  
EX-VESSEL  
VALUE



**14,000+**

PEOPLE EARNING INCOME  
FROM HATCHERY SALMON



**\$576M**

TOTAL ECONOMIC OUTPUT

**\$346M** FIRST WHOLE-  
SALE VALUE

**=21%**

SHARE OF  
TOTAL  
STATEWIDE  
SALMON  
WHOLESALE  
VALUE

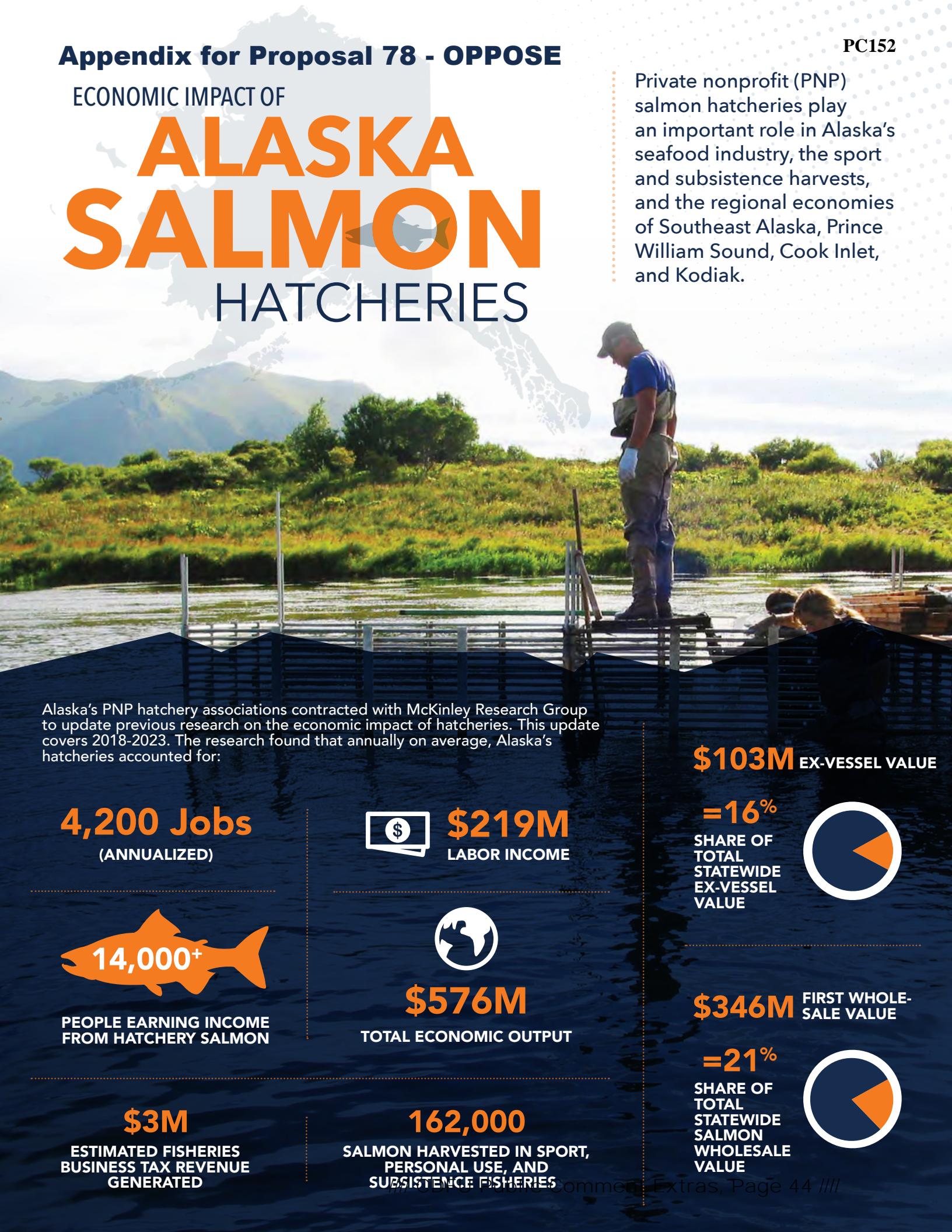


**\$3M**

ESTIMATED FISHERIES  
BUSINESS TAX REVENUE  
GENERATED

**162,000**

SALMON HARVESTED IN SPORT,  
PERSONAL USE, AND  
SUBSISTENCE FISHERIES





# SEAFOOD PROCESSING VALUE

## FIRST WHOLESALE

First wholesale value provides one measure of the sales made by Alaska’s seafood processors. It represents the ex-vessel value paid to fishermen plus value added by processing raw products. First wholesale production includes both common property and cost recovery hatchery salmon. Common property salmon made up 77% of the value on average in the 2018-2023 study period. The remaining 23% of wholesale value was cost recovery salmon.

- The first wholesale value of hatchery-produced salmon averaged **\$346 million annually** over the last five years.
- Hatchery-derived first wholesale value represented **21% of total statewide salmon first wholesale value**.
- Hatcheries account for **two-thirds of the total first wholesale value of Alaska’s chum salmon**, about a third of coho first wholesale value and a quarter of pink and Chinook value.
- Processors paid approximately **\$3 million annually in fisheries business taxes** from hatchery salmon. Fisheries business taxes are based on the ex-vessel value of the product purchased by processors.

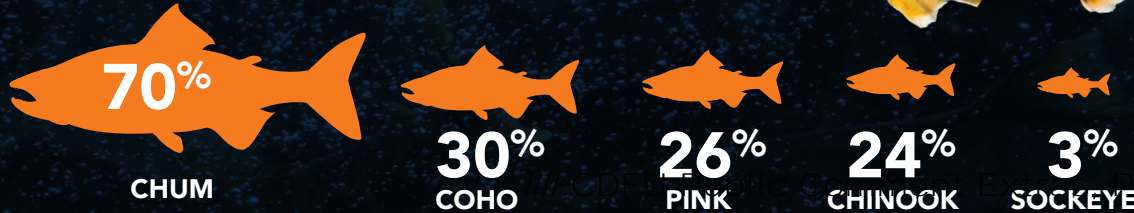
# ECONOMIC IMPACTS

- Statewide, approximately **7,500 fishermen (permit holders and crew) earn some of their income from harvest of hatchery-produced salmon**. About 950 annualized commercial fishing jobs can be attributed to salmon produced by PNP hatcheries.
- The employment impact of hatcheries also includes **hundreds of jobs in seafood processing, hatchery operations, and charter fishing. Hatcheries additionally generate thousands of jobs in the support sector**, created as hatchery-generated dollars cycle through the Alaska economy.
- The employment impact of hatcheries totals **about 4,200 annualized jobs, including all multiplier effects. A total of \$219 million in annual labor income** (wages) can be attributed to salmon hatcheries.

ECONOMIC IMPACT OF ALASKA (STATEWIDE) HATCHERY PRODUCTION

	DIRECT IMPACTS	INDIRECT & INDUCED IMPACTS	TOTAL ECONOMIC IMPACTS
COMMERCIAL FISHING			
EMPLOYMENT	950	430	1,390
LABOR INCOME (\$MILLIONS)	\$61	\$20	\$81
SEAFOOD PROCESSING			
EMPLOYMENT	1,010	810	1,810
LABOR INCOME (\$MILLIONS)	\$58	\$29	\$87
HATCHERY OPERATIONS			
EMPLOYMENT	290	340	630
LABOR INCOME (\$MILLIONS)	\$22	\$10	\$32
NON-RESIDENT SPORT FISHING			
EMPLOYMENT	330	100	440
LABOR INCOME (\$MILLIONS)	\$12	\$7	\$19
TOTAL ECONOMIC IMPACT			
EMPLOYMENT	2,580	1,680	4,270
LABOR INCOME (\$MILLIONS)	\$153	\$66	\$219
OUTPUT	\$375	\$208	\$583

HATCHERY PRODUCTION SHARE OF TOTAL FIRST WHOLESALE VALUE, BY SPECIES, 2019-2022



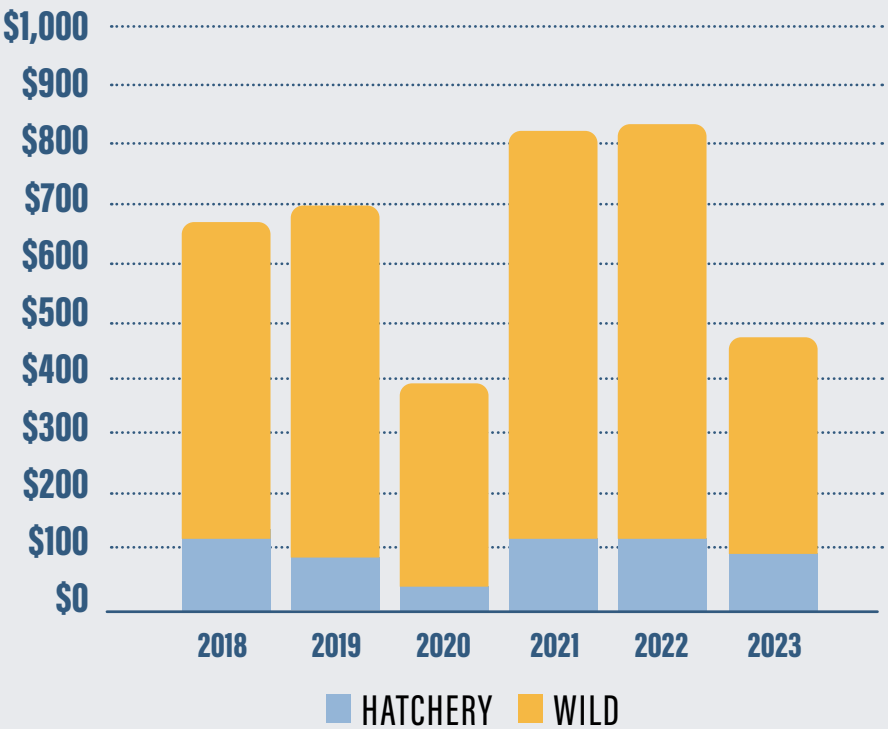
# COMMERCIAL FISHING VALUE

## EX-VESSEL (COMMON PROPERTY)

Commercial fishing economic activity generated by hatcheries includes both common property fisheries and cost recovery fisheries. Common property fisheries are regular commercial fishing opportunities available to commercial fishing permit owners. Cost recovery fisheries are exclusive fishing opportunities to harvest hatchery salmon to generate revenue for hatcheries. The figures below include only common property fisheries.

- Between 2018 and 2023, commercial fishermen harvested an annual average of **170 million pounds of hatchery-produced salmon worth \$102 million** in ex-vessel value, the gross revenue earned by fishermen.
- **The regional benefits of hatchery production are broad**, including \$51 million in annual average harvest value in Prince William Sound, \$42 million in Southeast, \$8 million in Kodiak, and about \$0.6 million in Cook Inlet.
- **Chum and pink salmon account for most hatchery production**. These two species made up 47% and 36% of hatchery-generated common property ex-vessel value, respectively – followed by sockeye (10%), coho (5%), and Chinook (2%).
- **Most hatchery-generated ex-vessel revenue went to the seine fleet (63%)**, followed by gillnetters (30%), and trollers (7%).
- **Hatchery salmon accounted for 16% of the total value** of Alaska’s salmon harvest over the 2018-2023 period.
- **Hatchery contribution to total salmon harvest was highest in PWS (53%)**, followed by Southeast (33%), Kodiak (17%), and Cook Inlet (3%).
- **Cost recovery income to harvesters is about \$1 to \$3 million annually**, although cost recovery is not included in overall economic impact totals due to data limitations.

HATCHERY CONTRIBUTION TO EX-VESSEL VALUE OF ALASKA’S SALMON HARVESTS, 2018-2023 (MILLIONS OF DOLLARS)



HATCHERY SALMON EX-VESSEL VALUE AS % OF STATEWIDE SALMON TOTAL





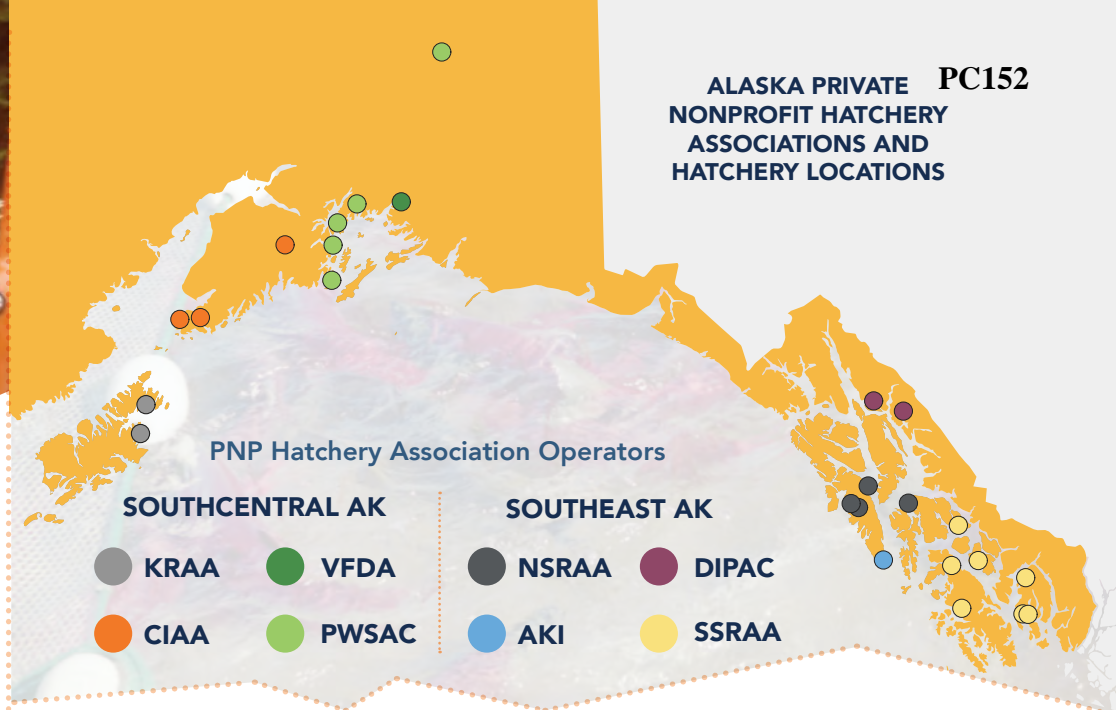


## 50 YEARS OF PRIVATE NONPROFIT HATCHERIES IN ALASKA

The origin of Alaska's private non-profit salmon hatcheries dates back fifty years. In the early 1970's the Alaska legislature took several steps to address low salmon returns in the state including the creation of limited entry fishing permits, allowing the development of salmon hatcheries, and – in 1974 – authorizing Private Nonprofit Corporations (PNPs) to operate these hatcheries.

As of 2024, eight PNPs operate 26 hatcheries in Alaska. These include a mix of PNP and state-owned hatcheries, which PNPs operate at no cost to the state. There are four additional non-PNP hatcheries: two sport fish hatcheries operated by the state (in Anchorage and Fairbanks), a research hatchery owned by the federal National Marine Fisheries Service, and a tribally owned hatchery operated by the Metlakatla Indian Community.

## ALASKA PRIVATE NONPROFIT HATCHERY ASSOCIATIONS AND HATCHERY LOCATIONS



## SPORT, PERSONAL USE, AND SUBSISTENCE

- **At least 162,000 hatchery salmon were caught in sport, personal use, and subsistence fisheries** annually. This number is likely a significant underestimate because of limited sampling and limited tagging of coho salmon.
- These fisheries **provide food for Alaskans and generate revenue from visitors attracted to Alaska because of sport fishing opportunities**. There are numerous salmon derbies across the state that are supported by hatchery-raised fish, mostly coho.
- The **four Southeast PNP hatchery organizations support noncommercial harvest with the release of millions of coho, Chinook, chum, and sockeye salmon each year**. Personal use of sockeye; sport charter, marine sport, and shoreside sport catch of chum, Chinook and coho are all significantly supported by these hatchery programs.
- The **two Prince William Sound PNP hatchery associations produce coho, sockeye, and pink salmon caught by noncommercial users**. Hatchery produced coho significantly supports the charter operators in the sound. Coho subsistence fishing in the village of Tatitlek is supported as well. Hatchery raised sockeye salmon are caught in Copper River subsistence and personal use fisheries.
- **The Cook Inlet Region PNP hatcheries produces sockeye salmon** in Cook Inlet's Resurrection Bay, an area that historically had few sockeye runs but now attracts sport fishermen. Hatchery-produced coho salmon also enhance sport fishing opportunities in this region.
- **The Kodiak PNP hatcheries enhance fishing opportunities for noncommercial users along the Kodiak road system** by stocking sockeye, coho, and Chinook salmon, as well as rainbow trout.

## Appendix for Proposals 79, 80, 81 - SUPPORT

**Table 80-1.-Main Bay Harvest for commercial, sport and subsistence fisheries and Main Bay Hatchery broodstock collection and cost recover, Prince William Sound Management Area, 2014–2023.**

Year	Harvest				Hatchery		Total Contribution
	Commercial	Sport	Subsistence	Total	Cost Recovery	Broodstock/Escape ment	
2014	1,189,499	9,791	3,485	1,202,775	0	84,324	1,287,099
2015	1,331,675	4,046	2,332	1,338,053	180,516	31,255	1,549,824
2016	778,515	4,015	1,777	784,307	0	9,846	794,153
2017	552,059	4,291	3,404	559,754	0	48,535	608,289
2018	1,034,159	5,426	1,806	1,041,391	0	11,640	1,053,031
2019	862,311	7,628	2,706	872,645	8,987	9,269	890,901
2020	494,934	9,155	3,011	507,100	232,337	9,735	749,172
2021	446,944	5,394	4,298	456,636	255,837	15,498	727,971
2022	474,706	6,402	2,664	483,772	118,420	10,794	612,986
2023	539,559	4,146	3,629	547,334	226,956	19,828	794,118
Average							
2014–2023	770,436	6,029	2,911	779,377	102,305	25,072	906,754

## Appendix for Proposal 84 - SUPPORT

ADF&G Home » Sport Fishing Survey » Southcentral Alaska » 2014-2023 saltwater Sea-run Chinook salmon harvest summary

### Alaska Sport Fishing Survey

#### Regional Summary Estimates

Study Years: 2014-2023 ▾

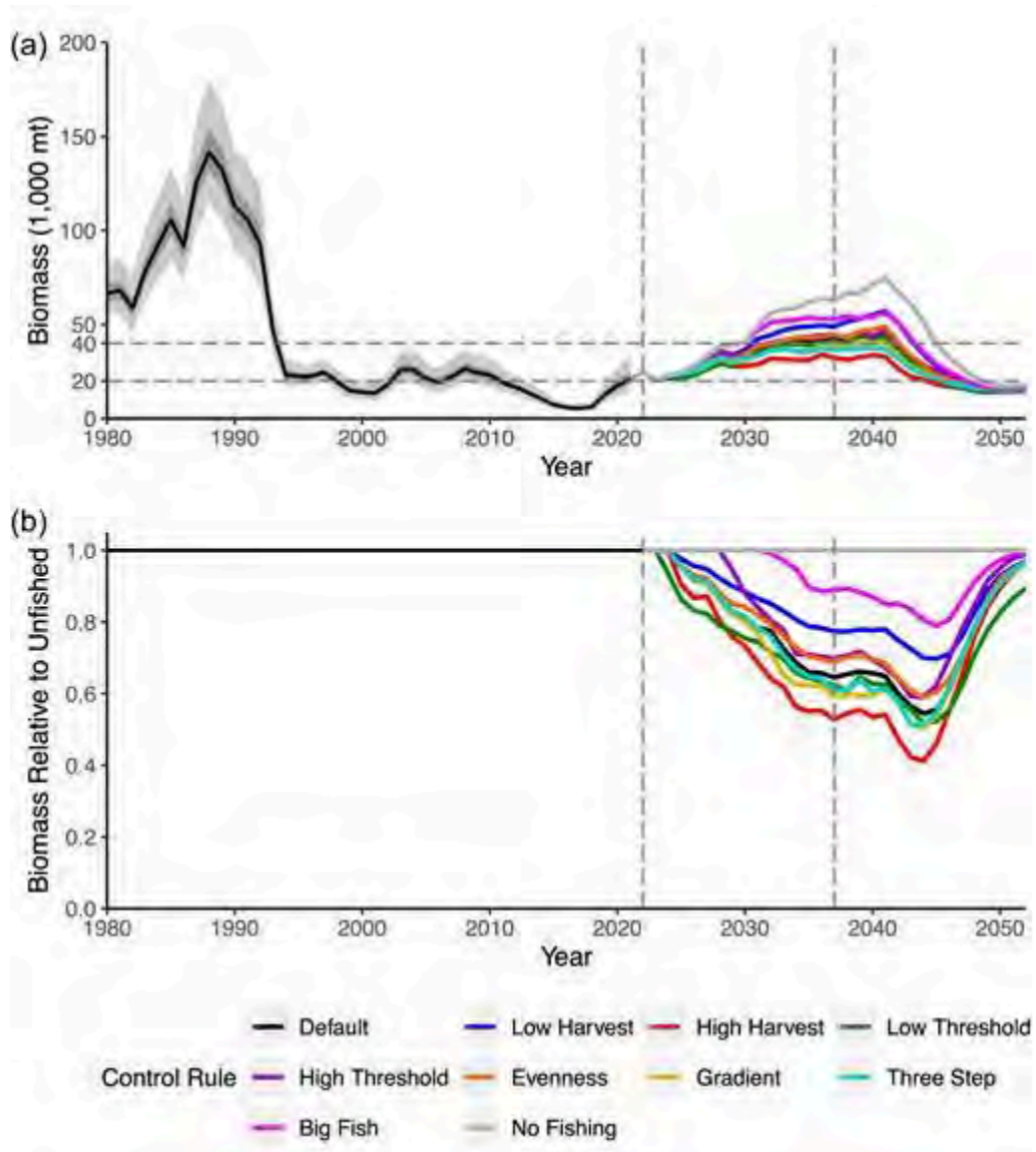
Estimates of Southcentral Alaska sport saltwater Sea-run Chinook salmon harvest, 2014–2023.

SOUTHCENTRAL	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
(J) North Gulf Coast/Prince William Sound	4,582	5,205	5,438	5,202	3,611	7,380	11,054	10,750	7,113	9,432
(K) Knik Arm				0	0	0	0	0	0	95
(L) Anchorage	0	16	20	0	0	0	0	0	0	0
(PS) Cook Inlet saltwater	11,989	19,515	20,005	17,438	18,157	15,650	15,132	18,260	16,760	12,540
(PX) Cook Inlet (Shellfish only)	0	0	0	0	0	0	0	0	0	0
(Q) Kodiak	8,049	6,709	9,499	11,065	7,090	6,647	7,677	11,673	8,011	9,540
(R) Alaska Peninsula/Aleutian Islands	107	172	170	235	359	337	49	0	69	78
(S) Kvichak River drainage		0				0	0			
(T) Nushagak, Wood River and Togiak	0		0	20	205	0	0	0		63
<b>Southcentral Total</b>	<b>24,727</b>	<b>31,617</b>	<b>35,133</b>	<b>33,960</b>	<b>32,422</b>	<b>30,014</b>	<b>33,912</b>	<b>40,683</b>	<b>31,953</b>	<b>31,748</b>

 [download as spreadsheet](#)

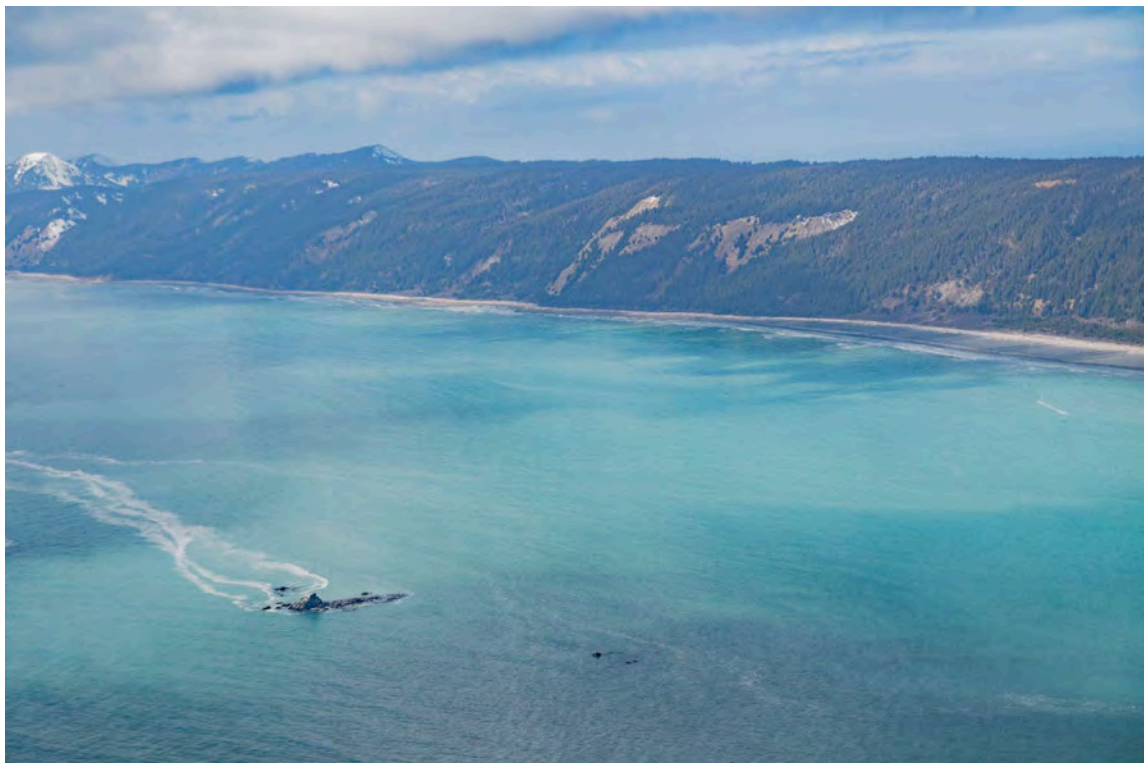
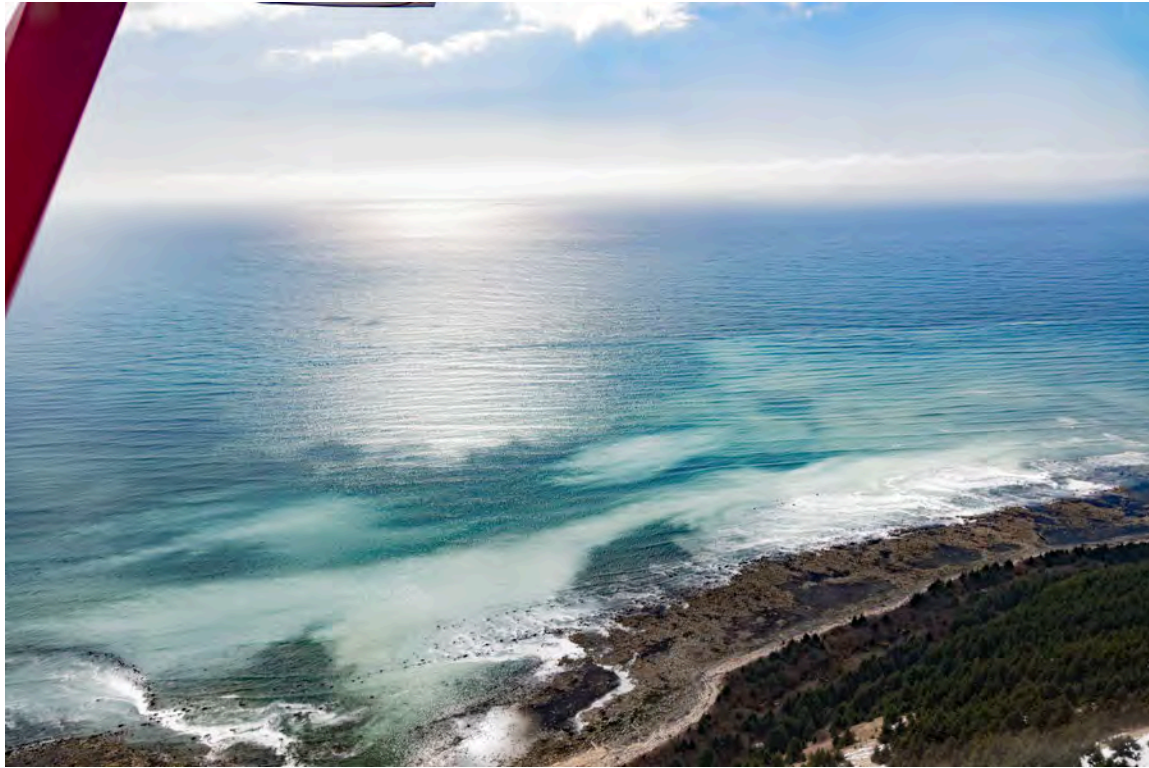
[back to Southcentral Alaska](#) • [back to home](#)

## Appendix for Proposal 97 - SUPPORT





Appendix for Proposal 99 - SUPPORT





**Submitted by:** Kevan Corella

**Community of Residence:** Cordova

**Comment:**

I oppose proposals 52 and 53. The red run on the Copper River is has only missed the escapement goal 1 year out of the last 20, with most years putting more fish than are required into the river. The further reduction of fishing time is not warranted and only results in unnecessary economic impact on a fishery already struggling with economic viability.

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**Submitted by:** Gus Cotten

**Community of Residence:** Halibut Cove Alaska

**Comment:**

I would like to voice my opposition to proposition #78.

I'm confident the board will understand the significance of ADF&G opposing this proposal along with countless others, but as a third generation Alaskan salmon seiner and Alaskan resident I would be remiss not to add my name to the list of concerned parties.

The impacts of this proposal would be detrimental to not only the fishermen and processors, but also to all of the industry that works downstream of commercial fishing in our communities and for likely no positive environmental impact.

I would also like to oppose proposals #75 #76 and #77 as they essentially aim to kick seiners while they're already down. The allocation was agreed upon almost twenty years ago and this blatant attempt to skew it more in favor of the drift fleet, particularly during a time of economic crisis for the seine fleet seems harsh and unjustified.

Thank you for your time.

---

Hello Chairman Carlson-Van Dort and Members of the Board of Fisheries,

My name is Andy Couch. I live in Alaska's Mat-Su Valley near Palmer and have fished for and eaten Upper Copper River salmon since the mid-1970s. With dramatic declines in salmon returning to Mat-Su Valley streams, during the past 5 years, my wife (Frede Stier) and I have harvested a larger portion of the salmon we eat, or share with friends, from the Copper River. In the 1970s I caught king salmon by sport fishing the Gulkana River and caught both sockeye salmon and king salmon by personal use dip netting at Chitina. Since then, I've harvested king salmon by sport fishing in the Gulkana and Klutina River, and more recently my wife and I have harvested most of our sockeye and king salmon by subsistence dip netting the Copper River upstream from Chitina.

I support the concept of Proposals 51, 52, and 53 — but believe that each proposal (opening the Copper River Salmon Management Plan) — if adopted as written — may not be conservative enough to ensure adequate spawning escapements of early returning Copper River king and sockeye salmon, while also sharing reasonable subsistence, personal use, and sport fishing harvest opportunities with the thousands of Alaskans who participate in Upper Copper River fisheries on an annual basis.

I, therefore, suggest that the board consider the following ideas and concepts when considering / adopting changes appropriate for the management plan:

- \* Most of the commercial king salmon harvest occurs during May (before the department has a good idea of the inseason abundance of king salmon). Because of this species' earlier run timing, over harvest by the commercial fishery during May can jeopardize attainment of king salmon spawning escapement goals, and exacerbate restrictions and harvest closures for all Upper Copper Users groups — as occurred in 2024.
- \* Although the Department develops both daily and cumulative salmon sonar count objectives for each date of the season starting on or before May 15 — during 2023 and 2024 the department has not met a single one of the daily or cumulative objectives during the entire month of May. (Mark Miller with the Wrangell — St. Elias Park Service) has a graph demonstrating the significantly larger rate of commercial harvest during May compared to other portions of the season.
- \* Even though not a single daily or cumulative salmon sonar objective has been achieved during the month of May for the past two seasons, ADF&G's commercial manager stated that he managed the commercial fishery **"Conservatively during 2024,"** as he had restricted fishing periods to 12 hours on Mondays and Thursdays, closed waters in the expanded Chinook salmon closure area, and closed the 4th period in May to commercial fishing. Despite these actions commercial harvests during the 4 May periods that were fished totaled 253,183 sockeye, 6,053 kings, 5,613 chum salmon, and 65 coho salmon. Meanwhile the cumulative sonar count for the entire month of May was 34,587 salmon compared to the cumulative objective of 148,339 during the same time period. Conservative management might better be defined as meeting some level of daily and cumulative sonar objectives throughout the run.
- \* While some of the salmon harvested during May were likely not bound to spawning areas upstream of the Miles Lake sonar on the Copper River, it is still worth considering that **during May 2024:** More than 7 times as many salmon (264,914) were harvested in the Copper River Commercial Fisheries as were counted past the sonar (34,587).



**Management Plan Recommendations:** The harvest data suggests escapement needs for discrete early-run Copper River salmon stocks may be better served if the commercial fishery were **managed on a step-up basis** rather than the current [STEP-DOWN BASIS] which perpetuates over harvests of salmon stocks returning during May (and particularly during later spring / colder water years that appear to retard upstream migration).

Rather than opening by the calendar — perhaps the Copper River commercial fisheries should only open after a specific number of salmon are counted past the sonar (the **cumulative management objective** may be an appropriate number, that could better ensure adequate spawning escapements of discrete early-returning salmon stocks, while also better sharing harvestable surplus salmon throughout the run amongst lower and upper river user groups).

Opening the commercial season after a specific level of salmon passage above the sonar would be a good start, and with proper management, could also better ensure more consistent commercial harvest opportunities and spread more consistent salmon harvest rates throughout the run. Such conservative early season management is less likely to be interrupted by emergency closures. Consistent with managing on a step-up basis, however, it is important to note that during May, even when not allowed to fish in the expanded Chinook Salmon closure area, and only fishing a 12-hour period on Mondays and Thursdays, the commercial fleet has demonstrated the ability to harvest over 7 times as many salmon as counted passing the sonar. Therefore, some consistency in sonar passage should be measured before each commercial opener. **Achieving an additional cumulative management objective** before allowing each successive commercial opener would: better meter salmon harvests and escapements throughout the run, better share harvestable surplus salmon amongst ALL user groups, and more closely follows regulatory language in the Policy for Management of Sustainable Salmon Fisheries 5 AAC 39.222.

#### **Additional Considerations:**

Early-run Copper River salmon provide all user groups some of the first readily available fresh salmon of the year, and are therefore highly valued by all user groups. Economic benefit for the Upper Copper River sport fishery is directly tied to the number of days of fishing with reasonable king salmon harvest opportunity, and earlier arriving king salmon to the Upper Copper River brings substantially more economic benefit.

Although triggering the start of the commercial season by salmon passage at the sonar may, at times, delay commercial harvests, Copper River salmon will remain the earliest net - caught Alaska salmon available, and, therefore, should maintain their status of premium price for first-of-the season quality salmon.

Thank you for your efforts in conserving Alaska's wild king salmon, and in providing reasonable harvest opportunities for all Alaskans sharing a limited public resource.

I look forward to hearing and watching your efforts for the Copper River resource and its users,

Andy Couch

**Submitted by:** Chris covert

**Community of Residence:** Anchorage

**Comment:**

I have been dip netting on the Copper for 5 years now and I support the keeping of the copper River chitna subsistence harvest. I feed my family off this all winter long. Please consider keeping this natural resource open to the public

Chris

Covert

---

**Submitted by:** Kip coyne

**Community of Residence:** palmer

**Comment:**

For clarity , proposal voting should have been linked to the proposal, not on separate pages elsewhere. Too confusing, poorly done. I dont want to spend an hour surfing for the proposal.

---

**Submitted by:** Robert Coyner

**Community of Residence:** Eagle River

**Comment:**

I have been participating in the Copper River personal use fishery since the early 90s to help feed my family. Remembering when the limit was 5 king salmon, never would I harvest that. In the past decade, I've rarely been allowed to keep even one king. Since the limit has been reduced to one and routinely closed by emergency order, I usually am releasing 5 to 10 king salmon back. Additionally, Ahtna corporation trespassing signs have increasingly been put up in an attempt to further restrict Alaskans from utilizing this fishery. I adamantly oppose any further restrictions by the passing of BOF proposal 63, 64, and 65.

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**Submitted by:** Elizabeth Crail

**Community of Residence:** Fairbanks

**Comment:**

44,45,46,47,49,50,54,55,56,57,60,61,62,63,64,65,66,67,68,69,71 - opposed

48,51,52,53,58,59,79 - support

In short, I support personal use and subsistence fisheries.

Although commercial fishing is an important industry for our state, the ability of individuals and families to harvest their own fish is more important, and the loss of any of it is incalculable. The disparity in numbers means that any restrictions need to be applied to the commercial industry and not to the individuals who are utilizing the personal use and or subsistence fisheries.

On that subject, I retain grave concerns about the excessive bycatch in the commercial fleets, and in other fishery areas besides the ones at issue for this particular meeting.

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**Submitted by:** Adam Crum

**Community of Residence:** Wasilla

**Comment:**

I Oppose Alaska Board of Fisheries proposals #63, #64, and #65 to reduce the opportunities for Alaska residents to gather salmon to eat.

Less than 10% of sockeye salmon returning to the Copper River drainage are harvested by Alaskans at the Chitina Personal Use fishery, and less than 5% of the king run. Well over 500,000 sockeye and tens of thousands of kings still are reported upriver every year. Sharing returning salmon among Alaskans is the law under state abundance-based management.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial fisherman and salmon seiner. Salmon hatcheries are essential to my business, family, lifestyle, and community. Proposal 78 would be detrimental to the entire salmon industry in Prince William Sound. It's completely unnecessary, reckless, and unconscionable to handicap an established industry just to test out someone's theory, which is based entirely on conjecture and cherry picked correlative coincidences. Whether this proposal passes or not, the proponents of this theory will just find any correlation that fits their narrative and try to portray it as a causal link.

Just because a study is peer reviewed does not mean it is settled science. I am fine with more study in this area, but the burden of proof should be on the people who intend to damage our fishery, not on the stakeholders of this fishery to disprove their theory. Do the right thing and oppose 78. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a

strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Nicholas Crump

A solid black rectangular box used to redact the signature of Nicholas Crump.

Valdez, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

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For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Nicholas Crump

A solid black rectangular box used to redact the signature of Nicholas Crump.

Valdez, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial fisherman. I was fishing in Prince William Sound 49 years ago when we had no hatchery production. I have served on the CDFU board and VFDA board and know the importance of fish to all Alaska citizens. Watching commercial and sport fishermen enjoy the benefits of hatcheries has been very rewarding to my lifetime of helping the hatcheries in Prince William Sound.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

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Sincerely,

Bernard Culbertson

[REDACTED]

Valdez, Alaska

**Submitted by:** Raven Cunningham

**Community of Residence:** Cordova

**Comment:**

Oppose proposals # 51,52,53

Dear Board of Fish, my husband and I are both NVE tribal member commercial fishermen. We depend on this fishery for our main source of income. These proposals would have a negative economic impact on my family, the majority (over 70 %) of tribal member households, and our community. It would increase harvest pressure on particular stocks and take tools away from the managers. Stock diversity issues and biodiversity have not been documented on the Copper River. My family has fished this river for over 100 years and if we were going to see evidence of early season commercial fishing affecting biodiversity it would have already happened.

These proposals also do not account for the time it takes the fish to get from the ocean to the sonar, the fish that go by before the sonar is in place, our delta stocks that do not go by the sonar, and the upwards of over half a million salmon that can be in this staging area at any given time.

Thank you

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**Submitted by:** Andrew Dallman

**Community of Residence:** Anchorage

**Comment:**

An increase of Burbot retention and limit would decrease the burbot population.

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**Submitted by:** Albert Daniels

**Community of Residence:** Wasilla Ak

**Comment:**

I totally oppose changing the dip net regulations. My family and I rely on this resource to supply. Our fish needs for the year. The charter is a safe and effective way for us to get our subsistence.

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Nov. 2024

Dear Alaska Board of Fisheries,

I am in favor of proposals 73 and 74.

This proposal will benefit the fishery by reducing an influx of boats heading for Prince William Sound on years with a larger than average forecast. There are currently too many permits available. Some might argue that this will make it difficult for new fishermen to get into the fishery; However, the initial cost of a permit means nothing if the fishery isn't profitable. Young fishermen will make more as Deckhands and be able to invest in the fishery, if the boat they are working on is more profitable. New permit and boat owners will be able to make payments. This proposal is a much needed benefit to the Prince William Sound Seine Fleet.

I oppose proposal 75 and 76.

This proposal is not in the best interest of either seine or gillnet fishery. The current allocation is one that has been in place for nearly two decades, was developed by both user groups over many years and strives to split the resource equally between the two user groups. Most fishermen have invested in the fishery understanding the allocation plan and understanding its impact on their business. Making these proposed changes will not benefit the fishery but instead disrupt a system that has been in place and that fishing businesses were based upon.

I oppose proposal 77.

PWSAC hatcheries were created to benefit both the seine and gillnet fleets equally. VFDA does not have anything to do with the PWSAC or the PWSAC allocation plan and was constructed in what has always been a seine gear type area. Including VFDA in any type of PWSAC allocation would be catastrophic to the seine fleet. Seinners would only have access to a small percentage of PWSAC salmon. Many family fishing businesses, mine included, would be devastated by changing the allocation in this way.

I oppose proposal 78.

A 25% reduction of egg take at hatcheries in Prince William Sound would mean economic disaster for the Fishermen and Communities of the Area. Most of the salmon fry that are released from hatcheries quickly become food for birds, other fish and marine mammals. Only a small percentage (approx. 2% - 5%) of eggs fertilized at hatcheries return as mature fish. The sustained reduction of egg take at these hatcheries would negatively impact the area and so many families for years to come.

Sincerely,

Brandon Darr

**Submitted by:** Jessica Davis

**Community of Residence:** Fairbanks

**Comment:**

It seems like we are trying to allow stacking permits for commercial fisheries, but trying to remove dual permits for personal use fisherman who hold a permit for both Lower Cook Inlet and Copper River.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Valdez, Alaska, and my family has been commercial fishing in Prince William Sound since before statehood. I am a fourth-generation commercial fisherman, and I hope my son can become the fifth generation. Salmon hatcheries have provided a significant portion of our family's income year after year since returns first began. A 25% reduction would cut my income, which would also reduce my crew's income, ultimately providing less money for all of our families.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

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Sincerely,

Edward Day

A solid black rectangular box used to redact the signature of Edward Day.

Valdez, Alaska

*Stephen Day*  
*F/V Wren*  
*Area E gillnet permit holder since 2018*

Commenting on proposals 46, 47, 48, 49, 51, 52, 53, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 70, 71, 75, 76, 77, 78, 79, 80, and 81

To the Board of Fish members,

In considering how to best manage such a complicated resource as a wild salmon run there are so many factors and opinions. I'm sure in the coming weeks you will hear perspectives from all sides and all will be compelling. We all speak passionately about what we care about. Salmon are vital to so many people's way of life. I urge you as an intelligent and conscientious decision maker to consider all that are affected by your decisions, but to do it through the lens of science. Decades of research and hard effort have gone into understanding how to best preserve an abundant return of harvestable salmon on the Copper River and in Prince William Sound. Please do your best to be objective, consider the user groups involved, and to examine how your decisions could be influenced by subjective opinion and political motivation. Your actions now will have repercussions into the future for real people and their livelihood. Thank you in advance for the time and effort you apply to this process.

I am a drift gillnet permit holder in this region and have grave concerns for the future of this fishery, which I depend on as my main livelihood. For the Copper River I am aware that upriver users are also dependent on this run of salmon, but I'd like to draw a comparison between the two. I as a permit holder had to make a significant monetary investment in the way of purchasing a limited entry permit in order to have the right to harvest fish. In that purchase I feel I made an implicit agreement with the State of Alaska that my ability to access the salmon resource in a profitable manner in this region would be upheld. Upriver users also have an implicit agreement with the state to access the same resource, but for the purpose of filling their freezers for the year. The comparison is one of scale. I am reliant on these fish to fund my whole year and future career, and if this run were to fail due to inconsiderate management my career would crash and my investments would become worthless. I believe the state is responsible to me to preserve the viability of this harvestable resource.

I support 46, 47 and 65.

I support all proposals that increase reporting and accountability of harvest in personal use and subsistence fishing along the whole Copper River system. Lower river users and the upriver users should both report more and more often. It is vital that we understand the harvest and manage accordingly. Commercial harvest is very well recorded and reported. It seems important that other users report in kind. Let's get as much data as we can!

I support 49 and 71, but oppose 48.

In reference to proposals that limit for-profit endeavors related to subsistence and personal use harvest: While I support salmon being accessible to Alaskans, I think it is against the legacy of



subsistence and personal use fisheries to monetize their access. This style of fishing has always been a version of self-reliance and community effort. Let it remain so and leave the for-profit operations to the commercial and sport fleet. Also if the cost of successful participation in that fishery rises to a point where it meets or surpasses the cost of purchasing salmon in a retail store, then that fishery can surely no longer be considered a personal use or subsistence fishery.

I oppose 51, 52, and 53.

I am hesitant to support inflexible management mandates. In all but one of the seven years I've fished the early season on the Copper River, we have faced significant closures and restrictions of our fishing time. ADF&G already manages the early season conservatively. Putting such an inflexible restriction in place will remove the best source of early season data we have and handcuff ADF&G in their ability to dynamically manage the fishery. In my opinion more creative solutions to managing the early run are in order. Perhaps more but shorter commercial openers, area restrictions, test fisheries, more sonar installations. But in my opinion rigid closure plans are not the right way to move forward.

I support 55 and oppose 58.

Chinook Salmon are a huge concern for all participants. Let's share the burden of reducing harvest fairly.

I oppose 56 and am neutral on 57.

While permit stacking is an established norm in other gillnet fisheries, I have concerns about creating barriers to new entrants to the fleet. I oppose 56 because it favors long established fishermen and consolidation of resources. 57, requiring there to be two permit holders aboard in order to run a longer net, may allow new entrants a way into the fishery without investing in a vessel initially, or allow a permit holder who experiences a mechanical disaster preventing them from operating their vessel to continue fishing the rest of the season on another vessel. I am concerned that it will become necessary to have a D permit in order to be competitive in this fishery and thus the bar for entry will be even higher.

I support 60, 61, 62, and 64.

Particularly I am in support of 64 that limits people from participating in multiple PU fisheries. I am limited from participating in multiple commercial salmon fisheries as a permit holder. I do think there is room for amendment, perhaps to some wording that says one may not "participate" in multiple PU fisheries, rather than hold permits.

I support 66

Commercial fishing is managed to maintain returns to hatcheries, let other user groups that benefit from the enhanced runs those hatcheries provide also participate in ensuring their continuing success.

I support 67

It's only common sense to keep fish intended for release in the water as much as possible.

I oppose 70

More area geared towards guided operations in a fishery that I believe should not have professional guide participation is not appropriate.

I support 75, 76, and 77

Having participated in this fishery for seven seasons now and having gone through some low years in that time and only seeing Port Chalmers be allocated to the drift fleet twice in that time doesn't make sense to me. I would like to see changes to how this is managed. More nimble and more equitable allocation of the shared resource is in order. Including VFDA fish in the allocation is low hanging fruit. Honestly I was surprised to learn that it hasn't been included in these calculations.

I oppose 78

Reduction of hatchery production by 25% is drastic. It already feels like as common property fishermen we are fighting for scraps left after cost recovery. I worry that such a reduction would reduce production to a point where there would not be enough return for cost recovery to cover operating expenses of the hatcheries and thus would be a death sentence for the whole system. This would be devastating for the viability of this struggling fishery and the people and communities reliant on it. I personally make most of my season's money in PWS, largely off hatchery fish. This change could truly devastate that large portion of my income, and that of many others. Before such an extreme measure is taken, the science must be rock solid and agreed upon by all parties. I haven't seen that to be the case.

I support 79, 80, and 81

These will protect operations for Main Bay Hatchery and eliminate conflicts between user groups. Accomplishing cost recovery as quickly and efficiently as possible benefits all users.

Thank you for listening to my concerns and for doing your due diligence as servants of the residents of Alaska. I love this state as I'm sure you do and I want it to remain a viable place to live and work and thrive. We're all in that fight together.

-Stephen

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial fisherman – both seining and gillnetting. Salmon hatcheries in Prince William Sound are responsible for the majority of the pink I have bought throughout my whole fishing career. In seasons in which the wild pink run has been weakened, the hatchery program ensures the protection of those weak runs by providing large amounts of harvestable pink salmon to the commercial fishing interests.

With the efficient modern fishing fleet, a reduction of 25% of egg take would greatly impact the number of salmon the hatcheries would be able to produce. A reduced number of peak salmon in the sound will negatively impact the fishery by limiting the fishing opportunity due to less fish in the districts. Further, reducing the amount of hatchery fish will in term put increased pressure on wild runs.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

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Sincerely,

Dylan Deal

A solid black rectangular box used to redact the signature of Dylan Deal.

Cordova, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am from Cordova, Alaska, and I am a commercial fisherman with a seine operation in Prince William Sound. The salmon production from the PWS hatcheries is a large part of my earnings. A 25% reduction in egg takes would likely result in a 20% reduction in my earnings, as well as those of my family and crew.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable

by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska’s broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska’s hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska’s economic and cultural fabric.

Sincerely,

Stuart Deal

[REDACTED]

Cordova, Alaska

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

Over the last 15 years, salmon hatcheries have provided approximately 25-35% of my annual gross revenues from salmon each year. Proposal 78 sets a bad precedent that can then be used to reduce egg take in SE Alaska, which is my fishery. Additionally, salmon processors operate in multiple regions of the state. Seafood processors and fishermen are experiencing an economic crisis. If the economics and profitability of the PWS region erodes even more for a processor operating in both the PWS and the SE region, it could also negatively impact me. The seafood industry is connected across regions in this way.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

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strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Gig Decker

A solid black rectangular box used to redact the signature of Gig Decker.

Wrangell, Alaska



November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a co-owner of F/V McCrea LLC, a commercial salmon fishing operation. The hatcheries help to support our family business by directly providing approximately 25-30% of our gross earnings. Proposal 78 would also set a bad precedent that would impact hatcheries in Southeast Alaska. Additionally, it negatively impacts salmon processors operating in both Prince William Sound and Southeast Alaska. Seafood processors are under severe economic pressure, and losing a salmon processor in Prince William Sound could have trickle-down effects in other regions.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

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Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

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For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Julie Decker

[REDACTED]

Wrangell, Alaska

**Submitted by:** Kayley DeLozier

**Community of Residence:** Cordova

**Comment:**

Oppose #51,52,53 and 78

Dear board of fish please oppose 51,52, 53, and 78. I am a Native village of Eyak tribal member and my family depends on the copper river and Prince william sound commerical fisheries for our main source of income. We reside in cordova

year round.

These proposals would have negative economic impacts on my family, the majority of tribal member house holds, and our community.

70 percent of our NVE tribal members are supported by our commercial fisheries.

Thank you.

**Submitted by:** Paul Delys

**Community of Residence:** Fairbanks

**Comment:**

I stand with the Chitina Dipnetters Association.

**Submitted by:** Damien Delzer

**Community of Residence:** Fairbanks

**Comment:**

Dear Board of Fisheries,

I strongly support Proposal 14 - the trawling fleet is depleting many stocks vis bycatch. I have personally seen a marked decrease in fish populations, particularly in the past two years. This significantly effects the food for local Alaska families.

I strongly support Proposal 58. If there is a plentiful return, the biologists and commissioners should have the ability to modify the limit.

I strongly support Proposal 59 - similarly if a bountiful and abundant return occurs, allowing additional harvest should be allowed by the commissioner.

I strongly support Proposal 70- this small adjustment will help reduce congestion and risk of those using this area. I have participated for decades in fishing this area and it makes much more sense to allow boats to not be in such close proximity on such a potentially dangerous river.

Thank you for the support of Proposals 14, 58, 59 and 70.

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**PC177**

**Submitted by:** Michael DeMaria

**Community of Residence:** WASILLA

**Comment:**

I support decreasing the commercial catch of Copper River salmon to allow more to enter the river to meet and exceed escapement and increase in-river catch.

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**PC177**

**Submitted by:** Michael DeMaria

**Community of Residence:** WASILLA

**Comment:**

Shut them down until they prove no damage to the bottom.

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**PC177**

**Submitted by:** Michael DeMaria

**Community of Residence:** Mat-Su

**Comment:**

I support the chitina Dipnetters

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**PC178**

**Submitted by:** Shannon denning

**Community of Residence:** Fairbanks

**Comment:**

I have been an Alaskan resident all of my life, born and raised in Fairbanks. The copper river has been a very important staple for my family. Usually, we can catch our limit sometimes we left Chitina with only 5 reds. That has always been the nature of dip netting the copper. I strongly oppose prop.69. I think the lower numbers of escapement should affect the commercial fisherman more than the few boaters that dipnet the copper. If the

escapement numbers are not at target, then the commercial fisherman in Cordova should be limited, and not the local Alaskan who is dip netting to provide for his family.

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**PC179**

**Submitted by:** Mike DePinto

**Community of Residence:** Oregon

**Comment:**

I fully support CLOSURE of the destructive and unsustainable commercial PWS pollock trawl fishery as specified in Proposals 14 and 16. If the Board fails to pass either of these Proposals, I would highly encourage them to consider measures to reduce bycatch impacts and ensure greater accountability in bycatch reporting as specified by the Chenega IRA Council in Proposals 15 and 17.

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**PC180**

**Submitted by:** Patricia DeRuyter

**Community of Residence:** Fairbanks

**Comment:**

OPPOSE Proposals

44,45,46,47,49,50,54,55,56,57,6

0,61,62,63,64,65,66, 67,68,69,71

SUPPORT Proposals

48,51,52,53,58,59,70

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**PC181**

**Submitted by:** Kim Dickinson

**Community of Residence:** Homer

**Comment:**

Proposals 14 and 16.

I SUPPORT the closing of Prince William sound to all TRAWL Fishing. This is a primitive and destructive fishing technique. This is true for both draggers and mid water trawl. It has been shown repeatedly that the nets of mid water TRAWL actually hit the ocean floor. This rapes the entire ocean and destroys the marine ecosystem, which the consequences are much more complex and vast, then the TRAWL industry wants us to believe.

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**Submitted by:** Temple Dillard

**Community of Residence:** Fairbanks

**Comment:**

Please, regulate the bycatch. They're throwing away food to make a dollar, it's wasteful.

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**Submitted by:** Heather Dorsey

**Community of Residence:** Copper Center

**Comment:**

I am writing in support of Proposal 16 to close the state-managed Prince William Sound pollock trawl fishery. Trawling leads to concerning levels of bycatch, especially for king salmon, and rockfish. Chinook salmon are struggling in large regions of the state resulting in closures or heavy restrictions of subsistence and sport fishing throughout the state. The National Marine Fisheries Service also estimates bottom contact up to 60% of the time for small pelagic trawl vessels like those used in PWS. The bycatch found in pelagic trawl nets displays an unsustainable fishery that is dragging the seafloor. The PWS trawl fishery also does not have adequate third-party observer coverage or electronic monitoring, so bycatch rates cannot be accurately reported. It is in the best interest of the State of Alaska to protect our resources and marine environment and close the state-managed PWS trawl fishery.

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Jason Doxey  
Fairbanks  
[REDACTED]

I oppose proposals 63, 64 and 65. These proposals are little more than unjustified attacks on the ability of Alaskans to harvest salmon for their own consumption.

Proposal 63 would harm Alaskans by placing restrictions on the Chitina personal use season that will make it even more difficult for Alaskans to get to Chitina when the fish are running. There are multiple factors that affect a person's ability to get to Chitina and catch his or her household limit. People have to work around their work schedules, their family members' work schedules, the river level, and, of course, the number of fish present in the personal use fishing area at any given time. There have been years when my brother and I have had to make a second trip to Chitina because we ran into problems (poor fishing/very high water, etc.) on the first trip. Delaying the start of the season as proposed by Ahtna will unjustifiably limit opportunity.

Proposal 64 is not based on sound science. The Chitina personal use fishery and the Upper Cook Inlet personal use fishery are unrelated to each other. Management of Copper River/Prince William Sound-based fisheries should not be connected to Cook Inlet-based fisheries.

Proposal 65 would impose an extreme hardship on Alaskans. There have been years when I have had to make multiple trips to Chitina to catch my limit due to scheduling the first trip based on my work schedule or my brother's schedule rather than based on the abundance of fish in the river. Sometimes the decision to head to Chitina or cancel a planned trip to Chitina are made at the last minute, depending on up-to-date information about river conditions and fish abundance. Switching to a weekly permit system in lieu of a season permit system would be a terrible mistake.

**Submitted by:** Raven Drake

**Community of Residence:** fairbanks

**Comment:**

Oppose Alaska Board of Fisheries proposals #63, #64, and #65 to reduce the opportunities for Alaska residents to gather salmon to eat

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**Submitted by:** Ben Dubbe

**Community of Residence:** Homer, AK

**Comment:**

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I am an Area E commercial fisherman. I have held an Area E drift permit since 2020. Fishing is my primary occupation and I have participated in several other fisheries in the state. I am also an active sport, personal use, and subsistence fisherman.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Ben Dubbe

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**Submitted by:** Ben Dubbe

**Community of Residence:** Homer, AK

**Comment:**

My original comment submission did not have my positions in my letter. Please see attached.

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I Support Proposal 25 and I support with amendments Proposals 1 and 26. If there is the sablefish stock to support a fishery, then the opportunity should be there. The pot fishery in SE should give a good framework for a similar fishery in PWS. I only support a personal use fishery because it would help to prevent over exploitation by the charter fleet and has stricter reporting requirements and seasonal limits.

I support Proposal 56 and support with Amendments Proposal 57. There will be new conflicts and problems because of permit stacking. I believe these will be resolved in time and the benefits of a reduced number of boats fishing and more profitable operations will outweigh the negative consequences. It is important that when a boat is fishing dual permits it could be both with a dual permit holder or two individual permit holders on board. It is also important that this could be changed within a season. For example, I believe there would be increased opportunity if say a person has boat troubles, they would be able to go on another boat as crew and stack permits for a while.

I support Proposals 75,76, and 77. The Prince William Sound Salmon Enhancement Allocation Plan is obviously flawed. Looking at the numbers since the current plan was implemented clearly shows its failure and the unequitable allocation between user groups. All three of these plans are trying to solve this problem and all of them would be a step in the right direction. Just because the seine fleet had a poor season does not make this a bad time to fix a problem that has been going on for 19 years.

I support proposal 83 with an amendment. It should read “unguided angler” not “resident angler”. Fishing two rods does not affect the bag limit of an individual and removing chartered anglers would help to reduce abuse and overexploitation with the new rule. This new regulation would most benefit a solo or pair of anglers on their private boat. This is because of the increased efficiency and physical mechanics of trolling. The potential problems of enforcement and additional harvest are very minimal and far less than the potential benefits to the individual.

Ben Dubbe

Märit Carlson-Van Dort, Chair  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
PO Box 115526  
Juneau, AK 99811  
[marit.carlson-vandort@alaska.gov](mailto:marit.carlson-vandort@alaska.gov)

November 26, 2024

Re: Prince William Sound Finfish Meeting Proposals

Dear Chair Carlson-Van Dort and Members of the Board of Fisheries,

I have held an Area E drift permit since 2020. Fishing is my primary occupation and I have participated in several other fisheries in the state. I am also an active sport, personal use, and subsistence fisherman.

I respectfully ask you to consider my attached proposal positions for the Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish (except shrimp) meeting.

Thank you for your time and consideration.

Sincerely,

Ben Dubbe

A solid black rectangular box used to redact the signature of Ben Dubbe.

Homer

**Proposal 2 - Reopen waters closed to the harvest of groundfish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 3 - Modify Prince William Sound groundfish pot specifications.:** SUPPORT this proposal with CDFU

**Proposal 5 - Adopt a provision to close waters to specific groundfish gear types for rockfish conservation.:** OPPOSE this proposal with CDFU

**Proposal 6 - Allow for release of rockfish in mechanical jig and hand troll fisheries.:** SUPPORT this proposal with CDFU

**Proposal 8 - Modify the Prince William Sound pacific cod fishery guideline harvest level.:** SUPPORT this proposal with CDFU

**Proposal 9 - Combine the Pacific cod longline and pot gear allocations and close the longline fishery for Pacific cod when the commercial halibut fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 10 - Modify pot limit in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 13 - Increase bycatch limits for skates in the Prince William Sound Pacific cod fishery.:** SUPPORT this proposal with CDFU

**Proposal 19 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 20 - Modify the commercial fishing season for sablefish in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 22 - Allow the concurrent use of longline gear and sablefish pot gear in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 23 - Prohibit the retention of sablefish from state waters.:** SUPPORT this proposal with CDFU

**Proposal 27 - Modify rockfish bag and possession limits.:** SUPPORT this proposal with CDFU

**Proposal 28 - Modify the rockfish area, bag and possession limit.:** OPPOSE this proposal with CDFU

**Proposal 29 - Create additional provisions for yelloweye rockfish management.:** SUPPORT this proposal with CDFU

**Proposal 31 - Repeal closed waters for the Prince William Sound subsistence and commercial Tanner crab fisheries.:** SUPPORT this proposal with CDFU

**Proposal 32 - Reopen the subsistence and commercial Dungeness crab fisheries in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 33 - Adopt community-based subsistence harvest permits and reporting requirements for shellfish in the Prince William Sound Area.:** OPPOSE this proposal with CDFU

**Proposal 34 - Repeal the Registration Area E Tanner crab harvest strategy.:** SUPPORT this proposal with CDFU

**Proposal 35 - Modify the harvest strategy for Prince William Sound Tanner crab.:** SUPPORT this proposal with CDFU

**Proposal 36 - Increase the pot limit in the Prince William Sound Tanner crab fishery.:** SUPPORT this proposal with CDFU

**Proposal 37 - Establish a pot limit of 30 pots per vessel in the Prince William Sound Tanner crab fishery.:** SUPPORT this proposal with CDFU

**Proposal 38 - Allow vessels participating in the Prince William Sound Tanner crab fishery to also tender Tanner crab.:** SUPPORT this proposal with CDFU

**Proposal 39 - Establish season dates for a commercial golden king crab fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 40 - Adopt a harvest strategy for golden king crab in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 42 - Open a sport king crab fishery and liberalize the personal use king and Tanner crab fisheries in Prince William Sound.:** OPPOSE this proposal with CDFU

**Proposal 43 - Establish a directed octopus fishery in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 46 - Require harvest reporting within seven days of harvest in the lower Copper River district subsistence salmon fishery.:** SUPPORT this proposal with CDFU

**Proposal 47 - Require inseason reporting in subsistence and personal use fisheries.:** SUPPORT this proposal with CDFU

**Proposal 48 - Repeal the prohibition of subsistence guide services in the Glennallen Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 49 - Prohibit transport services in the Glennallen Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 51 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 52 - Reduce commercial salmon fishing opportunity in the Copper River District.:** OPPOSE this proposal with CDFU

**Proposal 53 - Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met.:** OPPOSE this proposal with CDFU

**Proposal 55 - Restrict commercial guide services in the Upper Copper River District when the Copper River District commercial fishery is restricted.:** SUPPORT this proposal with CDFU

**Proposal 58 - Amend the Copper River King Salmon Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 59 - Amend the Copper River Personal Use Dip Net Salmon Fishery Management Plan.:** OPPOSE this proposal with CDFU

**Proposal 60 - Modify the annual limit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 61 - Modify the annual limit and establish a supplemental permit for the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 62 - Allow inseason adjustment of the Copper River personal use maximum harvest level.:** SUPPORT this proposal with CDFU

**Proposal 63 - Amend the opening date of the Chitina Subdistrict personal use fishery.:** OPPOSE this proposal with CDFU

**Proposal 64 - Prohibit a household from possessing permits for multiple personal use salmon fisheries in the same year.:** SUPPORT this proposal with CDFU

**Proposal 65 - Require a weekly permit and inseason reporting in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 66 - Manage the Chitina Subdistrict personal use fishery to achieve the Gulkana Hatchery broodstock goal.:** SUPPORT this proposal with CDFU

**Proposal 67 - Prohibit removing king salmon from the water if it is to be released in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 68 - Prohibit dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 69 - Establish restrictions when dipnetting from a boat in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 70 - Extend the lower boundary of the Chitina Subdistrict.:** OPPOSE this proposal with CDFU

**Proposal 71 - Prohibit guiding in the Chitina Subdistrict.:** SUPPORT this proposal with CDFU

**Proposal 72 - Close sport fishing for salmon based on water temperature in the Gulkana River.:** SUPPORT this proposal with CDFU

**Proposal 78 - Reduce Prince William Sound hatchery permitted pink salmon egg take level by 25%.:** OPPOSE this proposal with CDFU

**Proposal 79 - Close Main Bay to all fishing during hatchery cost recovery operations.:** SUPPORT this proposal with CDFU

**Proposal 80 - Manage the Main Bay sport fishery based on the hatchery corporate escapement goal.:** SUPPORT this proposal with CDFU

**Proposal 81 - Modify the area open to sport fishing near the Main Bay Hatchery.:** SUPPORT this proposal with CDFU

**Proposal 84 - Prohibit charter operators and crew from retaining king salmon and rockfish while clients are on board the vessel.:** SUPPORT this proposal with CDFU

**Proposal 85 - Modify the bag and possession limit for coho salmon.:** OPPOSE this proposal with CDFU

**Proposal 86 - Modify the sport fishing area and season dates in Ibeck Creek.:** SUPPORT this proposal with CDFU

**Proposal 87 - Modify the sport fishing area and season in a Copper River Delta system.:** SUPPORT this proposal with CDFU

**Proposal 88 - Modify coho salmon fishery bag limits and methods and means if the commercial fishery is closed.:** SUPPORT this proposal with CDFU

**Proposal 96 - Change herring management year dates for the Prince William Sound District and create a new food and bait fishery allocation.:** SUPPORT this proposal with CDFU

**Proposal 97 - Reduce the minimum herring spawning biomass threshold.:** SUPPORT this proposal with CDFU

**Proposal 98 - Align Prince William Sound herring and salmon management area descriptions.:** SUPPORT this proposal with CDFU

**Proposal 99 - Define commercial herring fishery districts in Prince William Sound.:** SUPPORT this proposal with CDFU

**Proposal 100 - Adopt a Kayak Island District herring management plan.:** SUPPORT this proposal with CDFU

**Proposal 102 - Allow commercial fishery permit holders to harvest herring for the own use as bait.:** SUPPORT this proposal with CDFU



**Submitted by:** Thaddeus Dubois

**Community of Residence:** Chugiak

**Comment:**

I am writing to express my disapproval of proposals #63 and 64. WRT #63 as someone who has benefit led from this fishery as well as been hindered by the proposing organization I staunchly oppose it. As a current DI454 permit holder, the Ahtna corporation restricting paid access to the land has prevented me from additional opportunities at harvesting a once-in-a-lifetime bison. This proposal is just another effort to restrict using the resources available to all alaskans.

#64: The proposing special interest is continuing the line that recreational users are damaging the stock, with no real evidence. Meanwhile, they are harvesting far more than the recreational users. Considering that returns are so low for the Upper Cook Inlet the likelihood that the resource will be available for recreational use is low. Meanwhile, the commercial interests will be able to deplete the stock. There should be equality in how the resource is used. This proposal does not provide equal use.

---

**Submitted by:** Thaddeus Dubois

**Community of Residence:** Chugiak

**Comment:**

I am writing to express my desire for a "No" vote on proposal 89.

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**Submitted by:** Thaddeus Dubois

**Community of Residence:** Chugiak

**Comment:**

I am writing to express my amusement concerning proposal 50. It is nonsense, and as a user of the Copper River creates not only safety issues, but how would it be enforced? It's a ridiculous proposal.

---

November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am a commercial fisherman in Prince William Sound. I oppose Proposal 78. I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

**Sustainability and Responsible Management:** Hatchery programs in Alaska are built on a strong foundation of sustainability and are subject to rigorous oversight from the Alaska Department of Fish and Game. Hatchery-produced salmon are managed through sound scientific practices, ensuring that they complement, rather than harm, wild salmon stocks. Moreover, Alaska's salmon fisheries, including hatchery-origin fish, are consistently certified as sustainable by both major certification bodies – the Marine Stewardship Council and Responsible Fisheries Management (RFM). This demonstrates that hatchery production aligns with Alaska's broader goals of responsible resource management.

**Impacts of Proposal 78:** Proposal 78 would reduce hatchery production at a time when salmon-dependent communities need it most. Reducing pink and chum salmon production by 25% would cause significant harm to fisheries tax revenues, disrupt the economic flow that hatchery salmon provide, and weaken the support hatcheries provide to wild stocks by decreasing the harvest pressure from user groups. This proposal would be highly disruptive to the sustainability of Alaska's hatchery programs, setting in motion an alternative oversight process in conflict with existing hatchery regulation. This process will introduce uncertainty in the production of Alaska hatchery salmon, impacting a hatchery association to plan production and its ability to service loan obligations. This proposal does not account for the well-documented role hatcheries play in supplementing wild returns, stabilizing economies, and ensuring long-term sustainability for coastal communities. Additionally, the data regarding hatchery impact on wild salmon populations needs to be more conclusive and support the drastic reductions proposed in this measure.

For 50 years, Alaska's hatcheries have been a critical component of sustainable fisheries management. They provide for the livelihoods of thousands of Alaskans and create a stable and reliable source of salmon for all user groups. I urge the Board of Fisheries to reject Proposal 78 and instead continue supporting hatcheries as a vital part of Alaska's economic and cultural fabric.

Sincerely,

Paul Dunatov

A solid black rectangular box used to redact the signature of Paul Dunatov.

Cordova, Alaska

**Submitted by:** Ralph Durante

**Community of Residence:** Fairbanks

**Comment:**

This needs to be better advertised to Alaskans. Alaska resident should be priority one with commercial fishing second. Trawlers don't belong at all

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I have been commercial fishing for salmon with my family for 35 years. My family's welfare has directly benefited from our hatchery programs. Hatcheries enhance the wild stocks of PWS salmon and provide a safety net, not fail proof by any means, against weather, environment and foreign episodes that impact this fishery.

Decreasing the egg take levels by 25% in PWS is like shooting ourselves in the foot. Why would we limit our ability to grow and harvest this renewable resource? My family would be impacted because there would be less fish to catch. Catching fish is how we make a living.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

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Sincerely,

Heather Durtschi



Girdwood, Alaska

**Submitted by:** Max Durtschi

**Community of Residence:** Whittier, AK

**Comment:**

Proposal 78 - I am strongly opposed to the reduction of hatchery egg take quotas. This proposal has been put forward at the last two PWS board of fish meetings. Last board cycle its author didn't bother to come to Cordova. However, many fishermen and Alaskans that support the commercial fishing industry made the trip to Cordova on their own dime to defend their livelihoods. This year the same thing will take place. There has been no new science in support of this proposal since last board cycle. The ramifications of this proposal would have profound, long lasting implications on the fisheries and communities tied to them. The state of Alaska and ADF&G have numerous scientists and funding dedicated to researching and preserving our fish stocks. Let them do their jobs, and tell people from Fairbanks to worry about their own backyards.

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November 26, 2024

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P.O. Box 115526  
Juneau, AK 99811-5526

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Sincerely,

Heather Durtschi

A black rectangular box redacting the signature of Heather Durtschi.

Girdwood, Alaska

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Board of Fisheries,

I am a lifelong Alaskan who grew up in Girdwood and has participated in the Prince William Sound commercial salmon fishery every summer of my life. I have heavily invested in my future and fishing career in this area. Our salmon hatcheries are critical to all user groups in Prince William Sound. These hatcheries support the livelihoods of fishing families across the state and are crucial to maintaining sustainability and stability within both the environmental and economic aspects of the fishery. The scope of the negative economic effect that would result from decreasing hatchery production would be extreme. The commercial fishing industry these fish sustain is a vast network of individuals with families who rely on these jobs. You are not just impacting the lives of a few hundred captains, but also their crews, the tender captains and their crews, the local mechanics and hardware suppliers who outfit and supply all our vessels. Then there are the thousands who process, ship, and sell this product. With no actionable evidence that these hatchery fish are having negative effects on wild stocks, there is absolutely no reason for the board to take action on a matter that would cripple hardworking Alaskans who have invested in and committed to being a part of this industry.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities. Please review the following reasons why the Board should oppose and reject Proposal 78:

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Sincerely,  
Reiker Durtschi

[REDACTED]

Girdwood & Prince William Sound, Alaska

**Eastern Interior Alaska Subsistence Regional Advisory Council**

c/o Office of Subsistence Management  
1011 East Tudor Road, MS 121  
Anchorage, Alaska 99503-6199  
Phone: (907) 786-3888, Fax: (907) 786-3898  
Toll-Free: 1-800-478-1456

In Reply Refer To:  
OSM.B24063

NOVEMBER 25 2024

Märit Carlson-Van Dort, Chair  
Board of Fisheries  
Alaska Department of Fish and Game  
Boards Support Section  
P.O. Box 115526  
Juneau, Alaska 99811-5526

Dear Chair Carlson-Van Dort,

I am writing to you on behalf of the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) to provide the Council's comments on proposals that will be considered during the December 10–16, 2024, Prince William Sound and Upper Copper/Upper Susitna Finfish and Shellfish Board of Fisheries (BOF) Meeting.

The Council held a public meeting on October 8–10, 2024, in Fairbanks, and where they took up three BOF Copper River Salmon Proposals. The proposals are of importance to the Council because residents of the Eastern Interior region have positive customary and traditional use determinations for salmon in the upper Copper River. Please see the Council comments below for Proposals 51–53.

**Proposal 51 - Reduce commercial salmon fishing opportunity in the Copper River District**

The Council **supported Proposal 51** on a unanimous vote. The Council agrees with the proponent that BOF action is needed to mitigate the persistent disproportionate exploitation of salmon stocks with early migratory timing. Continued disproportionate exploitation of early stocks diminishes the overall population diversity of Copper River Sockeye and Chinook Salmon and threatens food security for Copper River subsistence users, particularly those who fish upstream of the Gakona River in the uppermost portion of the Glennallen subdistrict.

The Council wants to emphasize that subsistence needs are not being met in the upper Copper River. Amounts necessary for subsistence (ANS) have only been met two years since 2006 for residents of the Gakona to Slana portion of the drainage (in 2014 and 2015). Commercial fishing must be limited until it is certain that the ANS and escapement goals that are established in State regulations and management plans are projected to be met. The commercial fishery must share in the burden of conservation to protect the future viability of these stocks and to ensure all users

Chair Carlson-Van Dort

can rely on this important resource for generations to come. Additionally, we regularly see the situation play out where Copper River salmon are harvested and sold commercially when subsistence harvest on those same stocks are limited or closed when they finally reach the upper river, which goes against the subsistence use priority.

The early runs of Chinook and Sockeye salmon in the Copper River go the furthest upstream to spawn. This is supported by both traditional ecological knowledge and by biological data. Allowing the first fish to pass upstream is a longstanding tradition of the Ahtna people who are the original stewards of this river and who understood the importance of getting those fish to the spawning grounds. The Council asks the BOF to take action to ensure that the current management plan is revised so that that harvest is more evenly distributed throughout the salmon runs, in an effort to protect stock diversity and provide for more equitable harvest opportunity among users of the resource.

**Proposal 52 - Reduce commercial salmon fishing opportunity in the Copper River District**

The Council **took no action on Proposal 52** and referenced their support and justification for proposal 51, which addresses similar issues.

**Proposal 53 - Allow the Copper River District commercial salmon fishery to open for the first two periods, then close until the Copper River cumulative salmon management objective is met**

The Council took **no action on Proposal 53** and referenced their support and justification for proposal 51, which addresses similar issues.

The Council thanks you for the opportunity to comment on these proposals. If you have any questions or would like to follow up, please contact me through our Subsistence Council Coordinator Brooke McDavid at (907) 891-9181 or [brooke\\_mcdavid@ios.doi.gov](mailto:brooke_mcdavid@ios.doi.gov).

Sincerely,



Robert "Charlie" Wright, Sr.  
Chair

cc: Federal Subsistence Board  
Eastern Interior Alaska Subsistence Regional Advisory Council  
Office of Subsistence Management  
Interagency Staff Committee  
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game  
Mark Burch, Special Projects Coordinator, Alaska Department of Fish and Game  
Administrative Record

November 24, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I'm tied to commercial and sport fishing in Homer, Alaska. I love sport fishing and catch fish every year for my family's personal use. My grandfather moved to Homer and began commercial fishing in 1939.

I've commercially fished, both seining and gillnetting, for over 50 years all around Alaska, particularly for salmon and herring. I am very grateful for the valuable impact the hatcheries in Prince William Sound have had on me, as they have promoted a stable income for my family for generations. The consequent impact on my town is significant.

When fishermen don't bring in a good harvest, the town of Homer feels it across the entire business sector. Reducing the egg take in our hatcheries would be recorded in history as a colossal economic blunder. In lieu of growing Russian salmon harvests, we would be wiser to add another hatchery.

I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

**Please review the following reasons why the Board should oppose and reject Proposal 78:**

**Economic Significance of Hatcheries:** Hatchery programs are a cornerstone of Alaska's economy, generating \$576 million in annual economic output and providing the equivalent of 4,200 jobs statewide. In Prince William Sound alone, hatcheries contribute to over 2,200 jobs, \$100 million in labor income, and \$315 million in total economic output. Reducing hatchery production by 25% would have disastrous economic consequences for communities such as Valdez, Seward and Cordova, which rely heavily on the steady stream of hatchery-produced salmon to support their economies. This reduction would result in lost jobs, decreased tax revenues, and reduced income for commercial fishermen, processors, and local businesses. It would also impact Whittier, Chenega, Tatitlek, and various lodges in the region.

**Preserving Access for All User Groups:** Hatcheries are critical to ensuring that salmon remain available to all user groups, including commercial, sport, personal use, and subsistence fishermen. These programs ensure that Alaskans, regardless of their fishing style, have access to sustainable salmon harvests. Without hatchery supplementation, wild salmon stocks would be

under increased pressure, particularly in years of lower abundance. Hatcheries play a crucial role in mitigating this pressure, safeguarding wild stocks, and providing economic stability for all user groups.

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Sincerely,

Mark Edens



Homer, Alaska

**Submitted by:** Savannah Egan

**Community of Residence:** Lake Louise/Glennallen

**Comment:**

Proposal 89: I think that with the access to Lake Louise and the popularity growing increasing the limit is a mistake and will result in the decimation of the burbot population. I want to see this lake fishable for the next generations and before changes there needs to be more studies done

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These comments are for proposals 86, 87 and 88:

I am against these three proposals.

The Sport fishing opportunities around Cordova are very limited. The locations where coho salmon spawn are much larger, more widely dispersed and often in areas where sportsman have no access. Restricting the areas where sportsmen do have access would severely limit their opportunities. This, in combination with increasing commercial fishing at the mouth of the Ibeck creek/Eyak river system (which has severely decreased the late fishing success on these rivers) would effectively take away the majority of opportunities for sportsmen to catch Coho salmon after September 21. The areas mentioned where sport fishing would remain open after September 21: 1) Up to 1.5 miles above the Copper River Highway on Ibeck Creek, and 2) The 18-mile system, up to 1 mile north of the confluence with the Alaganik Slough are areas that are less productive. This proposal would also concentrate sportsmen in a smaller area, and likely influence many to seek other areas than Cordova to fish. This would damage local businesses who rely on end-of-season income from sportsmen. Placing bag limits on sport fishermen who spend thousands of dollars to come to Cordova to fish would likely also drive many away.

Larre Egbert

**Submitted by:** Ryan Egbert

**Community of Residence:** California

**Comment:**

I oppose proposals 86, 87 and 88. My family and I very much enjoy traveling to Cordova to enjoy the outdoors and fishing for coho salmon. We love the area and our time interacting with the local community. We have been doing it yearly for the past decade. Late September is our favorite time to visit. Restrictions on the areas and timing of fishing, as well as more limitations, would likely drive us elsewhere to spend our time and money enjoying Alaska.

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November 26, 2024

Alaska Board of Fisheries  
P.O. Box 115526  
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries,

I am the owner of a commercial gillnetter in Cordova, Alaska. I am opposed to Proposal 78. I am writing to express my opposition to Proposal 78, which seeks to reduce hatchery-permitted pink and chum salmon egg take levels by 25% in Prince William Sound. This proposal would severely undermine the economic stability and sustainability that hatcheries provide to Alaskan coastal communities.

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Sincerely,

Emily Ekbom

A solid black rectangular box used to redact the signature of Emily Ekbom.

Cordova, Alaska



November 21, 2024

Dear Board of Fisheries members,

As a lifelong Alaskan and owner of El Capitan Lodge for the past 30 years I am writing in support of Proposals 14, 16, and 17 that seek Board of Fisheries action to update Alaska regulations for the pelagic trawl pollock fishery in the Prince William Sound Management Area under 5 AAC 28.263.

“The waters of Prince William Sound are critical to the area’s characters and economy, sustaining more than 300 species of fish that are essential to traditional subsistence practices, commercial seafood production, and sport fishing.”<sup>1</sup>

Under 5 AAC 28.263, ADF&G manages the only pelagic trawl fishery in state waters. This trawl fishery jeopardizes these PWS vital economic drivers and the sustainable and wild Alaska seafood market that small boat directed fisheries depend on.

It isn’t right that a single commercial fishery is given free rein to compromise the health of the ecosystem, the businesses, and the livelihoods of the communities of PWS, and the access of Alaskans to subsistence, sport, and other commercial fisheries. I am requesting that the Board of Fisheries pass Proposals 14, 16, and 17. I believe these proposals can address the severe impacts of indiscriminate fishing with trawl gear and protect the vital PWS waters and those Alaskan businesses that depend upon a healthy and robust ecosystem.

Sincerely,

Scott Van Valin- Owner

<sup>1</sup> <https://mckinleyresearch.com/wp-content/uploads/2022/04/2020072-pws-ceds-brochure-final-web.pdf>