

Submitted by: Kevin Abena

FV Big Blue

Community of Residence: Kodiak

To the Alaska State Board of Fish concerning regulatory proposals 163-165:

Proposal 163 - Current regulations prohibit bottom contact in state water trawl fisheries, both pelagic and non-pelagic gear types. NOAA currently understands that pelagic trawl gear is more often than not in contact with the seafloor. First, vessels participating in trawl state water fisheries are currently allowed to carry non-pelagic gear on a separate reel on the vessel. Non-pelagic gear should not be aboard an actively fishing trawl vessel in state water. Second, pelagic vessels in state waters deliver arrowtooth, halibut, cod, and other well identified bottom dwelling fish. That information is readily available from NOAA/NMFS. That would suggest these trawls are making bottom contact. Third, the economic impact of these fisheries do not justify the environmental impact from their fishing activities. Along with this, you have vessels participating in trawl EM that are actively incentivized to catch and sell non-target species(Rockfish in PWS) and sell. They are legally able to go over the MRA and sell their overage due to the new trawl EM regulations. Note - the state closed an area in PWS February 2026 due to approaching the rockfish trawl allocation in PWS.

Concerning this proposal and forcing the pelagic vessels to prove they are not making bottom contact, the electronic sounding technology (Marport is one example.) is already aboard most of these vessels to actively see their headrope and foot rope in relation to the bottom sounding. And yes, it's recordable. It would be very easy to submit this information to the NMFS for review or the potential review.

Proposal 164 - I spoke to this above. The technology is already on most all the vessels that participate in state water trawl fisheries.

Proposal 165 - This proposal is a no brainer. Yes, these trawls must have salmon excluders. The words Alaska and Salmon are synonymous, let's protect them both.

In closing, it's my belief that current age trawl gear with the horsepower in front of these massive nets has no business in state waters. Let's protect our crab, salmon, halibut, rockfish, coral, and ecosystems to ensure these species have the best opportunity to thrive. If pollock trawlers can't prove they are not making bottom contact, they should head outside of three miles to drag.

Thank you for your time and consideration.

Kevin Abena

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Waynr Ackerlund, and I am a salmon seine fisherman in Prince William Sound. I operate the F/V Tor through Ackerlund Fisheries, and my livelihood and business viability depend directly on hatchery production. If hatchery production is significantly reduced, it would be crippling to my livelihood and to the long-term sustainability of my fishing operation.

A reduction in hatchery production would also result in a loss of revenue across all supporting businesses that depend on a healthy and stable commercial salmon fishery. The economic ripple effects would extend beyond my vessel and crew to the broader community and industry that rely on consistent harvest opportunities.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Waynr Ackerlund
Valdez, Alaska



Adak Community Development Corporation

Post Office Box 1943 Adak, Alaska 99546-1943
 (907) 592-2335 • acdc@adakcdc.org

March 1, 2026

Alaska Department of Fish & Game
 Board of Fisheries
 Boards Support Section
 P.O. Box 115526
 Juneau, Alaska 99811-5526

RE: Opposition to Proposal 11

Dear Board Members:

The Adak Community Development Corporation (“ACDC”), the non-profit economic development entity for Adak, Alaska is **opposed to Proposal 11**, for the reasons outlined further in this letter.

ACDC as part of its organizational charter and mission was allocated the community’s 10% of the Western Aleutian Islands Golden King crab quota, making ACDC a significant stakeholder in the subject fishery. As a recognized Community Quota Entity (“CQE”), ACDC has additionally made significant investments in the Pacific halibut and Sablefish/Black cod fisheries that are prosecuted in the same region; and the community of Adak is highly dependent on the Aleutian Islands Pacific cod fisheries. This provides ACDC with a deep, multi-species and data-based understanding of this proposal.

Our specific rationale for opposing this proposal is as follows:

1. Proposal 11 will have a minimal impact on Aleutian Islands crab bycatch; but it will also push the trawl fleet into the Bering Sea, significantly increasing Pacific halibut bycatch.

As Staff Comments point out, Golden King crab bycatch over the last six season as averaged 66 animals per year. The data shows that 2021 was an outlier with 396 animals harvested; if that year is dropped the annual average crab bycatch by the trawl fleet operating in state waters is less than one animal per year:

Table 11-5.—Aleutian Islands District reported commercial harvest by ADF&G fish ticket of golden king crab by groundfish trawl gear in waters west of long 170°W, 2020–2025.

Year	Vessels	Landings	State waters harvest		Federal waters harvest	
			Number of crab	% State waters	Number of crab	% Federal waters
2020	14	38	0	0.0%	4,936	100.0%
2021	11	37	396	5.8%	6,447	94.2%
2022	8	31	0	0.0%	3,350	100.0%
2023	11	37	0	0.0%	4,841	100.0%
2024	8	36	1	0.0%	3,581	100.0%
2025 ^a	9	17	0	0.0%	9,015	100.0%
Average	10	33	66	1.0%	5,362	99.0%

^a Harvest through August 15, 2025.

The trawl-sector Pacific halibut bycatch rates in the Aleutian Islands are about 11.5% of the Bering Sea bycatch rate; pushing the trawl fleet deeper into the Bering Sea will exacerbate Pacific halibut bycatch:

Data from "car240_psc_halibut2019" sorted by CV Sector, Trawl Gear, Cod Target. A season, comparing AI Halibut mortality amounts to BS mortality amounts and rates

GEAR	BS REPORTING AREA	TARGET	WEEK	SECTOR	GROUND FISH (MT)	HALIBUT (KG)	RATE KG/MT	HALIBUT MORTALITY (MT)
NPT	509	Pacific Cod	1/26/19	Catcher Vessel	7,444	231,098	31.04	138.93
NPT	517	Pacific Cod	1/26/19	Catcher Vessel	1,981	58,923	29.75	33.92
NPT	519	Pacific Cod	1/26/19	Catcher Vessel	C	C	94.46	0.06
NPT	509	Pacific Cod	2/2/19	Catcher Vessel	6,077	189,400	31.17	125.23
NPT	516	Pacific Cod	2/2/19	Catcher Vessel	C	C	13.74	1.2
NPT	517	Pacific Cod	2/2/19	Catcher Vessel	1,879	44,029	23.43	25.99
NPT	517	Pacific Cod	3/2/19	Catcher Vessel	C	C	5.55	0.57
NPT	524	Pacific Cod	3/2/19	Catcher Vessel	C	C	4.76	0.01
NPT	509	Pacific Cod	3/16/19	Catcher Vessel	C	C	4.46	0.41
NPT	517	Pacific Cod	3/16/19	Catcher Vessel	C	C	4.31	0.66
Totals CV BS mt & rate					17,381	523,450	30.12	326.98
GEAR	AI REPORTING AREA	TARGET	WEEK	SECTOR	GROUND FISH (MT)	HALIBUT (KG)	RATE KG/MT	HALIBUT MORTALITY (MT)
NPT	541	Pacific Cod	1/26/19	Catcher Vessel	C	C	15.74	0.37
NPT	541	Pacific Cod	2/2/19	Catcher Vessel	C	C	11.15	0.14
NPT	541	Pacific Cod	2/16/19	Catcher Vessel	424	810	1.91	0.48
NPT	541	Pacific Cod	2/23/19	Catcher Vessel	891	3,140	3.52	1.9
NPT	541	Pacific Cod	3/2/19	Catcher Vessel	1,032	2,860	2.77	1.73
NPT	541	Pacific Cod	3/9/19	Catcher Vessel	2,653	12,952	4.88	7.82
NPT	541	Pacific Cod	3/16/19	Catcher Vessel	1,721	3,512	2.04	2.19
NPT	542	Pacific Cod	3/9/19	Catcher Vessel	C	C	3.26	0.06
NPT	542	Pacific Cod	3/16/19	Catcher Vessel	C	C	0.00	0
Totals CV AI mt & rate					6,721	22,775	3.46	14.69

2. Operating in the remote western Aleutian Islands is economically challenging. These fisheries are already subject to significant restrictions including Steller Sea Lion closures, bycatch limits, gear-specific caps and trip limits.

To illustrate the extent of current restrictions, from the Staff Comments (*emphasis added*):

*“In total, state waters of the Aleutian Islands District west of long 170°W encompasses approximately 6,966 square miles although not all state waters are open to trawl fishing due to Steller sea lion (SSL) no fishing zones and habitat protection areas. Within the proposed state waters closures area, 391 square miles (6%) is open to fishing for Atka mackerel with nonpelagic trawl gear, 1,537 square miles (22%) is open to fishing for Pacific cod with nonpelagic trawl gear, 2,277 square miles (33%) is open to fishing for non-SSL prey species (species other than walleye pollock/Atka mackerel/Pacific cod) with nonpelagic trawl gear, and 2,650 square miles (38%) is open to fishing for walleye pollock with pelagic trawl gear (Table 11-4, Figures 11-3, 11-4, 11-5, and 11-6). Closing state waters west of long 170°W to trawl gear would translate to a 100% reduction in available fishing area for the state-waters and parallel trawl fisheries. **Current parallel groundfish trawl effort and catch would redistribute to adjacent federal waters.**”*

As we illustrated in the previous section, pushing the trawl fleet into adjacent federal waters will exacerbate the Pacific halibut bycatch without a demonstrable benefit to the Golden King crab fishery.

3. The western Aleutian Islands groundfish trawl fisheries are subject to complex, overlapping regulations. There are three harvest regimes: the federal fishery, the parallel fishery and the state waters fishery.

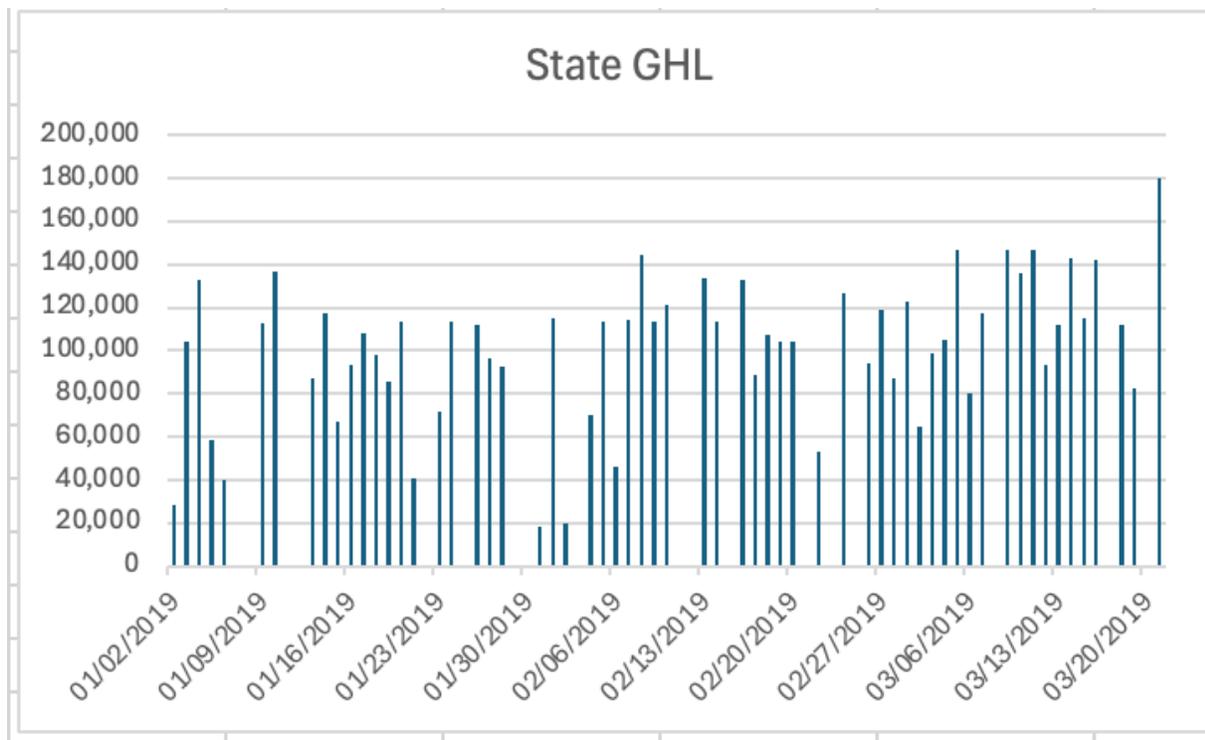
To quote from Staff Comments (*emphasis added*):

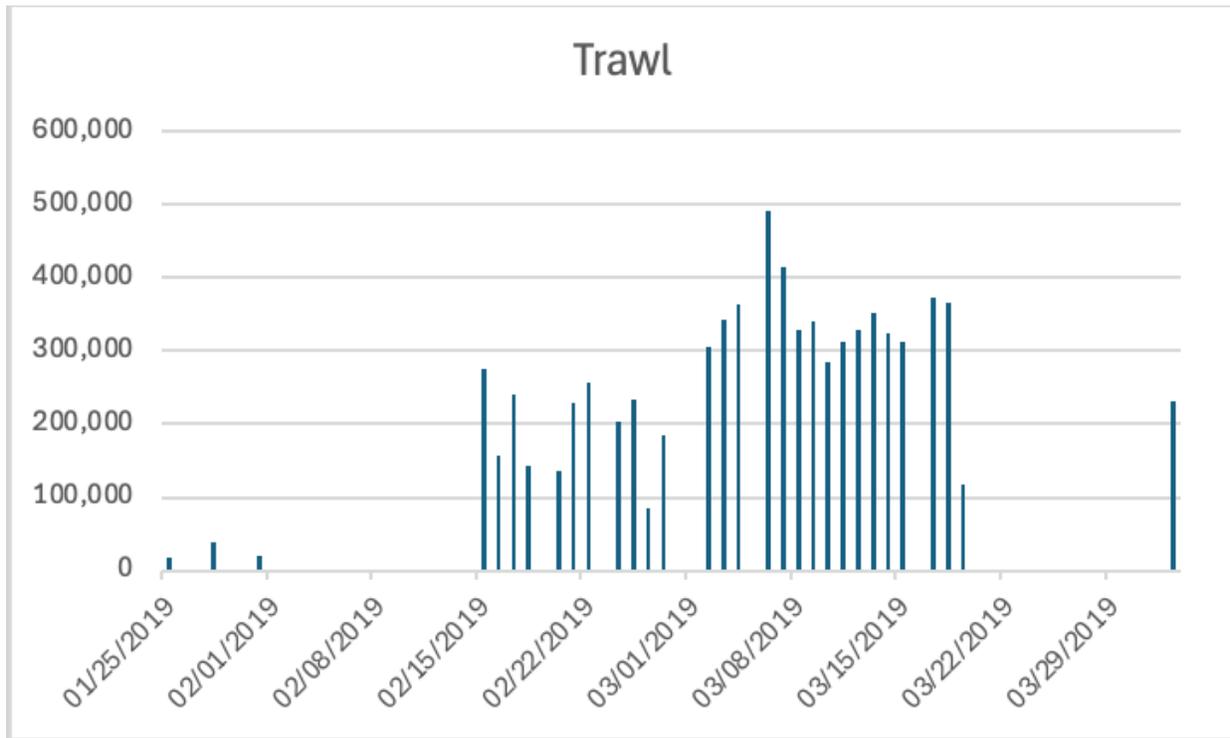
“Given past efforts to provide for uniformity across federal/parallel fisheries, establishing unique monitoring and bycatch performance standards at the state/federal boundary would create inefficiencies and present management and compliance challenges for enforcement.”

It is clear that the Board of Fish has the authority to create unique monitoring and bycatch regulations. The question that needs to be answered is this: **do the documentable benefits of Proposal 11 exceed the management, enforcement and industry costs? We do not think that has been proven.**

4. The Pacific cod fishery in the western Aleutian Islands must be prosecuted in a very narrow time frame (while fish are aggregating); and the trawl-sector plays an important role in prosecuting this fishery efficiently and economically during the peak period.

It is very expensive to operate in the remote Aleutian Islands. To fully prosecute the Pacific cod fishery, trawl vessels play an important role for about five weeks each year (approximately February 15 - March 20). Without the capacity provided by these vessels, prosecuting these fisheries may be at risk:





5. Proposal 11 has been submitted by a single vessel participating in the Golden King crab fishery.

There are more than 40 stakeholders, including ACDC, that are either opposed to Proposal 11 or remain silent. It is our understanding that several of these (other) stakeholders are also actively working with the trawl sector to avoid gear conflicts and address other areas of mutual concern.

We believe the five rationale points outlined in this letter sufficiently communicate our significant opposition and are appropriate points of justification to oppose Proposal 11. Furthermore, we believe that should the Board of Fisheries be truly interested in additional analysis in this matter it should be sent to the Joint Protocol Committee.

Sincerely,

Layton J. Lockett
 President

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Mike Adams, and I am a community member and commercial fisherman in the Cordova area, Area E. I fish aboard the F/V Redpack.

I fear these proposals will cause severe loss of income not just to fishermen but also to the City of Cordova in the form of fish tax. Our entire lifestyle is under threat. We are already experiencing financial stress, and I believe we need to increase silver salmon egg take and take a more diverse approach to sockeye egg take, not less.

If these proposals move forward, I believe the ripple effects will be severe: bills not getting paid, bankruptcy, divorce, and a community that slowly dissolves. We are asked to diversify, but instability like this makes me unwilling to reinvest.

We also have predators like sea lions and whales, and I believe we have a responsibility to maintain a healthy fleet, because fishermen are shareholders of our economic environment. If they don't understand this connection they should be removed.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

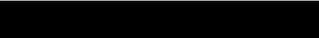
Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Mike Adams
Cordova area e, Alaska





3909 Arctic Boulevard, Suite 500
Anchorage, Alaska 99503
Office: (907) 222-9500
Fax: (907) 222-9501

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

RE: Letter of Opposition to Proposals 170, 171, and 172 – Statewide Hatchery Restrictions

Dear Members of the Board:

Afognak Native Corporation (ANC) respectfully submits this letter in opposition to Proposals 170, 171, and 172. Consistent with ANC's adopted 2026 Legislative & Advocacy Strategy, which supports Alaska's private nonprofit (PNP) salmon hatchery program and science-based fisheries management, ANC supports maintaining the existing PNP hatchery framework and regulatory structure that has guided it for decades.

Hatcheries play a key role in sustaining subsistence, commercial, sport, and personal use fisheries across Alaska. In coastal communities, including those within ANC's region, hatchery production supports food security, cultural practice, jobs, local businesses, municipal revenues, and harbor infrastructure. Stable and predictable salmon returns are foundational to long-term planning for fishing families, processors, and communities that depend on seasonal economic activity. For many communities, hatchery-supported fisheries are deeply integrated into long-term business planning, workforce stability, and municipal budgeting. Sudden statewide reductions would create uncertainty that extends beyond harvest levels and into broader regional economic health.

Proposals 170, 171, and 172 would impose statewide egg take reductions, broad production constraints, and additional regulatory barriers without clear scientific justification or region-specific analysis. Alaska's PNP hatchery program operates under a permit-based, adaptive management system administered by the Alaska Department of Fish and Game, with established biological review, monitoring, and performance evaluation requirements. This structure allows for region-specific oversight and data-driven adjustments when warranted. Statewide mandates that do not distinguish between regions, species, or performance history risk disrupting a system designed to respond to biological conditions in real time. Blanket restrictions and added regulatory layers would undermine that framework, limit adaptive management tools, and risk reduced harvest opportunity and economic stability in fishing communities.

Alaska's fisheries management system has long been recognized for its science-based approach and regional flexibility. Maintaining that integrity is critical to ensuring balanced conservation and economic sustainability.

ANC respectfully urges the Board to reject Proposals 170, 171, and 172 and to maintain Alaska's established, science-based PNP hatchery management system.

Please contact me with questions about this letter of support at (907) 222-9587 or malia@afognak.com.

Sincerely,

A handwritten signature in black ink that reads "Malia Villegas".

Dr. Malia Villegas
Senior Vice President of Community Investments
Afognak Native Corporation



Ahtna Intertribal Resource Commission

PO Box 613 – Glennallen, Alaska 99588 www.ahtnatribal.org
Phone: (907) 822-4466 Fax: (907) 822-4406 connect@ahtnatribal.org

February 25, 2026

Alaska Department of Fish and Game
Boards Support Section
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Board of Fisheries Council Members,

On behalf of the Ahtna Intertribal Resource Commission (AITRC), thank you for the opportunity to submit comments on the proposed regulatory changes for the 2026-2028 Statewide Finfish Proposals. AITRC represents the eight federally recognized Tribes in the Ahtna Territory, working in partnership to protect and strengthen the Ahtna People's continued customary and traditional use of fisheries and natural resources across its territory.

The enclosed comments reflect the unified input of AITRC's member Tribes, professional staff, and our Fisheries and Wildlife Committee. These positions are grounded in generations of Indigenous knowledge and lived experience managing and relying upon species such as the Copper River Salmon. The proposals we support, and the friendly amendments we recommend, aim to ensure subsistence resources remain accessible, sustainable, and managed in ways that reflect the priorities of the Indigenous communities who depend on them.

We appreciate the Board's continued engagement with Tribal voices and hope these comments assist in your deliberations. Thank you for your service and for considering the perspectives of AITRC and the Ahtna People.

Tsin'aen,

Karen Linnell
Karen Linnell,

Executive Director, AITRC

2026 Statewide Board of Fish - Comments on Proposals

Proposal 162

AITRC submitted and continues to support Proposal 162. Alaska law defines subsistence uses as customary and traditional non-commercial uses (AS 16.05.940(7) and (34)). In times of low abundance, specifically for Chinook salmon available to subsistence fisheries statewide, it is best to use precautionary management. Allowing commercial transport of fishermen in subsistence fisheries is contrary to AS 16.05.940(7) and (34).

These statutes state that (7) “customary and traditional” means the noncommercial, long-term, and consistent taking of, use of, and reliance upon fish or game in a specific area and the use patterns of that fish or game that have been established over a reasonable period of time taking into consideration the availability of the fish or game; and (34) “subsistence uses” means the noncommercial, customary and traditional uses of wild, renewable resources by a resident domiciled in a rural area of the state for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation, for the making and selling of handicraft articles out of nonedible by-products of fish and wildlife resources taken for personal or family consumption, and for the customary trade, barter, or sharing for personal or family consumption; in this paragraph, “family” means persons related by blood, marriage, or adoption, and a person living in the household on a permanent basis;

The newly established pattern of the commercial use of boats for subsistence salmon fishing should be prohibited under a subsistence permit. We need to protect the intended use of subsistence resources, not extract from salmon populations for commercial interests.

Proposals 163-165

We strongly support proposals 163, 164, & 165, as the impact of the trawl fisheries are detrimental to the longevity of populations which rely on healthy ocean habitats. It is clear, as we have seen examples around the country where trawling has been outlawed, that trawl negatively impacts fish and other populations. There is clear evidence that stopping trawling results in rebounded populations. As we can all see the destruction of ocean floor habitat caused by trawling, these proposals are simply common sense.

Proposals 170-172

We support proposal 170 and take no action on 171 and 172. The board of fish hatchery committee has been tasked with oversight of hatchery production based on science. There is new scientific evidence that demonstrates competition with wild stocks is detrimental. One example of many is declining growth rates of wild sockeye during high abundance biennial pink salmon years (Rand & Ruggerone 2024).

Proposal 175

We support proposal 175 with a clarifying amendment of using the frame must be attached to a single rigid handle and be operated by hand “without the addition of a rope attached to the handle and boat *specifically for the purpose of extending* [to extend] the reach of the dip net into the water beyond the length of the rigid handle.” We do not intend for this proposal to limit the current uses of a rope tied to the handle of the net to alleviate resistance, potential loss of net, or safety of the dipnetter, rather to prevent “dipnetting” being conducted in a manner similar to the following YouTube link of “dipnetting” on the lower Yukon:

<https://www.youtube.com/watch?v=g6MjcnYXyTw> This is not dipnetting. It more closely relates to trawling or gillnetting.

We continue to support decreasing the maximum dipnet mesh size from 4.5 to 3.5-inch mesh. After conversations with commercial dipnet guides and personal dipnetters, it became apparent they were in agreement that it is easier to release large Chinook salmon unharmed from a dipnet with 3.5-inch mesh versus 4.5-inch mesh. Both of these mesh sizes are widely available. In times of low Chinook salmon abundance statewide it is important to take measures that reduce stress and incidental mortality.

Proposals 179-180

We strongly support proposals 179 and 180. We favor proposal 180 as it prevents the most exploitation of Chinook salmon in this current era of statewide low abundance.

Proposal 181

While we understand the intent of this proposal, we are concerned it may restrict the use of tip-ups while ice-fishing. It may make more sense to include “radio-controlled boat, drone, or downrigger” in prohibited gear for sport fishing, or to use clarifying language to not prohibit commonly used methods including tip-ups.

Proposal 182

We oppose this proposal. This proposal could benefit by amending to limit to invasive species only.

Proposal 183

We oppose this proposal. It does not make sense to not take care of your harvest as immediately as possible. If this proposal were to pass, many fishermen with good intentions of taking care of their meat would inadvertently be breaking the law. This may be useful biologically or for enforcement on a species or regional basis, but not for all finfish. As written, this proposal does not make sense.



February 26, 2026

Alaska Board of Fisheries
 PO Box 115526
 Juneau, AK 99811-5526

RE: Opposition to Proposal 186 – Upper Cook Inlet Drift Gillnet Restrictions

Madam Chair and Members of the Board,

Alaska Boats & Permits, Inc. opposes Proposal 186, which would permanently reduce drift gillnet fishing opportunity in Area 1 during mid-July and eliminate it altogether during the latter half of July.

Alaska Boats & Permits, Inc. is Alaska's largest marine brokerage. Since 1997, we have worked with commercial fishermen in every major fishery in the state. As President and owner of the company, a member of a fishing family, and a resident of a coastal community, I regularly attend Board of Fisheries (BOF) and North Pacific Fisheries Management Council (NPFMC) meetings. The regulatory decisions made by this Board directly affect our business, the thousands of Alaska fishermen we serve, and our community of Homer, located at the heart of the Cook Inlet drift fishery.

Proposal 186 should not have been accepted as an out-of-cycle Agenda Change Request (ACR), and it should be rejected on that basis alone. Although framed as a conservation proposal, it is not predicated on an emergent conservation circumstance. Rather, it asks the Board to permanently reallocate fishing opportunity among user groups by imposing rigid restrictions on drift gillnet fishing in Area 1, regardless of coho run strength or biological conditions.

Failure to Meet ACR Standard; Absence of Conservation Basis

ACRs exist to address unforeseen conservation or biological issues that arise outside the regular cycle and require prompt Board action. Proposal 186 identifies no stock-of-concern designation, no biological threshold, and no emergent risk that existing management tools are incapable of addressing.

Under Alaska law and longstanding Board practice, the distinction between conservation and allocation is fundamental. Conservation measures are those necessary to maintain sustained yield. Allocation decisions determine how harvest opportunity is divided among users once conservation needs are met.

Despite being justified on purported concerns about coho salmon, **Proposal 186 is inherently allocative.** It does not meaningfully address coho run size, escapement performance, or stock status. It identifies no conservation objective and provides no explanation for how the proposed restrictions would achieve one.

If Proposal 186 were genuinely conservation-based, it would be tied to measurable biological performance and structured to adjust as conditions change. It is not. A regulation that applies identically in weak years and strong years is not conservation-driven; it is allocation by design.

Effective conservation management under Alaska's sustained-yield mandate is adaptive. It relies on in-season information and allows managers to respond to real-time conditions. Proposal 186 removes that flexibility entirely. It provides no in-season management authority and no mechanism to tether restrictions to abundance.

Alaska Boats & Permits, Inc.

Such rigidity is inconsistent with conservation management and further underscores the allocative nature of the proposal.

Allocative proposals belong in the regular cycle, where competing interests can be evaluated transparently and in context. Accepting Proposal 186 as an ACR circumvents that process and undermines the open, stakeholder-driven framework that has long defined Alaska’s fishery management system.

Conflict with Coordinated Management; Cumulative Effects

At its February meeting, the NPFMC set a Cook Inlet EEZ coho total allowable catch (TAC) of **16,619 fish**, reflecting a highly precautionary federal management approach. The Council made clear that this precaution was driven not by a documented conservation concern, but by limitations in available data and federal management structure under the Magnuson–Stevens Act.

Proposal 186 would layer severe and permanent State-water restrictions on top of this already constrained federal framework without consideration of cumulative effects or foreseeable effort displacement. The predictable result is increased management instability, concentration of effort, and early closures driven by regulatory interaction rather than biological necessity.

Sound salmon management in Cook Inlet depends on coordination and predictability. Proposal 186 undermines both.

Economic and Community Impacts

Drift gillnet fisheries support Alaska residents, family businesses, processors, and coastal communities throughout Cook Inlet. Permanent restrictions untethered to biological performance unreasonably limit economic opportunity and disproportionately burden these coastal communities without demonstrating a conservation benefit. Such outcomes are not required to maintain sustained yield and should not be imposed through an out-of-cycle process.

Conclusion

Alaska Boats & Permits, Inc. respectfully requests that the Board reject Proposal 186 or, at a minimum, decline to act on it outside the regular cycle and defer consideration to the March 2027 Upper Cook Inlet meeting, consistent with the Board’s established standards for allocative proposals.

Proposal 186 is not necessary for conservation, is not responsive to biological conditions, and represents a permanent and allocative regulatory change improperly advanced through the ACR process. Acting on it out of cycle would require the Board to make permanent allocation decisions without the procedural safeguards of the regular cycle and without a demonstrated conservation necessity.

Thank you for the opportunity to comment, for your careful consideration, and for your continued prioritization of open and transparent fisheries management.

Respectfully,



Maddie Lightsey, President

Alaska Boats & Permits, inc.

Submitted by: Jim Erickson
Alaska Glacier Seafoods, Inc.
Community of Residence: Juneau

March 1, 2026

Alaska Board of Fish

March 2026 Statewide Meeting

Submitted By: Jim Erickson

Chairman Carlson-Van Dort and Board Members

Alaska Glacier Seafoods is a processing company located in Juneau Alaska. As a family-owned local processing company, we oppose Proposal 170.

My company is celebrating its 30th year in business in 2026. My company along with the more than 70 boats that fish salmon for us have become deeply dependant on hatchery produced Chum, pink and coho.

The loss of of this hatchery production will no doubt have a strong negative effect on all of our bottom-line annually.

Less hatchery production will result in fewer seafood jobs, reduced payment on fish tickets to the boats, reduced tender contracts, less fish tax revenue (both for the state and the community in which the fish is landed in) , less fuel sales and overall reduced economics for all the indirect businesses that rely on a robust salmon season.

The economic benefits of hatchery produced salmon have far reaching positive economic impacts for all involved.

Hatchery produced salmon in SE Alaska provides a strong platform for my company and it makes up a large percentage of the salmon that we process on a annual basis. The loss of this salmon production would undoubtedly affect on how we operate with other species as well during the salmon season. In short...reduced hatchery produced salom would cause us to have to change how we operate overall.

Our industry has been through some extremely challenging seasons in recent years and I feel that we are now on a slow road to economic recovery. I ask you as a life-long Alaskan and local business owner who lives year-round in Juneau to Vote Down Proposal 170.

The last thing our industry needs right now is more uncertainty.

Respectfully,

Jim Erickson

Vice-President

Alaska Glacier Seafoods, Inc

Juneau AK



March 2, 2026

Chair and Board Members,

The Alaska Healthy Habitat Alliance respectfully submits this comment letter in strong support of Proposals 163, 164, and 165. These proposals advance a straightforward and essential principle for Alaska fisheries management: when the State defines a gear type and sets operating standards, those standards must be clear, enforceable, and verifiable on the water. This is particularly important for fisheries with large operational footprints and the potential for substantial habitat and bycatch impacts, such as Alaska's pelagic trawl fisheries.

Alaska already has the policy direction in place. State regulations define pelagic trawl gear as gear used in state waters that does not operate in contact with the seabed. The problem is not that Alaska lacks a definition. The problem is that Alaska currently lacks a workable compliance pathway that allows the Alaska Department of Fish and Game and enforcement to verify that pelagic trawl gear is in compliance while fishing is underway. In the absence of verification, the management system defaults to "trust us" compliance. That outcome is incompatible with accountable fisheries management and leads to predictable consequences: enforcement paralysis, erosion of regulatory credibility, increased user conflict, and elevated risk to benthic habitat and non-target species, including salmon.

Requested Board action

For these reasons, the Alaska Healthy Habitat Alliance respectfully urges the Alaska Board of Fisheries to adopt Proposals 163, 164, and 165 as a cohesive package that:

1. Convert the definition of pelagic trawl gear from a paper standard into an enforceable operating standard
2. Establish a verifiable compliance pathway for fishermen and enforcement through monitoring and clear protocols
3. Require salmon excluders as a baseline best practice to reduce avoidable salmon bycatch
4. Improve fairness across gear types by reducing gray areas and ensuring consistent accountability
5. Restore public confidence by replacing "trust us" with proof

Evidence developed through the North Pacific Fishery Management Council process makes clear that so-called “pelagic” trawl gear frequently contacts the seafloor. The Council’s Fishing Effects (FE) Model incorporates observer data, vessel behavior, and gear characteristics and concludes that pelagic trawl nets, doors, and sweeps make regular bottom contact across large portions of their footprint. This conclusion has been reinforced by testimony from trawl fleet representatives at multiple NPFMC meetings acknowledging that bottom contact is a routine and, at times, unavoidable aspect of pelagic trawl operations. In other words, both modeling and industry testimony confirm that pelagic trawl gear does not operate off-bottom as defined in Alaska regulation. This record leaves little ambiguity: bottom contact is not hypothetical, incidental, or rare. It is a known and documented feature of the fishery. Alaska’s challenge is not a lack of information, but a lack of enforceable mechanisms in state waters to verify compliance with the “no bottom contact” standard while fishing is occurring.

Proposals 163 and 164 directly address this core problem by establishing a practical, enforceable framework to confirm whether pelagic trawl gear is operating as defined in state regulations. Proposal 165 strengthens Alaska’s approach to salmon stewardship by requiring salmon excluders as a baseline best practice for reducing avoidable salmon bycatch risk in state waters.

Proposal 163: Support for a “prove pelagic operation” framework

Proposal 163 would treat pelagic trawl gear as bottom-contact gear unless operators can demonstrate, through enforceable verification methods, that the gear is not fishing on the seafloor. We support this approach because it aligns with Alaska’s fundamental accountability standards in commercial fisheries: permit holders are responsible for the legal operation of their vessels at all times. Where a gear definition rests on how the gear is fished, rather than solely on its design, it is reasonable and necessary to require that compliance be demonstrable.

This proposal also strengthens fairness across gear types. Many Alaska fishermen operate under strict constraints and clear enforcement standards and are expected to maintain compliance at all times. Allowing pelagic trawl to operate in a gray zone due to a lack of verification creates an uneven playing field and undermines confidence in the regulatory system as a whole. A presumption framework is a practical tool to move management away from argument and toward evidence. It reduces conflict by substituting measurable proof for competing narratives, and it protects compliant operators by allowing them to document and demonstrate their off-bottom operations.

We are open to practical ideas from the fleet and technical experts on what constitutes “proof,” provided the approach is enforceable and verifiable. Alaska must move past “just trust us.” A system that depends on trust alone is not management.

Proposal 164: Support for seafloor monitoring to make the definition enforceable

Proposal 164 would require seafloor monitoring technology on pelagic trawl gear to verify compliance with state regulations. This proposal is essential because it provides what the current regulatory system lacks: a practical verification method that makes the existing pelagic definition enforceable.

The objective should be to establish a reliable method to verify when the gear is in contact with the seabed, supported by a clear protocol for verification and compliance documentation. Monitoring is not about punishment. It is about measurable compliance. It is also a conflict-reduction tool. When compliance is transparent and verifiable, disputes decrease, credibility improves, and compliant operators benefit from documented proof rather than operating under suspicion.

The Board can further strengthen this proposal's effectiveness by emphasizing key implementation principles: a clear standard for what constitutes seabed contact or avoidance during fishing operations; transparent, auditable compliance protocols with appropriate confidentiality protections; an implementation ramp that leads to enforceability on a defined schedule; and predictable consequences for noncompliance. Monitoring requirements without meaningful consequences risk becoming another unenforceable rule, and Alaska cannot afford additional gray areas in high-impact fisheries.

Proposal 165: Support for salmon excluders as a baseline best practice

Proposal 165 would require the use of salmon excluders in pelagic trawl nets. We support this proposal as a common-sense bycatch reduction measure and an appropriate baseline best practice in mixed-stock waters, as evidenced in the Experimental Fishing Permit work in the Gulf of Alaska in 2013-2014. Salmon are a statewide resource with profound cultural, economic, and food-security significance. Where avoidable salmon encounters occur in pelagic trawl fisheries, Alaska should require the use of proven mitigation tools to reduce risk and support salmon stewardship.

Proposal 165 also advances consistency across jurisdictions. When best practices exist in one jurisdiction but remain optional in another, the result is regulatory fragmentation, confusing expectations, and uneven conservation outcomes. Aligning expectations for state waters with modern bycatch mitigation standards used in the adjacent federal fishery strengthens public trust and the credibility of Alaska's fisheries management system.

Addressing predictable concerns

We recognize that some will argue that the pelagic trawl fleet already fishes off the bottom, or that monitoring and excluders will be costly. If operators are already fishing off the bottom, then verification should be straightforward and beneficial. A compliance system would document what operators say they are already doing, reduce public controversy, and decrease user conflict. This is about ensuring the "no bottom contact" definition is enforceable and trusted.

Cost is a legitimate implementation consideration, but it is not a reason to preserve an unenforceable rule for a fishery with potentially large impacts. The Board can adopt these proposals while encouraging timelines for collaborative protocol development with the fleet and technical experts, performance-based standards that avoid vendor lock-in, and the pursuit of grant and congressional support where appropriate. The costs of inaction are also real: ongoing conflict, loss of management credibility, and continued habitat and bycatch risks under an unverifiable system.

Thank you for your service and for the opportunity to comment. We appreciate the Board's commitment to clear, enforceable regulations that protect Alaska's habitats and the communities that depend on healthy fisheries.

Respectfully submitted,

Alaska Healthy Habitat Alliance



March 2, 2026

Dear Chair Carlson- Van Dort and Alaska Board of Fisheries members:

Alaskans know that our future depends on healthy oceans. Our communities, local economies, and cultures are built on the abundance of marine life and the integrity of the habitats that sustain it. When those ecosystems are damaged, or when industrial fishing practices violate the spirit and letter of the law, we all lose.

For that reason, I support Proposals 163, 164, and 165 before the Alaska Board of Fisheries as important steps toward restoring accountability and protecting the foundation of Alaska's fisheries.

- Proposal 163 would redefine pelagic trawl gear as bottom trawl until operators can prove they are not fishing on the seafloor.
- Proposal 164 would require seafloor monitoring technology on pelagic trawl nets to verify compliance with state regulations.
- Proposal 165 would require the use of salmon excluders in pelagic trawl nets—a common-sense measure already standard in federal waters.

Reports from the North Pacific Fishery Management Council, along with public testimony from trawl fleet representatives, confirm that so-called “midwater” trawls regularly operate on the seafloor. This contact causes habitat damage and increases threats to the sustainability of critical species such as salmon, crab, and halibut. The lack of required seafloor monitoring or enforcement mechanisms allows these illegal practices to continue unchecked, undermining the integrity of Alaska's sustainable fisheries management, its commitment to habitat protection, and the long-standing regulation governing pelagic trawl use in state waters.

Under Alaska regulation (5 AAC 39.105), pelagic trawl gear is defined as gear that does not contact the seabed or use protective devices that make it suitable for fishing on the bottom. That's clear, fair, and widely understood. It's time to ensure that the definition is honored in practice, not just on paper.

These proposals reflect what Alaskans believe: that our fisheries should be managed with integrity, transparency, and respect for the ecosystems that sustain them. Upholding our own regulations is not anti-industry. It's pro-future. It's how we protect opportunity, abundance, and accountability for generations to come.

Alaska has some of the largest pelagic trawl fleets on the planet. Trawling inevitably impacts the seafloor and seafloor creatures, and we're calling on the Board of Fisheries to protect the ecosystems that underpin our fisheries and coastal communities by upholding common-sense accountability standards.

Sincerely,

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| 1. Mj Litchard Nome, AK | 2. Debbie Nome, AK | 3. Mark Weissler Anchorage, AK | 4. Cece Jefferson Anchorage, AK |
| 5. Chris Walker Valdez, AK | 6. Jody Arnold Anchorage, AK | 7. Jeremy Williams Seward, AK | 8. Bobette Jenkins Anchorage, AK |
| 9. Mike Wann Anchorage, AK | 10. Cody Mcdonald Anchorage, AK | 11. Martaelena Mcnatt Eagle River, AK | 12. Dave Mendez Eagle River, AK |
| 13. Dave Oaks Anchorage, AK | 14. Kimberly Oaks Anchorage, AK | 15. Nellie Huffman Anchorage, AK | 16. Arthur Jones Anchorage, AK |
| 17. Matt Carr Wasilla, AK | 18. Susan Lambrix Indian, AK | 19. John Ford Indian, AK | 20. Isaac Rush Wasilla, AK |
| 21. Mike Day Eagle River, AK | 22. Jeff Kusz Anchorage, AK | 23. Bobby Carter Palmer, AK | 24. Curt Martin Palmer, AK |
| 25. Derek Samuelson Anchorage, AK | 26. Lisa Jackson Anchorage, AK | 27. Michael Bevis Anchorage, AK | 28. Libby Musolino Fairbanks, AK |
| 29. Michael Saxby Anchorage, AK | 30. Judy Reed Nome, AK | 31. Ayse Macknight Kodiak, AK | 32. William Beaver Fairbanks, AK |
| 33. Roberta Greenlee Fairbanks, AK | 34. Clifford Williams Yakutat, AK | 35. Mary Porter Yakutat, AK | 36. Zoe Bulard Yakutat, AK |
| 37. Reyna Abreu-Vigil Yakutat, AK | 38. Jeremiah James Yakutat, AK | 39. Raymond Brady Eagle River, AK | 40. Betty Mcintos Valdez, AK |
| 41. Kimberly Baridiana Valdez, AK | 42. Renae Egrass Valdez, AK | 43. Isabella Tulauskas Valdez, AK | 44. Emily Iacobucci Anchorage, AK |
| 45. Erica Schurosky Wasilla, AK | 46. Randi Gryting Talkeetna, AK | 47. Nate Baird Girdwood, AK | 48. Gloria Roe Girdwood, AK |
| 49. Greg Gedemer Wasilla, AK | 50. Frances Hunter Girdwood, AK | 51. Nicolette Hoeg Eagle River, AK | 52. Margaret Vos Talkeetna, AK |
| 53. John Loomis Talkeetna, AK | 54. Diane Okonek Talkeetna, AK | 55. Kathy Sullivan Talkeetna, AK | 56. Lorraine Brown Fairbanks, AK |
| 57. Wesley Snyder Anchorage, AK | 58. Kris Perry Talkeetna, AK | 59. Truno Holdaway Fairbanks, AK | 60. Kat Fyten Fairbanks, AK |

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| 61. Krista Wilkinson
Fairbanks, AK | 62. Audrey Welsh
Fairbanks, AK | 63. Christopher
Hellmann | 64. David Athons
Kenai, AK |
| 65. Terry Wilson
Fairbanks, AK | 66. Joyanne Bloom
Juneau, AK | 67. John Leask
Metlakatla, AK | 68. John Lancaster
Homer, AK |
| 69. William Hartley
Ketchikan, AK | 70. Tim Ewing
Anchorage, AK | 71. Max Royall
Coffman Cove, AK | 72. Steve Fleischman
Anchorage, AK |
| 73. Carol Race
Juneau, AK | 74. Linda Ayer
Valdez, AK | 75. Diane Wessing
Anchorage, AK | 76. Carma Johnston
Eagle River, AK |
| 77. Sophie Frets
Kodiak, AK | 78. Jane Miles
Homer, AK | 79. Tim Hinterberger
Anchorage, AK | 80. Wayne Pichon
Anchorage, AK |
| 81. Tyler Henegan
Anchorage, AK | 82. Brian Beckwith
Eagle River, AK | 83. Sam Mcbeen
Tenakee Springs, AK | 84. Chuck Donahue Jr
Anchorage, AK |
| 85. Diane Boggess
Anchorage, AK | 86. Daphne Koropp
Anchorage, AK | 87. Hunter Heafer
Soldotna, AK | 88. Maddie Halloran
Anchorage, AK |
| 89. Margaret Mcneil
Anchorage, AK | 90. Pamela Nolcini
Wasilla, AK | 91. Sara Gering
Anchorage, AK | 92. Dan Busch
Kodiak, AK |
| 93. Callan Chythlook-
Sifsof | 94. Ineke Buchman
Homer, AK | 95. Chris Reynolds
Anchorage, AK | 96. Antonia Grissett
Anchorage, AK |
| 97. Francis Gallela
Anchorage, AK | 98. Vanessa Tahbone
Nome, AK | 99. Kyle Gregory
Anchorage, AK | 100. Allen Dahl
Anchorage, AK |
| 101. Jennifer Liepa
Anchorage, AK | 102. Alexander Stock
Haines, AK | 103. Maryclaire
Bernstein | 104. Heidi Robichaud
Haines, AK |
| 105. Bob Standish
Kenai, AK | 106. Tory Rockefeller
Homer, AK | 107. Christopher
Hashiguchi | 108. Kate Persons
Nome, AK |
| 109. Casimir
Abramczyk | 110. Cindy Wagner
Metlakatla, AK | 111. Mickie Burns
Homer, AK | 112. Sonnet Nyback
Anchorage, AK |
| 113. Alisa Carroll
Anchorage, AK | 114. John Nielsen
Palmer, AK | 115. Anissa Berry
Haines, AK | 116. Norman Alexie
Anchorage, AK |
| 117. William Ledoux
Wasilla, AK | 118. Anna Aсталos
Anchorage, AK | 119. Gregory Olsen
Soldotna, AK | 120. Chris Clark
Anchorage, AK |

121. Camille Hermon Palmer, AK	122. Dwight Kramer Kenai, AK	123. Adam Cuthriell Girdwood, AK	124. Marvin Lake Anchorage, AK
125. Mary Lukens Kodiak, AK	126. Joan Cahill Juneau, AK	127. Diane Taylor Kasilof, AK	128. Douglas Moody Anchorage, AK
129. Trevor Rollman Soldotna, AK	130. Lorne Miller Anchorage, AK	131. Whitney Wolf Talkeetna, AK	132. Laura Wright Talkeetna, AK
133. Rene Limeres Healy, AK	134. Kelly Haag Anchorage, AK	135. Gloria Simeon Bethel, AK	136. Jeremy Waite Fairbanks, AK
137. Ken Hamrick Anchorage, AK	138. William Kramer Juneau, AK	139. Ryan Martin Port Alexander, AK	140. Scott Lindquist Palmer, AK
141. Daniel Landen Juneau, AK	142. Susan Ware Anchorage, AK	143. Erik Norberg Juneau, AK	144. Katrina Leary Anchorage, AK
145. Carly Wier Homer, AK	146. Mary Jo Lord-Wild Elfin Cove, AK	147. Maureen Knutsen Naknek, AK	148. John Hudson Juneau, AK
149. Carolyn Nichols Sitka, AK	150. Hannah Heimbuch	151. Tav Ammu Dillingham, AK	152. China Kantner Kotzebue, AK
153. Bruce Markwood Anchorage, AK	154. Eli Hanlow III Yakutat, AK	155. Cynthia Adams Haines, AK	156. Nora Skeelee Sitka, AK
157. Jamison Ramsey Ketchikan, AK	158. Robert Sparks Fairbanks, AK	159. Maureen Powers Homer, AK	160. Betsy Peratrovich Anchorage, AK
161. Kevin Bopp Fairbanks, AK	162. Kevin Shaffer Moose Pass, AK	163. Kaye Holowatch Anchorage, AK	164. Fred Klouda Anchorage, AK
165. James Lyons Eagle River, AK	166. Angela Ferrari Anchorage, AK	167. Peter Melde Anchorage, AK	168. Angie Hamill Chugiak, AK
169. Katie McClellan Fairbanks, AK	170. Brian Okonek Talkeetna, AK	171. Sue Baker Chiniak, AK	172. Deborah Limacher
173. Lynnda Kahn Soldotna, AK	174. Della Coburn Anchorage, AK	175. Craig Walcott Sterling, AK	176. Sandra Loomis Talkeetna, AK
177. Susan Vogt Fairbanks, AK	178. Ken Zafren Anchorage, AK	179. Shirley Forquer Homer, AK	180. Karen Wilson Juneau, AK

181. Joe Seelig
Anchorage, AK
185. Randy Busch
Kodiak, AK
189. Santa Claus
North Pole, AK
193. Thea Whitehead
Wasilla, AK
197. Darcy Holt
Anchorage, AK
201. Daniel Norman
Kenai, AK
205. Mary Ann Tierese
Anchorage, AK
209. Germaine
Thomas
213. Betty Bonin
Naknek, AK
217. Rachel Robison
Talkeetna, AK
221. Dawn Morse
Anchorage, AK
225. Sue Christiansen
Homer, AK
229. Courtney Moore
Anchorage, AK
233. Katherine Boyle-
Schmidt
237. James Goodwin
Soldotna, AK
182. Jeremy Robida
Valdez, AK
186. Arthur Bloom
Juneau, AK
190. Guy Lopez
Big Lake, AK
194. Theodore Bartko
Palmer, AK
198. Theresa Dolan
Anchorage, AK
202. Edward San
Martin
206. Karen Mannix
Talkeetna, AK
210. Deborah
Anderson
214. Samuel Ohana
Anchorage, AK
218. Dan Berube
Anchorage, AK
222. Abigail
Leatherman
226. Evelyn Agnus-
Leavitt
230. Cathy Bremner
Yakutat, AK
234. Tom Vandewater
Juneau, AK
238. Amber Bridgeman
Wasilla, AK
183. Dogan Ozkan
Fairbanks, AK
187. Jennifer Edwards-
Fahl
191. Valerie Penz
Anchorage, AK
195. Bruce Service
Anchorage, AK
199. Lisa Villano
Fairbanks, AK
203. Susan Oehlers
Yakutat, AK
207. Donna Willoya
Wasilla, AK
211. Bruce White
Sitka, AK
215. Jamie Bailey
Anchorage, AK
219. Martha Service
Anchorage, AK
223. Erica Madison
King Salmon, AK
227. Mary Martin
Juneau, AK
231. Theresa
Gerdtsen
235. Phil Shoemaker
King Salmon, AK
239. Trevor Ose
North Pole, AK
184. Suzette
Mashburn
188. Stan Olsen
Anchorage, AK
192. Todd Young
Anchorage, AK
196. Becky Breeding
Chugiak, AK
200. Sally Donaldson
Juneau, AK
204. Steve Fish
Sitka, AK
208. Andres Camacho
Douglas, AK
212. Richard Rothstein
Anchorage, AK
216. Paula Williams
Anchorage, AK
220. Jan Conitz
Juneau, AK
224. Laura Deatherage
Valdez, AK
228. Nancy Waterman
Juneau, AK
232. Lori Stephenson
Homer, AK
236. Nelson Co
Homer, AK
240. Brenan Hornseth
Seward, AK

241. Julie Nolan Homer, AK	242. Marc Dumas Fairbanks, AK	243. Robert Gardiner Ketchikan, AK	244. Thomas Finger Kenai, AK
245. Aidan Shafland Valdez, AK	246. Kneeland Taylor Anchorage, AK	247. Hayden Kaden Gustavus, AK	248. Lynette Hinz Anchorage, AK
249. Noelle Carbone Talkeetna, AK	250. Emily Craver Anchorage, AK	251. James Simon Fairbanks, AK	252. Luke Hopkins Fairbanks, AK
253. Colleen Bickford Anchorage, AK	254. Steve Box Juneau, AK	255. Jean Carter Palmer, AK	256. Neil Akana Sitka, AK
257. Lorraine Nolley Anchorage, AK	258. Daniel Smith Wrangell, AK	259. Richard Catrett Juneau, AK	260. Vladimir Kuzmin Delta Junction, AK
261. John Gardner III Sand Point, AK	262. Timothy Sexton Douglas, AK	263. Minnie Chase Bethel, AK	264. Michael Hansen Kodiak, AK
265. Brad Swanson Yakutat, AK	266. Michael Schmit Ketchikan, AK	267. Lindsay Johnson Haines, AK	268. Gary Rozelle Sr. Akhiok, AK
269. Curt Rudd Anchorage, AK	270. Mark Niver Wasilla, AK	271. Pamela Weaver Fairbanks, AK	272. Kate Crump King Salmon, AK
273. Corinna Dart Manley Hot Springs,	274. Norman Hoppas Anchorage, AK	275. Olivia Spiezio Anchorage, AK	276. April Woods Anchorage, AK
277. Piper Hartues Anchorage, AK	278. Carl Berlin Kasigluk, AK	279. Dennis Northrup Ketchikan, AK	280. Diane Jewkes North Pole, AK
281. Dan Anderson Valdez, AK	282. Nathan Elswick Anvik, AK	283. Rob Boyer Anchorage, AK	284. Amanda Johnson Anchorage, AK
285. Jason Bontrager Anchorage, AK	286. Sara Thomas Anchorage, AK	287. Christine Everett North Pole, AK	288. Freya Tagseth Seward, AK
289. Blake Bousley Ketchikan, AK	290. Brian Ross Juneau, AK	291. Anne Kahn Homer, AK	292. Barbara Norris Anchorage, AK
293. Phillip Sparrow Wasilla, AK	294. Jerome Mcarthur Anchorage, AK	295. Lee Page Ninilchik, AK	296. Bruce Baker Juneau, AK
297. Kendra Blochwitz Anchorage, AK	298. Kim Smith Homer, AK	299. Joel Jackson Kake, AK	300. Dyan Ecklund Anchorage, AK

301. David Vought II Soldotna, AK	302. Samuel Roberts Juneau, AK	303. Yvette Wilkins Eagle River, AK	304. Les Dunbar Palmer, AK
305. Warren Schaefer Anchorage, AK	306. Marika Hintz Palmer, AK	307. Crystal Howard Wasilla, AK	308. Caryn Fuzzard Fairbanks, AK
309. Michael Janecek Palmer, AK	310. Steve Mcelfresh Ninilchik, AK	311. Kathy Budd Palmer, AK	312. Jimmie Jack Drath Soldotna, AK
313. Mary Jane Wiehl Rampart, AK	314. Richard Hiratsuka Dillingham, AK	315. Carol Wegener Petersburg, AK	316. Seth Stewart Pelican, AK
317. Joan Mcbeen Tenakee Springs, AK	318. Ryan Astalos Anchorage, AK	319. Sue Lillard Wasilla, AK	320. Beth Fenhaus Haines, AK
321. Karl Ashenbrenner Jr	322. Matthew Boldt Anchorage, AK	323. Nathaniel Moulton	324. Clyde Vicary Anchorage, AK
325. Charles Mccrone Kasilof, AK	326. Claudia Jacobson Soldotna, AK	327. Patricia Stark Fairbanks, AK	328. Christine St Pierre Fairbanks, AK
329. Shonna Roush Juneau, AK	330. Patrick Quigley Craig, AK	331. Elizabeth Wolfe Haines, AK	332. Jake Richey Anchorage, AK
333. Elizabeth Martin Ketchikan, AK	334. Todd Russell Kenai, AK	335. Lauren Attanas Fairbanks, AK	336. Morris Nassuk Koyuk, AK
337. Rett Gunnell Homer, AK	338. Karen Haley Sitka, AK	339. Bradford Buddenberg	340. Laurie Daniel Homer, AK
341. Laurie Thorpe Wasilla, AK	342. Shawn Silverthorn	343. Susanne Miller Anchorage, AK	344. Keith Westphal Wasilla, AK
345. Gordon Edmiston Chugiak, AK	346. David Apperson Anchorage, AK	347. Laura Derungs Talkeetna, AK	348. Robert Geesen Kenai, AK
349. Rick Dominguez Sr	350. Kayci Hanson Ninilchik, AK	351. Clare Hanneman Fairbanks, AK	352. Andrea Burtzel Anchorage, AK
353. Jeff Knisley Anchorage, AK	354. Parker Lowney Homer, AK	355. Christopher Barton	356. Willow Alvarez Anchorage, AK
357. Michael Dyer Anchorage, AK	358. Ryan Byrne Anchorage, AK	359. Yasmin Radbod Anchorage, AK	360. Camilla Beans Anchorage, AK

361. Jennifer Sonneborn	362. Halen Hernandez Homer, AK	363. Elizabeth Bassett Anchorage, AK	364. Morgan Vail Anchorage, AK
365. Patrick Dolphin Kenai, AK	366. Craig Saunders Skwentna, AK	367. William Clock Seward, AK	368. Michael Metcalf Anchorage, AK
369. Seth Gray Kenai, AK	370. Theresa Clark Anchorage, AK	371. Eric Morales Sitka, AK	372. Karma Ulvi Eagle, AK
373. Janet Crichton Juneau, AK	374. Mark Jacobson Soldotna, AK	375. Shannon Tibbs Ketchikan, AK	376. Kevin Miller Juneau, AK
377. Robert Fuller Anchorage, AK	378. Eric Wallis Eagle River, AK	379. Joel Bouse Jr Willow, AK	380. Larry Kelone Valdez, AK
381. Laura Deatherage Valdez, AK	382. Mary Ostermick Talkeetna, AK	383. Michael Diemer Anchorage, AK	384. Robin James Valdez, AK
385. Scott Van Valin Craig, AK	386. Kristine Harder Haines, AK	387. Chris Lillehoff Sitka, AK	388. David Fitka Marshall, AK
389. Dan Kosterman Eagle River, AK	390. Lucas Gogert Palmer, AK	391. Storman Norman Anchorage, AK	392. Chuck Hugny Nenana, AK
393. David Plant Palmer, AK	394. Lesley Hammer Anchorage, AK	395. Melis Coady Talkeetna, AK	396. Michael Pendergast
397. Bradley Cruz Anchorage, AK	398. Craig Johnston Eagle River, AK	399. John Larsen Anchorage, AK	400. Evelyn Austin Anchorage, AK
401. Jennifer Cornell Anchorage, AK	402. Laura Murph Juneau, AK	403. R Gordy Vernon Homer, AK	404. Kerry Ivory Ouzinkie, AK
405. Craig Anderson Fairbanks, AK	406. Charles Haley Jr Sitka, AK	407. Robert Haan Anchorage, AK	408. Michael Henry Kenai, AK
409. Amy Dittmar Juneau, AK	410. David Weeks Ninilchik, AK	411. Sean Donahue Anchorage, AK	412. Todd Winter Anchorage, AK
413. Colin Hurley Eagle River, AK	414. Larry Miller Talkeetna, AK	415. Todd Steiner Homer, AK	416. Evelyn Harden Homer, AK
417. Matthew Pyhälä Kenai, AK	418. Andrew Mueller Palmer, AK	419. Jon Gregg Fairbanks, AK	420. Kathrin Mccarthy Juneau, AK

421. Emily Wright Juneau, AK	422. Donald Snovel Palmer, AK	423. Terrence Mccabe Valdez, AK	424. Jesse Carter Cordova, AK
425. Peter Lunoe Anchorage, AK	426. Katie Arnberg Valdez, AK	427. Victor Demoski Sr Anchorage, AK	428. Kassandra Taggart
429. Tammy Chulick Kasilof, AK	430. Michael Limacher Homer, AK	431. Sasha Anderstrom	432. Randi Perlman Wasilla, AK
433. Nedra Boze Soldotna, AK	434. Sebastian Draeger	435. Dena Boughton Eagle River, AK	436. Mark Ha Anchorage, AK
437. Ruth Garrison Bethel, AK	438. Darrell Garrison Anchorage, AK	439. Janie Jensen Yakutat, AK	440. Lloyd Fanter Eagle River, AK
441. Jeffery Johnson Anchorage, AK	442. Natalie Harder Anchorage, AK	443. Seth Koetitz Soldotna, AK	444. Jerry Farrington Soldotna, AK
445. Melva Krogseng Soldotna, AK	446. Martaelena Ochoa Mcnatt	447. John Stauffacher Sterling, AK	448. Kong Ly Wasilla, AK
449. Brent Davies Chugiak, AK	450. Brad Branson Sr Willow, AK	451. Steven Vincent Soldotna, AK	452. Joshua Duong Juneau, AK
453. Michael Priebe Anchorage, AK	454. Marni Levanger Anchor Point, AK	455. Michael Mclean Fairbanks, AK	456. Anneliese Kupfrian
457. Kelsi Miller Anchorage, AK	458. Charles Ross Palmer, AK	459. Mindy Latteier Eagle River, AK	460. Rich Sonnen Homer, AK
461. Olivia Vincent Homer, AK	462. Thomas Must Kodiak, AK	463. Jasper Marder Talkeetna, AK	464. Jacqui Stanley Sterling, AK
465. Tim Cowan Soldotna, AK	466. Kasey Nielsen Fairbanks, AK	467. Tara Craig Anchorage, AK	468. Tamara Rothman Anchorage, AK
469. Philip Roth Ketchikan, AK	470. Bonita Aderman Palmer, AK	471. Donald Mike Chugiak, AK	472. Sharon Walluk Eagle River, AK
473. Josh Scollard Anchorage, AK	474. Randy Moore Chugiak, AK	475. Deanne Pearson Soldotna, AK	476. Megan Henry Anchorage, AK
477. Steven Hall Eagle River, AK	478. Gabrielle Karpinsky	479. Sarah Mastroni Anchorage, AK	480. Masha Lazutkina Anchorage, AK

481. Sophie Agnew
Seward, AK
485. Noel Therrien
Girdwood, AK
489. Michael
Polushkin
493. Noralie Jennings-
Voigt
497. Renata Sweet
Seldovia, AK
501. Terry Mccoy
Willow, AK
505. Sam Steele
Anchorage, AK
509. Sparrow Gray
Talkeetna, AK
513. Victoria Provenza
Seward, AK
517. Frank Ryman III
Yakutat, AK
521. Marry Knutsen
Yakutat, AK
525. Dylan Peterson
Yakutat, AK
529. John P Burden Jr
Wasilla, AK
533. Beverly Hoffman
Bethel, AK
537. John Ledoux
Anchorage, AK
482. Greg Markle
Copper Center, AK
486. Jennifer Osborn
Soldotna, AK
490. Ahmika Kluka
Sitka, AK
494. Heidi Wong
Clam Gulch, AK
498. Pax Templeton
Anchorage, AK
502. Brett Lange
Homer, AK
506. Paul Badalich
Anchorage, AK
510. Austin Pajak
Yakutat, AK
514. Debra Lekanoff
Yakutat, AK
518. Trisha Costello
Talkeetna, AK
522. Gwen Swanson
Anchorage, AK
526. Marvin Lake
Anchorage, AK
530. Jerry Bixby
Soldotna, AK
534. Agnes Beans
Wasilla, AK
538. Tom Bachert
Fairbanks, AK
483. James Sullivan
Chugiak, AK
487. Abi Berlet
Anchorage, AK
491. Haley Hirsch
Anchorage, AK
495. Stacy Corbin
Cooper Landing, AK
499. Nicholas Corbin
Kenai, AK
503. Randy Branning
Delta Junction, AK
507. Tom Peel
Homer, AK
511. Katharine Del
Castillo
515. Albert Daniels
Wasilla, AK
519. Teresa Swanson
Yakutat, AK
523. Dyllon Mcintosh
Anchorage, AK
527. Petra Wilm
Anchorage, AK
531. Dain Douthit
Kenai, AK
535. Karen Gillis
Anchorage, AK
539. William Wunnicke
Anchorage, AK
484. Caroline
Rasimowicz
488. Mariah Thornsley
Palmer, AK
492. Jeremy Hunter
Girdwood, AK
496. Ian Waskey
Anchorage, AK
500. Robert Hartley
Anchorage, AK
504. Abby Morrison
Anchorage, AK
508. Luca Gray
Talkeetna, AK
512. Jessica Jensen
Yakutat, AK
516. Andrew Gray
Yakutat, AK
520. Bea Gallagher
Wasilla, AK
524. Monica Gallagher
Wasilla, AK
528. Ronald Rodgers
Soldotna, AK
532. Andrew Seppi
Wasilla, AK
536. Jacqueline
Muehlbauer
540. Kristine Harder
Haines, AK

541. Ravnit Lachapelle Anchorage, AK	542. Hannah Pratt Anchorage, AK	543. Karma Ulvi Eagle, AK	544. Dylan Moore Anchorage, AK
545. John Rodgers John Rodgers	546. Malory Moskovitz Anchorage, AK	547. Hohn Tonuchuk Kotlik, AK	548. Mike Schierman Wasilla, AK
549. Cheri Brukardt Eagle River, AK	550. Philip Bottrell Eagle River, AK	551. Jeanne Tatangelo Eagle, AK	552. Clint Hammer Anchorage, AK
553. Allan Sherman Anchorage, AK	554. Dana Ulvi Eagle, AK	555. Roxanne Thurman	556. Doug Hill Palmer, AK
557. Miquelle Milner Kenai, AK	558. Brook Clock Seward, AK	559. Scott Jones Palmer, AK	560. Helen Mcneil Anchorage, AK
561. Klara Hamby Sutton, AK	562. Aspen Marlin Homer, AK	563. Crystalyn Lemieux	564. Jodi Benham Anchorage, AK
565. Carol Torrey Anchorage, AK	566. Jerry O'Brien Nikiski, AK	567. Richard Nicholson Jr	568. Daniel Solomon Anchorage, AK
569. Mary Ann Batchelder	570. Robert Schmidt Jr Seward, AK	571. Kaiden Bogie Homer, AK	572. Mike Chulick Kasilof, AK
573. Tim Latham Ninilchik, AK	574. Kimberly Burke Fairbanks, AK	575. Leonard Jewkes North Pole, AK	576. Moriah Conkel Homer, AK
577. Ainsley Haukaas Anchorage, AK	578. Angela Ferrari Anchorage, AK	579. Tyler Greenhalgh Soldotna, AK	580. Susan Pacillo Homer, AK
581. Chung Nim Ha Anchorage, AK	582. Shawn Grimes Homer, AK	583. Erik Boltman Wasilla, AK	584. Michael Dalton Anchor Point, AK
585. Karen Johnson Sitka, AK	586. Paul Olson Sitka, AK	587. Ric O Ruttum Anchorage, AK	588. James McCormick
589. Yom Young Homer, AK	590. Ashlan Hooton Anchorage, AK	591. L. Marie Mcintire Kasilof, AK	592. Erma Milspaugh Eagle River, AK
593. Michael Rheam Anchorage, AK	594. Deborah Kenshalo	595. Mari Mahanna Anchorage, AK	596. Kent Mahanna Anchorage, AK
597. Chris Wiita Anchorage, AK	598. Theresa Donhauser	599. Robert Donhauser	600. Ron Rowland Eagle River, AK

601. Karl Van Buskirk Seward, AK	602. Burt Christian Anchorage, AK	603. Michelle Pearson Wasilla, AK	604. Jerry Nash Wasilla, AK
605. Brandon Mcbride Palmer, AK	606. Nathan Perkins Anchorage, AK	607. Lori Campbell Anchorage, AK	608. Lori Burroughs Chugiak, AK
609. Travis Duft Eagle River, AK	610. Darlene Wright Glennallen, AK	611. Duane Babcock Glennallen, AK	612. Marissa Senger Copper Center, AK
613. Matthew Senger Copper Center, AK	614. Don Burroughs Chugiak, AK	615. Joselyn Angstman Anchorage, AK	616. Chase Liland Anchorage, AK
617. Phillip Durousseau	618. Michael Harter Wasilla, AK	619. Kyle Therrien Anchorage, AK	620. Savannah Plank Sitka, AK
621. Jeremy Plank Sitka, AK	622. Doug Schoessler Seward, AK	623. Christopher Bitz Eagle River, AK	624. Damian Schlegel Anchorage, AK
625. Marcelle Schlegel Anchorage, AK	626. Jeff Moore Wasilla, AK	627. Amy Moore Wasilla, AK	628. Cliff Ambro Anchorage, AK
629. Erik Anderson Anchorage, AK	630. Kate Bender Anchorage, AK	631. Tom Bollaert Anchorage, AK	632. Dana Kewan Anchorage, AK
633. Don Mccann Anchorage, AK	634. Michelle Renfrew Anchorage, AK	635. Heather Coletti Anchorage, AK	636. Ben Mallicant Anchorage, AK
637. Mike Hammer Anchorage, AK	638. Sam Nadeen Anchorage, AK	639. James Lina Anchorage, AK	640. Gary Severtson Palmer, AK
641. Crystal Coulter Anchorage, AK	642. Jay Coulter Anchorage, AK	643. Dave Mueller Wasilla, AK	644. Rhonda Mueller Wasilla, AK
645. Kongly Wasilla, AK	646. Olivia Hrnby Wasilla, AK	647. Kathy Thompson Wasilla, AK	648. Michele Bentz Wasilla, AK
649. Chris Bentz Wasilla, AK	650. Serena Hanbey Perless	651. Robbin Copers Valdez, AK	652. Samantha Addler Valdez, AK
653. Rebecca Walker Valdez, AK	654. James Tucker Tuscaloosa, AL	655. Karen Spradlin Jacksonville, AL	656. Lauren Richie Pleasant Grove, AL
657. Jennifer Coleman Huntsville, AL	658. Izabelle Kazmarcxyn	659. Linda Shumate Paron, AR	660. Valerie Paterson Pocahontas, AR

661. Gerry Milliken Cottonwood, AZ	662. D'Anne Macneil Mesa, AZ	663. Jewell Batway Apache Junction, AZ	664. Gage Counts Goodyear, AZ
665. Dan Heffernan Glendale, AZ	666. Stephan Donovan Oro Valley, AZ	667. Barbara Mathes Rio Rico, AZ	668. Betty Winholtz Morro Bay, CA
669. Phyllis Chavez Santa Monica, CA	670. Edie Bruce El Cerrito, CA	671. Vic Bostock Altadena, CA	672. Alice Polesky San Francisco, CA
673. JI Angell Rescue, CA	674. Roger Hollander Tarzana, CA	675. Sondra Boes Campbell, CA	676. Lisa Ann Kelly And Family
677. Krista Dana Sunnyvale, CA	678. Ann Wasgatt Roseville, CA	679. Elizabeth Darovic Monterey, CA	680. Sue Hall Castro Valley, CA
681. John Oda San Francisco, CA	682. Miriam Baum Rancho Cucamonga,	683. Arthur Webb Gilroy, CA	684. Neal Steiner Los Angeles, CA
685. Darcy Skarada Kelseyville, CA	686. Harry Knapp Riverside, CA	687. Robin Vantassell Summerland, CA	688. Melissa Williams La Quinta, CA
689. Alena Jorgensen Temple City, CA	690. Andy Lupenko Lemon Grove, CA	691. Aj Cho San Leandro, CA	692. Forest Frasier Benicia, CA
693. Alexa McMahan Huntington Beach, CA	694. Norm Wilmes Yuba City, CA	695. Linda Freeman Yuba City, CA	696. Linda Albrecht South Lake Tahoe, CA
697. Chris George Beverly Hills, CA	698. Craig Barton Healdsburg, CA	699. Taylor Walker San Francisco, CA	700. Linda Dyer Millard Portola Valley, CA
701. Vibeke Strand Portola Valley, CA	702. L P Felton Los Angeles, CA	703. Alice Ford Los Angeles, CA	704. Colin Epstein Berkeley, CA
705. Kiana Reyes San Mateo, CA	706. Beth Woodruff Studio City, CA	707. Mo Tidemanis San Clemente, CA	708. Edward Lemon Sebastopol, CA
709. Heidi Lemon Sebastopol, CA	710. Roy Ferguson Aurora, CO	711. Molly Ross Castle Rock, CO	712. Jonette Bronson Telluride, CO
713. Del Stiewert Colorado Springs, CO	714. Laura Waterworth Aurora, CO	715. Sandra Varvel Greeley, CO	716. Tanya Piker La Junta, CO
717. Nicole Rymarz Arvada, CO	718. Carl Nilson Clifton, CO	719. Barbara Macalpine	720. Pete Sullivan Stamford, CT

721. Susan Goldstein West Hartford, CT	722. Maure Briggs Vernon Rockville, CT	723. John Curotto Quinebaug, CT	724. Joann Koch Lebanon, CT
725. Bob Ange Groton, CT	726. Shelley Wehrly Old Saybrook, CT	727. Carol Collins Dover, DE	728. Mary Johnson Edgewater, FL
729. Felicity Hohenshelt	730. Linda Vopicka Tampa, FL	731. Elizabeth Scherbak	732. Martha Burton Lakewood Ranch, FL
733. Michele Laporte Lakeland, FL	734. Jane Wiley Tampa, FL	735. Barb Morrison Clearwater, FL	736. George Craciun Thonotosassa, FL
737. Anna Louise E. Fontaine	738. Patricia Deluca Nokomis, FL	739. Suzy Siegmann Temple Terrace, FL	740. Nancy Neumann Clearwater, FL
741. Kathleen Shabi Palm Coast, FL	742. Vincent Rusch Panama City Beach, FL	743. Marisa Marulli West Palm Beach, FL	744. Michele Kurucz Peel
745. Jon King St Augustine, FL	746. Patricia Bilden Palm Beach, FL	747. Dennis Creech Saint Petersburg, FL	748. Linda Fortier Juno Beach, FL
749. Michelle Hall Boynton Beach, FL	750. Cara Woods Sebastian, FL	751. Samantha Marulli Palm Beach, FL	752. Kathy Fieldee Acworth, GA
753. Kathy Chancellor Columbus, GA	754. Patricia Kipchak Kailua, HI	755. Jody Gibson Des Moines, IA	756. Janet Romine Des Moines, IA
757. Paul Patterson Idaho Falls, ID	758. David Pease Victor, ID	759. Carmen Chacon Pocatello, ID	760. Gisela Zech Boise, ID
761. Sheryl Berg Idaho Falls, ID	762. Stephanie Austad Idaho Falls, ID	763. David Pace Idaho Falls, ID	764. Nicholas Bridgett Champaign, IL
765. Renee Lorengo Wenona, IL	766. Linda Bridges Athens, IL	767. Michael Rynes Naperville, IL	768. Allison Fradkin Northbrook, IL
769. Roberta Kessler Crest Hill, IL	770. Ryan Nestler Pecatonica, IL	771. Jennifer Smith Chicago, IL	772. Don Biciste Kildeer, IL
773. Margaret Knight Downers Grove, IL	774. Bruce Hlodnicki Indianapolis, IN	775. Joshua Seff Lexington, KY	776. Elizabeth Butler Henderson, KY
777. Helen Heddens Prospect, KY	778. Stanley Hastings Florence, KY	779. Steven Becker Covington, LA	780. Tyra Pellerin New Orleans, LA

781. V. Henry Dodd III
Keithville, LA
785. Peter Tiffany
Wellfleet, MA
789. Diana Goth
Ellicott City, MD
793. Joanne Negola
Gaithersburg, MD
797. Josie Cone
Portland, ME
801. Daniel Solano
Detroit, MI
805. William Ehnis
Tecumseh, MI
809. Harold Watson
Springfield, MO
813. Rochelle
Gravance
817. Robert Moore
Wake Forest, NC
821. David Jessup
Trent Woods, NC
825. Susan Mitchell
Windham, NH
829. Lorraine Brabham
Hoboken, NJ
833. Laura Taylor
San Jose, NM
837. Mark Ferguson
Brooklyn, NY
782. Barbara Abraham
Leominster, MA
786. Bill Allan
Eastham, MA
790. Barbara Myers
Garrett Park, MD
794. Rosalind Ivens
Bucksport, ME
798. Richard Smith
Melvindale, MI
802. Paul Kriptli
Grand Rapids, MI
806. Karen Walker
Cohasset, MN
810. Nezka Pfeifer
Saint Louis, MO
814. Skye Raiser
Bozeman, MT
818. Cindy Shoaf
Salisbury, NC
822. Sara Rice
Leland, NC
826. Ernest Mellon
Southampton, NJ
830. Nancy Madura
Hewitt, NJ
834. Susan Peirce
Santa Fe, NM
838. Marilyn Derosa-
Wilkie
783. Carole Smudin
Bridgewater, MA
787. John Higgins
North Potomac, MD
791. Robert Goth
Ellicott City, MD
795. Meryl Pinque
Bangor, ME
799. Grace Strong
Ironwood, MI
803. Katie Webber
Au Train, MI
807. Heidi Ahlstrand
Owatonna, MN
811. Kt Hertfelder
Ballwin, MO
815. James Shelden
Bozeman, MT
819. Heide Coppotelli
Cedar Mountain, NC
823. Bobbi Kelly
Charlotte, NC
827. Mary Rivas
Morris Plains, NJ
831. Edward Madura
Hewitt, NJ
835. Louise Bass
Albuquerque, NM
839. Janet Forman
New York, NY
784. Wendy Fossa
Essex, MA
788. Marc And Alice
Marc Marc And Alice
Imlay
792. R Lewison
Silver Spring, MD
796. Lenore Sivulich
New Gloucester, ME
800. Haven Knight
Lake Ann, MI
804. Mary Ann C.
Shumaker
808. Melissa Cathcart
Minneapolis, MN
812. Nellie Medlin
Holly Springs, MS
816. Kicab Castaneda-
Mendez
820. Christian Ponds
Wilmington, NC
824. Maryom Farahani
Browns Summit, NC
828. Steve Troyanovich
Florence, NJ
832. Janet Allocca
Chester, NJ
836. Derek Gendvil
Las Vegas, NV
840. Naomi Klass
Bethel, NY

841. Claire Prevost
Granby, NY
845. Scott Korman
Floral Park, NY
849. Amy Kalblein
Port Jervis, NY
853. Jean Hanson
Avon, OH
857. Mary Zahler
North Canton, OH
861. Sherry Monie
Damascus, OR
865. Scott Kennedy
Keizer, OR
869. Garrison Goth
Roseburg, OR
873. Nicola Nicolai
Chester Springs, PA
877. Devorah Soodak
Philadelphia, PA
881. Charlene Rush
Allison Park, PA
885. R Bv
Harrisburg, PA
889. Patricia Luck
Johns Island, SC
893. Lindsay Byrne
San Antonio, TX
897. Kristin Addison
Corpus Christi, TX
842. Arlene Zuckerman
846. Sylvia O
Brooklyn, NY
850. Patricia Vineski
South Colton, NY
854. Stephen Owen
West Chester, OH
858. Scott Fengler
Sand Springs, OK
862. Ian Shelley
Portland, OR
866. Marie Wakefield
Newport, OR
870. Heidi Hunger
Bijsmans
874. James Staszewski
Pittsburgh, PA
878. Robin Pappas
Pocono Manor, PA
882. Kevin Mcglynn
Flourtown, PA
886. Quincy Mccoy
Devon, PA
890. Christopher
Marcille
894. Bo Baggs
Port Arthur, TX
898. Patrick De La
Garza Und Senkel
843. Brenda Psaras
East Moriches, NY
847. Jackie Stolfi
Massapequa Park, NY
851. Dr. Dennis
Fassman
855. Vicki Wheeler
Deshler, OH
859. Janna Piper
Portland, OR
863. Cynthia Hicks
Portland, OR
867. Georgeanne
Samuelson
871. Susan Babbitt
Philadelphia, PA
875. Rosemary
Delpino
879. Allison Alberts
Kunkletown, PA
883. Steven Ricklefs
Seven Valleys, PA
887. Alison Delong
Barrington, RI
891. Barbara
Mcmahan
895. L M
Cypress, TX
899. R. Simpson
Denton, TX
844. Michael Brandes
White Plains, NY
848. Michele Johnson
Yorktown Heights, NY
852. Joan Ehrlich
Brooklyn, NY
856. Michael Norden
Defiance, OH
860. Debra Rehn
Portland, OR
864. Grace Godfrey
Corvallis, OR
868. Noelle Edwards
Butte Falls, OR
872. Carrie Swank
Reading, PA
876. Anne Jackson
Birdsboro, PA
880. Elizabeth Seltzer
Media, PA
884. Jesse Saunders
Unionville, PA
888. Kathy Bradley
Lugoff, SC
892. Chantal Eldridge
Austin, TX
896. J. M.
Cypress, TX
900. Daniel Wise
Farmersville, TX

901. Michael Pugh El Paso, TX	902. Catherine Croom Bulverde, TX	903. Thomas Ikeda Hewitt, TX	904. T Blake Prosper, TX
905. Alexi Charter Boulder, UT	906. Thomas Seitz Park City, UT	907. Carol Metzger Kents Store, VA	908. Pat Mace Spotsylvania, VA
909. Aaron Pierce Alexandria, VA	910. Vera England Urbanna, VA	911. Maria Steyaart Waterbury, VT	912. Kim Seater Seattle, WA
913. Jon Boyd Walla Walla, WA	914. Janice Wilfing Port Angeles, WA	915. Christina Davis Spanaway, WA	916. Kirsten Hill Olympia, WA
917. Lawrence Hill Twisp, WA	918. Virgene Link-New Anacortes, WA	919. Donna Dimof Silverdale, WA	920. Angie Dixon Seattle, WA
921. Barbara Rosenkotter	922. Becky Hardey La Conner, WA	923. James Mulcare Clarkston, WA	924. Andrew Halverson
925. Barbara Blackwood	926. Jacquelyn Sidor Aberdeen, WA	927. Su Reeves Bothell, WA	928. Margo Finch Marysville, WA
929. Joella Rosendahl Seabeck, WA	930. Stefanie Harris Sammamish, WA	931. Ryan Fleming Seattle, WA	932. Joan Oosterwyk Cottage Grove, WI
933. Kathleen Trochlell Mercer, WI	934. Daniel Rewolinski Milwaukee, WI	935. Carl Stapler Evanston, WY	936. Keeber Bran
937. Sheri Baylor	938. Olaf Totland	939. Pandora Totland	940. Tom Rotiloff
941. Paul Pavlik	942. Joe Valle	943. Meg Waite	944. Umani Mineweased
945. P.L. Boggess	946. Molly Kenick		

March 2, 2026

Dear Chair Carlson- Van Dort and Alaska Board of Fisheries members:

Alaskans know that our future depends on healthy oceans. Our communities, local economies, and cultures are built on the abundance of marine life and the integrity of the habitats that sustain it. When those ecosystems are damaged, or when industrial fishing practices violate the spirit and letter of the law, we all lose.

For that reason, I support Proposals 163, 164, and 165 before the Alaska Board of Fisheries as important steps toward restoring accountability and protecting the foundation of Alaska's fisheries.

- Proposal 163 would redefine pelagic trawl gear as bottom trawl until operators can prove they are not fishing on the seafloor.
 - Proposal 164 would require seafloor monitoring technology on pelagic trawl nets to verify compliance with state regulations.
 - Proposal 165 would require the use of salmon excluders in pelagic trawl nets—a common-sense measure already standard in federal waters.
-

Reports from the North Pacific Fishery Management Council, along with public testimony from trawl fleet representatives, confirm that so-called “midwater” trawls regularly operate on the seafloor. This contact causes habitat damage and increases threats to the sustainability of critical species such as salmon, crab, and halibut. The lack of required seafloor monitoring or enforcement mechanisms allows these illegal practices to continue unchecked, undermining the integrity of Alaska's sustainable fisheries management, its commitment to habitat protection, and the long-standing regulation governing pelagic trawl use in state waters.

Under Alaska regulation (5 AAC 39.105), pelagic trawl gear is defined as gear that does not contact the seabed or use protective devices that make it suitable for fishing on the bottom. That's clear, fair, and widely understood. It's time to ensure that the definition is honored in practice, not just on paper.

These proposals reflect what Alaskans believe: that our fisheries should be managed with integrity, transparency, and respect for the ecosystems that sustain them. Upholding our own regulations is not anti-industry. It's pro-future. It's how we protect opportunity, abundance, and accountability for generations to come.

Alaska has some of the largest pelagic trawl fleets on the planet. Trawling inevitably impacts the seafloor and seafloor creatures, and we're calling on the Board of Fisheries to protect the ecosystems that underpin our fisheries and coastal communities by upholding common-sense accountability standards.

Sincerely,

Steele Davis
 Owner/operator
 Spirit of Alaska Wilderness Adventures
 Larsen Bay, AK

Justin Shoffner Owner
 Alpenglow Coffee House
 Girdwood, AK

Nathanael Ferguson
 Owner
 Savory Alaska
 Oatmeal, TX

Jim Steffen
 Owner
 Norcoast Marine Surveyors, Inc
 Sitka, AK

Mike and Sally Trotter
 Owners
 Baranof Wilderness Lodge
 Beyond Boundaries Expeditions
 Sitka, AK

Larry Powell
 Vice President Co-Owner
 Mallott's General Store Inc
 Yakutat, AK

Natalie Sattler
 Program Director Alaskans
 Own
 Sitka, AK

April Woods
 Owner
 Animal Daycare & Boarding
 Anchorage, AK

Kate Crump
 Co-owner & operator
 The Lodge at 58* North
 King Salmon, AK

Adam Cuthriell
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 FishHound Expeditions
 Willow, AK

Jon Boyd
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 River King Outfitters
 Dillingham, AK

Sarah Spies
 Owner-Operator
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Alaska Board of Fisheries
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Re: Pelagic Trawl Proposals 163,164,165

Dear Members of the Board,

We submit the following comments on behalf of the Alaska Longline Fishermen's Association (ALFA) regarding Proposals 163-165. ALFA represents commercial fishermen, seafood processors, businesses, and individuals who rely on Alaska fisheries and work to promote sustainable fisheries, strong coastal communities, and healthy ecosystems.

I. Introduction

ALFA's members are concerned about the habitat degradation and threats to the sustainability of critical species such as crab, halibut, salmon and rockfish resulting from seafloor contact by trawl gear. These concerns are rooted in direct experience with the negative socioeconomic and ecological impacts from bottom trawling. ALFA championed the Southeast Alaska Trawl Closure Area decades ago and we believe the Southeast Trawl closure demonstrates the long-term ecological and economic value of habitat protection.

The State of Alaska has defined pelagic trawl gear as trawl gear that does not operate in contact with the seabed. However, when a gear type is defined by how it is fished, compliance must be verifiable while fishing is underway. Alaska currently lacks a mechanism for enforcing the state's definition of pelagic trawl and the need for verification is underscored by recent analysis and testimony establishing that pelagic trawl gear is in contact with the seafloor, on average, 40-80% of the time.¹

ALFA requests that the Board adopt proposals 163 and 164 to:

- 1) reclassify "pelagic" trawl gear as "mobile bottom contact" until ADFG establishes a meaningful verification process to enforce the State's definition of pelagic trawl gear; and**
 - 2) establish real time or near real time bottom contact monitoring requirements for pelagic trawl gear operating in State waters currently open to pelagic trawling.**
- Because Southeast Alaska already has a comprehensive trawl closure in place, we recommend these changes be applied to waters west of 140 degrees West Longitude.

¹ NPFMC. 2022. Bristol Bay Red King Crab Information. Discussion Paper, Agenda Item D1. April 2022.

Non-target species or bycatch is also a concern associated with the use of pelagic trawl gear in state waters. Salmon are a statewide resource with profound cultural, economic, and food-security importance. Where avoidable salmon encounters occur in trawl fisheries, Alaska should require the use of proven mitigation tools to reduce risk and support salmon stewardship.

ALFA also requests that the Board adopt proposal 165 to require salmon excluders on pelagic trawl gear, a common-sense bycatch avoidance measure already in place in Federal waters.

If adopted, proposals 163, 164, and 165 would convert the pelagic trawl definition into an enforceable operating standard, direct ADFG to establish clear monitoring and compliance protocols, and require salmon excluders to reduce bycatch. ALFA strongly supports these actions. At minimum, ALFA maintains that the Board should clearly commit to the existing State definition of pelagic trawl gear and initiate a process that leads to an enforceable standard and monitoring procedure to limit seafloor contact. To incentivize industry cooperation, ALFA urges the Board to eliminate the existing enforcement loophole that allows “pelagic” trawling, which has known seafloor contact, to operate in areas and at times closed to bottom trawling.

II. Why Protect Habitat from Bottom Trawling

ALFA has worked for decades to protect seafloor habitats and minimize bycatch of key species. In the early 1990s, trawl activity increased off of Southeast Alaska resulting in high levels of rockfish bycatch that threatened to preempt local fisheries. ALFA proposed a trawl ban across Southeast Alaska in order to protect cold-water coral habitats and regional fishery resources, with wide support from regional communities, fishermen, and the State of Alaska. As a result, in 1998, the North Pacific Fishery Management Council recommended, and the Secretary of Commerce approved, a ban on trawling in federal waters off Southeast Alaska. The Board of Fisheries promptly mirrored that action to close all state waters off Southeast Alaska to trawling, bottom and pelagic, with a limited exception for shrimp beam trawls. The history of the Southeast Trawl closure, including the ecological and socioeconomic reasons for its implementation, are well documented in the report linked [HERE](#).

Corals and sponges:

Research documents that corals and sponges form some of the most important habitats in deep, cold oceanic waters.² They provide nursery grounds, refuge for species seeking shelter, and critical foraging areas for fish and shellfish valued as high quality seafood.³ Many of these habitats west of Southeast Alaska remain vulnerable to seafloor contact by trawls. Proposals 163 and 164 drive meaningful action to restrict seafloor contact by pelagic trawls through implementation of effective monitoring and enforcement standards. The proposals request that

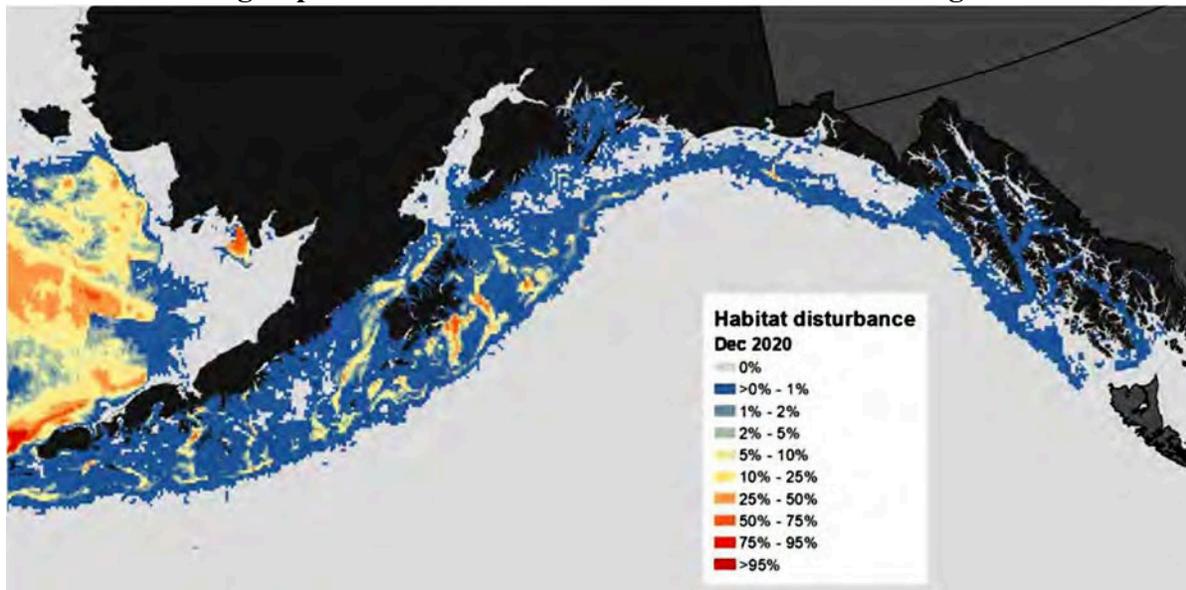
² Hourigan, T.F., Etnoyer, P.J. & S.D. Cairns. 2017. Introduction to the state of deep-sea coral and sponge ecosystems of the United States. In: Hourigan, T.F., Etnoyer, P.J. & S.D. Cairns (eds.). *The State of Deep-Sea Corals and Sponge Ecosystems of the United States*. NOAA Technical Memorandum NMFS-OHC-4. Silver Spring, MD. 35 p.; NOAA, Coral Reef Conservation Program. 2010. *NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation*. Silver Spring, MD: NOAA Coral Reef Conservation Program. NOAA Technical Memorandum CRCP 11. 67 pp.

³ Ragnarsson S.Á. et al. 2016; Andrews, A.H. et al. 2002; Andrews A.H., R.P. Stone, C.C. Lundstrom & A.P. DeVogelaere. 2009. Growth rate and age determination of bamboo corals from the northeastern Pacific Ocean using refined 210Pb dating. *Mar Ecol Prog Ser* 397:173–185; Stone R.P., M.M. Masuda & J.F. Karinen. 2014.

the Board recommit to the existing state definition of pelagic trawl gear and drive compliance to protect seafloor habitat in areas closed to bottom trawling. If these proposals are adopted, the Board can maintain control of this issue through clear enforcement standards.

Most seafood species caught in Alaska use coral and sponge habitats during part or all of their life cycle.⁴ The seafloor habitat is “biogenic habitat” because it was constructed by animals – corals and sponges.⁵ Smaller species, such as sea pens, grow in softer sediments and form biogenic habitats that resemble shrubby areas or grasslands.⁶ Some scientists describe biogenic habitats as “animal forests” because they have ecological functions similar to terrestrial forests that provide habitat for many species.⁷ Sea animal forests are crucial to ocean functionality, fisheries sustainability, and human well-being.⁸ Indirect ecosystem services to humans include the provisioning of food and maintenance of biodiversity.⁹ Direct services to deep sea life include providing substrate for immobile seafloor inhabitants to anchor themselves to, refuge for juvenile fish, and foraging and spawning habitat for adult fish.¹⁰ There are also cultural ecosystem services associated with educational, aesthetic and scientific values.¹¹

Trawling impacts to sea animal forests can be severe and long-term¹²



⁴ Stone, R.P. & S.K. Shotwell. 2007.

⁵ Pacific Fishery Management Council. 2024. Fishery Management Plan, Appendix C, Part 1.

⁶ *Id.*; Rossi S, L. Bramanti, A. Gori & C. Orejas. 2017. An Overview of the Animal Forests of the World. In: Rossi S, Bramanti L, Gori A, Orejas C (eds) Marine Animal Forests: The Ecology of Benthic Biodiversity Hotspots. Springer.

⁷ Rossi S. et al. 2017.

⁸ Rossi, S. et al. 2017; ; Hourigan, T.F. et al. 2017.

⁹ Ragnarsson S.Á., J.M. Burgos, T. Kutti T, I. van den Beld, H. Egilsdóttir, S. Arnaud-Haond & A. Grehan. 2016. The impact of anthropogenic activity on cold-water corals. In: Rossi S, Bramanti L, Gori A, Orejas Saco del Valle C (eds) Marine Animal Forests: The Ecology of Benthic Biodiversity Hotspots. Springer International Publishing, Switzerland; NOAA, Coral Reef Conservation Program. 2010.

¹⁰ NOAA, Coral Reef Conservation Program. 2010.

¹¹ Ragnarsson S.Á. et al. 2016.

¹² Graphic: Zaleski, M., T.S. Smeltz, S. Rheinsmith, J.L. Pirtle & G.A. Harrington. 2023. 2022 Evaluation of Fishing Effects on Essential Fish Habitat. January 2023. Figure 3. Gulf of Alaska cumulative percentage habitat disturbed. All gears combined.

Bottom trawling has been identified as the most significant and pervasive anthropogenic threat to cold-water coral, sponge and other seafloor habitats worldwide and in Alaska.¹³ Researchers cite the extensive use of trawl gear and its forceful impacts on the seafloor, the large area covered, and the severe impacts which include dislodging or crushing large corals and sponges anchored to the seafloor, transforming them into piles of broken rubble.¹⁴ Other anthozoans (species anchored to the seafloor) such as sea pens and sea whips are also vulnerable to trawls that contact the seafloor.¹⁵ Continuous contact by trawls alters other deep sea habitats as well, including leveling the seafloor surface.¹⁶

The cumulative area towed over by trawls is typically the most extensive human impact on the seafloor.¹⁷ Trawls can contact the seafloor along a continuous path, leaving an extensive footprint by carving a swath up to 500 feet wide for the length of a tow.¹⁸ Fixed gears can also impact biogenic habitats, but the narrow footprint is orders of magnitude smaller than that of trawling.¹⁹ “Pelagic” (3,176 mi²) and non-pelagic trawls (12,659 mi²) are responsible for the overwhelming majority of bottom contact in Gulf of Alaska fisheries (17,735 mi²).²⁰ **Pelagic trawls alone make more bottom contact than all other Gulf of Alaska fisheries combined.**²¹ The estimated area impacted by trawl gear in Alaska every three years – over 275 million acres – can be nearly 10 percent of the seafloor in the Gulf of Alaska and up to one-third of the seafloor in the eastern Bering Sea.²²

Seafloor Recovery time:

Multiple factors make the direct effects to cold-water corals and sponges substantial and enduring: (1) slow growth rates, which range from mere millimeters to a few centimeters per year; (2) extreme recovery times for species with life spans up to several hundred years; (3) low reproductive rates, with recruitment events for undamaged species occurring infrequently, perhaps once per decade and (4) fragility that makes them highly vulnerable to physical impacts caused when trawls contact the seafloor.²³ These life history characteristics mean that once damaged or removed, habitat recovery is very slow and may take decades, centuries, or even millennia after trawling impacts have ceased.²⁴

¹³ Hourigan, T.F. et al. 2017. Stone, R.P. & Rooper, C.N. 2017. State of Deep-Sea Coral and Sponge Ecosystems in the Alaska Region; Ragnarsson S.Á. et al. 2016; Rossi S. et al. 2017; Freese, J.L. et al. 1999; NOAA, Coral Reef Conservation Program. 2010.

¹⁴ *Id.*; Clark M.R. et al. 2016; Hogg, M.M. et al. 2010; Stone, R.P. & S.K. Shotwell. 2007.

¹⁵ Malecha, P.W. & R.P. Stone. 2009. Response of the sea whip *Halipteris willemoesi* to simulated trawl disturbance and its vulnerability to subsequent predation. *Mar Ecol Prog Ser* 388:197–206.

¹⁶ Freese, J.L. et al. 1999.

¹⁷ Clark, M.R., F. Althaus, T.A. Schlacher A. Williams, D.A. Bowden & A.A. Rowden. 2016. The impacts of deep-sea fisheries on benthic communities: A review. *ICES J Mar Sci* 73:i51-i69.

¹⁸ *Id.*; Heifetz, J. et al. 2009.

¹⁹ Hourigan, T.F. et al. 2017; Heifetz, J. et al. 2009.

²⁰ Zaleski, M. et al. 2023. *See* Table 1. Fishing area contact adjusted footprint (CAF) by region and sector, all fishing 2016-2020.

²¹ *Id.*

²² Amoroso, R.O., Pitcher, C.R., Rijnsdorp, A.D., McConnaughey, R.A., Parma, A.M., Suuronen, P., Eigaard, O.R., Bastardie, F., Hintzen, N.T., Althaus, F. & Baird, S.J., 2018. Bottom trawl fishing footprints on the world’s continental shelves.

²³ Althaus, F., A. Williams, T.A. Schlacher, R.J. Kloser, M.A. Green, B.A. Barker, N.J. Bax, P. Brodie & M.A. Hoenlinger-Schlacher. 2009. Impacts of bottom trawling on deep-coral ecosystems of seamounts are long-lasting. *Mar Ecol Prog Ser* 397:279-294; Stone, R.P., P.W. Malecha & M.M. Masuda. 2017; Hourigan, T.F. et al. 2017; Clark M.R. et al. 2016.

²⁴ Hiddink J.G., S. Jennings, M.J. Kaiser, A.M. Queiros, D.E. Duplisea & G.J. Piet. 2006. Cumulative impacts of seabed trawl disturbance on benthic biomass, production, and species richness in different habitats. *Can J Fish Aquat Sci* 63:721- 736; Hourigan, T.F. et al. 2017; Clark M.R. et al. 2016.

There has been significant coral and sponge bycatch, causing considerable habitat loss.²⁵ The largest losses occurred in the eastern Bering Sea and the Aleutian Islands.²⁶ During the 1990s and early 2000s, the bycatch of sponges, corals and smaller bottom dwelling species approached half a million pounds per year, mostly in bottom trawl fisheries.²⁷ Available bycatch estimates do not include potential unobserved mortality of damaged or detached corals, which may be substantial because of widespread seafloor disturbance in some areas.²⁸ Even though NMFS implemented closures in the Aleutian Islands and other measures during the 2000s that prevented the expansion of bottom trawling into unfished areas, there is significant ongoing coral and sponge bycatch and conserving remaining habitats in impacted areas is a primary concern.²⁹

Deep Sea Mud & Soft Sediment Habitats:

Multiple studies have found that seafloor contact by trawls also changes deep sea mud and other soft-bottom habitats in ways that impair ecosystem functioning and harm marine life.³⁰ The ecological consequences are similar to those caused by other ocean stressors such as warming and ocean acidification.³¹ Studies of impacts to soft-bottom habitats compare trawling to intensive agricultural ploughing.³² Ploughing land may occur just a few times a year, but bottom contact by trawls may occur frequently over the same surface.³³

A 2005 study compared the distribution and abundance of seafloor species at two overlapping soft-sediment sites in the Gulf of Alaska.³⁴ One site was subject to high intensity trawling and the other site had been closed to bottom trawling for over a decade.³⁵ Trawled areas had lower species richness and significantly fewer low-mobility prey available for foraging groundfish.³⁶ Researchers identified evidence of prey depletion as a “red flag.”³⁷

To summarize: repeated trawling displaces and redistributes sediments, smothers seafloor species, levels the seafloor surface and reduces habitat complexity by removing structural features.³⁸ Impacts vary depending on seafloor type and benthic communities but in general the habitat will be less productive after trawling.³⁹ The frequent seafloor disturbance

²⁵ Hourigan, T.F. et al. 2017; Heifetz, J. et al. 2009; 70 Fed. Reg. 39700 (July 11, 2005); Stone, R.P. & S.K. Shotwell. 2007.

²⁶ 70 Fed. Reg. 39700 (July 11, 2005); Hourigan, T.F., Etnoyer, P.J. & S.D. Cairns. 2017; Hogg, M.M. et al. 2010.

²⁷ Stone, R.P. & Rooper, C.N. 2017; Hogg, M.M. et al. 2010; 70 Fed. Reg. 39700 (July 11, 2005).

²⁸ Stone, R.P. & S.K. Shotwell. 2007.

²⁹ Hourigan, T.F. et al. 2017; Heifetz, J., R.P. Stone & S.K. Shotwell. 2009. Damage and disturbance to coral and sponge habitat of the Aleutian Archipelago. *Mar Ecol Prog Ser* 397:295-303; Stone, R.P. & Rooper, C.N. 2017.

³⁰ Hixon M.A. & B.N. Tissot. 2007; Rossi S, et al. 2017; Puig, P. et al. 2012.

³¹ Puig, P., M. Canals, J.B. Company, J. Martin, D. Amblas, G. Lastras, A. Palanques & A.M. Calafat. 2012. Ploughing the deep sea floor. *Nature* 489:286-289.

³² *Id.*

³³ *Id.*

³⁴ Stone, R.P., M.M. Masuda & P.W. Malecha. 2005. Effects of bottom trawling on soft-sediment epibenthic communities in the Gulf of Alaska. In: Barnes PW, Thomas LP (eds.) *Benthic Habitats and the Effects of Fishing*. Proc American Fisheries Society Symposium 41: 461-475

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*; Rossi S, et al. 2017; Clark M.R. et al. 2016.

³⁹ Hixon M.A. & B.N. Tissot. 2007.

may delay or prevent habitat forming species from re-establishing themselves on soft bottom seafloors.⁴⁰ Changes in nutrient availability impact other sea floor inhabitants.⁴¹

There are large portions of the Gulf of Alaska where there is a significant amount of coral, sponge and sea pen habitat and other vital habitats for fish that are vulnerable to impacts from trawls that contact the seafloor.⁴² During the 2000s, NMFS closed a significant area in the Bering Sea and Aleutian Islands to bottom trawling in large part to address concerns about impacts to biogenic habitats.⁴³ In the Gulf of Alaska, there are only a few relatively small areas outside of the Southeast Alaska Trawl Closure where NMFS prohibited bottom trawling to protect habitat.⁴⁴ Bottom trawling in the Gulf of Alaska frequently removes or damages gorgonian corals, large sponges and boulders, which provide most of the seafloor's multi-dimensional habitat.⁴⁵ These impacts are ongoing in state and federal areas open to bottom trawling; they are also ongoing in state and federal waters open to pelagic trawling since the "pelagic" part of the pelagic trawl definition is not enforced. Providing meaningful seafloor protection in state waters currently closed to bottom trawling requires enforcement of the state's pelagic trawl definition— which is the goal of proposals 163 and 164.

III. What Part of Pelagic Trawls is “Pelagic?”

There is a clear distinction in regulation, if not in practice, between “midwater” or “pelagic” fishing gear and gear deployed on the seafloor or “bottom trawl”. In 5 AAC 39.105c, the State of Alaska defines pelagic trawl as “a trawl where the net, or the trawl doors or other trawl spreading device, do not operate in contact with the seabed, and which does not have attached to it any protective device, such as chafing gear, rollers, or bobbins, that would make it suitable for fishing in contact with the seabed.” The requirement that pelagic trawl gear have no protective devices is a common distinguishing feature between pelagic and nonpelagic trawls and is in place to discourage dragging along the seafloor. A pelagic trawl is often described as a “mid-water” trawl, operating off the seabed and away from the fragile habitats and organisms living there. This is theoretically why pelagic trawls are allowed to fish in areas and at times when bottom trawling is banned.

Although regulations governing pelagic trawl components discourage or prohibit seafloor contact, it has long been evident from catch composition — including crab and other benthic species — that bottom interactions occur. Both staff analysis and testimony provided to the North Pacific Fishery Management Council established that this gear type contacts the seafloor on average from 40% to 80% of the time, with rates up to 100% on catcher processor vessels.⁴⁶

⁴⁰ Rossi S, et al. 2017.

⁴¹ *Id.*

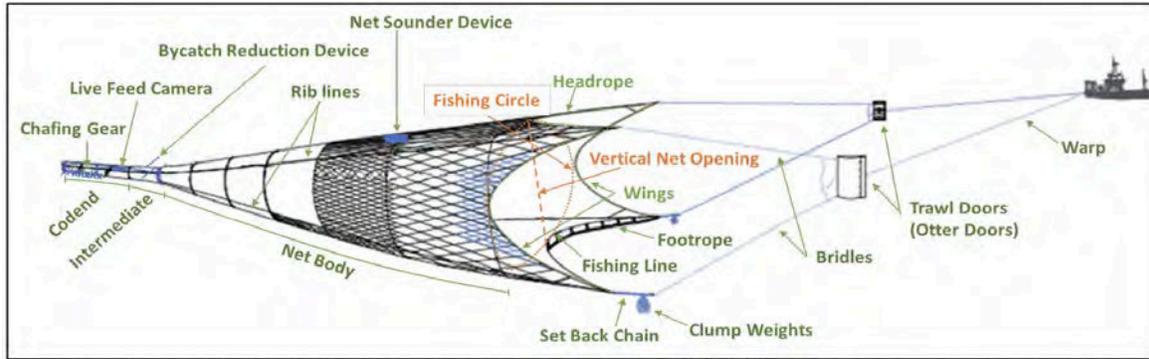
⁴² Spaide, Z., Evers, J., Freyvogel, T. & Smith, J. 2023. Bycatch Mitigation Strategies in the Gulf of Alaska. *Journal of Science, Policy & Governance*, 23(1).

⁴³ 70 Fed. Reg. 39700 (July 11, 2005); Hogg, M.M. et al. 2010.

⁴⁴ 70 Fed. Reg. 39700 (July 11, 2005); Graphic credit: Oceana. 2022. Warrenchuk, J., Karnik, J., Mecum, B., Enticknap, B. & Murray, S. 2022. Net loss: the costs of bottom trawling in the Gulf of Alaska.

⁴⁵ Freese, J.L. 2001. Trawl-induced Damage to Sponges Observed From a Research Submersible. *Mar Fish Rev* 63:7- 13; Williams A, Schlacher TA, Rowden AA, F, Clark MR, Bowden DA, Stewart R, Bax NJ, Consalvey M, Kloser RJ (2010) Seamount megabenthic assemblages fail to recover from trawling impacts. *Mar Ecol* 31:183-199

⁴⁶ NPFMC. 2022. Assessment of the Effect of Fishing on Essential Fish Habitat in Alaska for the 2022 5-year Review. Discussion Paper, Agenda Item D5. February 2022.



Generalized pelagic trawl gear and labeled components.⁴⁷

Clearly the current definition of pelagic trawl gear misrepresents both operation and impact of the gear. The gear should be redefined as bottom trawl gear or mobile bottom contact gear and managed accordingly— or managed to prevent seabed contact. Additionally, the Alaska Department of Fish & Game and the public need to better understand the habitat impacts of what is currently and illogically defined as pelagic trawl gear. Below is a brief history of the North Pacific Fishery Management Council’s (NPFMC) review of this issue to assist the Board with your decision making.

Prior to 1990, the NPFMC definition of pelagic trawl prohibited parts of the trawl from contacting the seafloor in order to minimize halibut and crab bycatch.⁴⁸ Subsequent closures to the pollock fishery due to exceeding bycatch allowances motivated a redefinition. First, NMFS prohibited the use of protective devices and seafloor contact, similar to Alaska’s pelagic trawl definition. However, by 1991, the seafloor contact prohibition was deemed unenforceable and removed. The description of the pelagic trawl design was revised with larger mesh sizes and wider line spacing, aiming to reduce halibut and crab bycatch in bottom trawl closure areas from pelagic trawls. The revised gear definition spurred vessel owners to reconfigure their nets accordingly and resulted in users operating “pelagic” trawl gear being able to fish for non-pelagic species, like large pollock. The new definition opened up bottom trawl closure areas to modified pelagic trawl contacting the seafloor but did not reduce bycatch.

In 1993, NMFS adopted a performance standard that prohibited vessels from catching 20 or more crabs. The rationale was that midwater fisheries catch small amounts of benthic species; however, vessels deploying pelagic trawls for pollock on or near the sea bed, catch large amounts of benthic life forms.⁴⁹ The final regulation implemented the crab performance standard sought to “discourage” but did not prohibit seafloor contact. This framework remains in effect today, with no enforceable control of bottom contact. The unobserved mortality of benthic species is a current topic of concern in the NPFMC process. Crab are only considered as bycatch if a whole crab can be identified in the catch sample. Parts of a crab do not count as a whole crab, therefore, unobserved mortality is not fully taken into account. The NPFMC will be taking up the issue of the performance standard and pelagic trawl impacts in June 2026.

⁴⁷ NPFMC. 2024. Pelagic Trawl Gear Definition Changes. Discussion Paper, Agenda Item D1. February 2024

⁴⁸ NMFS. 1993. Groundfish of the Gulf of Alaska; Groundfish of the Bering Sea and Aleutian Islands Area. Proposed Rule. 58 Fed. Reg. 17196. (April 1, 1993).

⁴⁹ NPFMC. 2022. Bristol Bay Red King Crab Information. Discussion Paper, Agenda Item D1. April 2022.

While the NPFMC definition fulfilled this industry goal, it should raise concern given the current depleted condition of both halibut and some crab stocks. Does a bottom trawl become a pelagic trawl once all the crab and halibut are gone?

Alaska has long positioned itself as a leader in sustainable fisheries management; it should once again lead by committing to clear, enforceable standards that protect habitat and maintain confidence in the integrity of its fisheries management. NPFMC's current definition merely discourages bottom contact—an ambiguous definition that has been challenged by stakeholders and the public. Alaska has already led the way by upholding a definition that defines pelagic trawls as off-bottom gear— a definition we urge the Board to uphold. In short, ALFA asks that the Board ensure that the pelagic gear definition is not just words on paper, but a standard backed by accountability and action. Due to technological advances since the early 1990s, monitoring devices that provide real time or near real time operational data are not only available but already in use in Alaska. What may have been operationally difficult to enforce in the past is now technologically feasible, as described in the section below.

IV. Tools Available - Bottom Sensing & Bycatch Avoidance

Proposal 164

As described previously, trawling on the seafloor imposes another negative externality on fishermen and society because it harms habitats, particularly habitats that support large concentrations of fish species. The lower carrying capacity of trawled habitats reduces the availability of fish to other fishermen immediately and in the future, reducing their catch rates and increasing harvest costs.⁵⁰ An investment in gear that ensures fishing activities are in compliance with the regulations designed to protect these resources is critical.

Proposal 164 would require all vessels using pelagic trawl gear in Alaska state waters to be equipped with a seafloor contact detection system. The intent of the proposal is for the Department to develop a workable standard for verifying and enforcing that pelagic trawl gear is operating off of the seafloor. The proposed amendment allows ADF&G to approve sensors or electronic monitoring systems that can detect bottom contact, as well as defining requirements for reporting. If adopted, ADF&G would provide technical assistance and a reasonable time period for implementation and enforcement.

Feasibility of Bottom Contact Sensor Integration:

Bottom contact sensors are a simple, widely used technology (including some use in Alaska) that can be easily installed on pelagic trawl nets. The vast majority of trawl vessels are already equipped with an integrated acoustic net sensor system to measure things such as door spread, twisting, and catch in order to protect expensive trawl nets, which can cost up to \$300,000. Bottom contact sensors are compatible with these widely used systems and would only require purchasing the sensor unit (quoted at \$6,999 from Notus) and connecting it to current onboard equipment. There are multiple companies that manufacture these sensors including Simrad and Notus, which are popular in Alaska.

⁵⁰ Foley, N.S. et al. 2012.

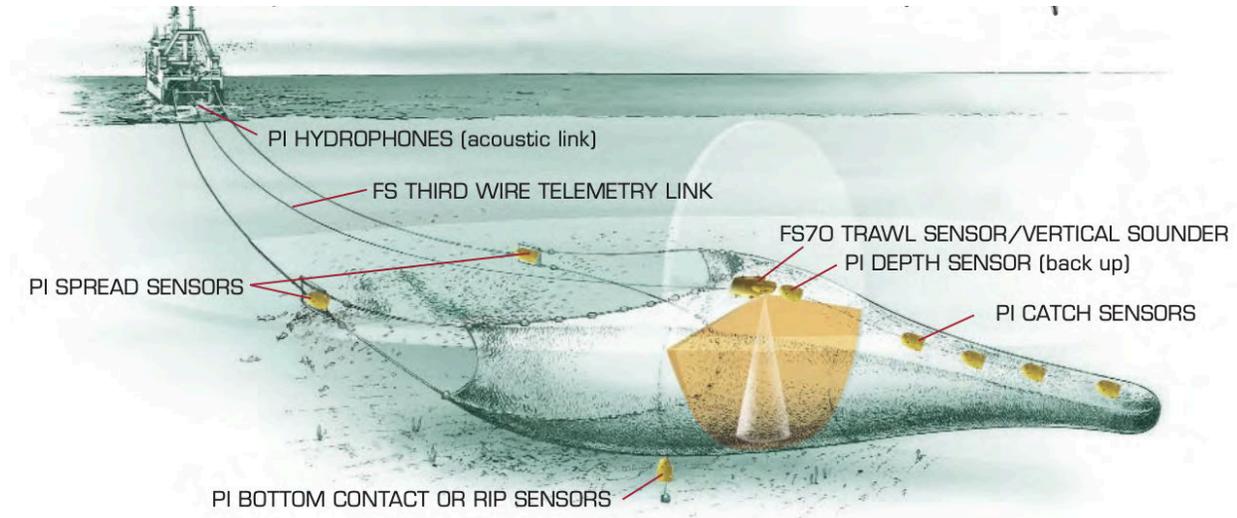
Item	Qty	Description	Unit Price	Total
1	1	Trawlmaster Command Unit Lite (TM900ETL)	7,366	7,366
2	1	Trawl Hydrophone (G901)	3,906	3,906
3	1	Bottom Contact, Distance Sensor (801BCR)	6,999	6,999
4	1	Charger for One (1) Sensor (FLC1)	604	604
Total				\$18,875

Quote from Notus for the entire Trawlmaster system

Bottom contact sensors used in integration with existing trawl monitoring systems, including the [Trawlmaster](#) from Notus, measure the angle of the trawl tube; when the trawl tube is horizontal, the net is on the bottom. Similar sensors have been used in midwater trawl fisheries across the world. In a [video tutorial](#), Notus explains that the sensors work basically as an angle sensor that attaches to the combination wire, behind the footgear. When the trawl is on bottom, the sensor is horizontal and will indicate an angle of about 90 degrees. When the trawl comes off bottom, the sensor will orient vertically, indicating an angle of approximately 0 degrees.



The Simrad [PI50](#) system is popularly used for a [variety of gear sensors](#) and their bottom contact sensors can fully integrate with other trawl sensors using the same command unit and hydrophone.



[Simrad Diagram](#) illustrates various sensors used together, including Bottom Contact Sensors

While we recognize that requiring sensors and collecting the data will impose costs, ALFA would again note the habitat and socioeconomic costs associated with *not* enforcing the existing regulation that prohibits seabed contact by pelagic trawls. We urge the Board to work with ADFG and fisheries enforcement to establish an enforceable compliance system, with clear standards, monitoring requirements, and repercussions for violations, prior to again allowing pelagic trawling in areas closed to bottom trawling.

Proposal 165 - Salmon Excluders

Salmon are a statewide resource with profound cultural, economic, and food-security importance. Where avoidable salmon encounters occur in trawl fisheries, Alaska should require the use of proven mitigation tools to reduce risk and support salmon stewardship. Salmon taken as bycatch in trawl fisheries represent fish that would otherwise contribute to harvest opportunities, spawning escapement, or stock rebuilding. The continuing bycatch of these fish, to varying degrees, would be available for harvest by Alaska subsistence, sport and commercial fishermen or would support recovery of salmon populations, which are at such low-abundance levels that Alaska fisheries managers have had to close or severely restrict harvest opportunities. With increased pressure from changing ocean conditions, the protection of salmon stocks in Alaska is ever more pressing.

Bycatch excluders are commonly used to reduce bycatch while maintaining target catch efficiency.⁵¹ There has been large industry buy-in and research into improving the efficacy of excluders and advancing the technology to be species-specific.⁵² The use of salmon excluders in trawl gear have been proven to help reduce bycatch in midwater trawl fisheries with research showing salmon escapement rates up to 54% in the Gulf of Alaska.⁵³ The recent advancements in available technology continue to improve the success rates of excluder devices and decrease

⁵¹ NPFMC. 2025. Pelagic Trawl Gear Innovation. Discussion Paper, Agenda Item C3b. May 2025

⁵² NPFMC. 2025. Revised application for an exempted fishing permit (EFP) to develop a chum salmon focused salmon excluder, Agenda Item B2. April 2025

⁵³ NPFMC. 2015. Central Gulf of Alaska Salmon Excluder EFP 13-01 Final Report, Agenda Item C3. April 2015.

cost for evaluation of the gear.⁵⁴ Fishermen and researchers have continued to collaborate on advancements from the original designs in order to improve the efficacy of salmon excluders across the Gulf of Alaska and Bering Sea fleets⁵⁵ and have reported higher success rates in recent years.⁵⁶

V. Conclusion

Trawl fisheries make up 97% of the fishing footprint in the North Pacific. As described above, there is ample evidence worldwide and in the waters off Alaska that bottom trawling alters benthic habitat, changes species composition, and impacts marine life at ecosystem levels. For these reasons, managers have closed areas in both state and federal waters to bottom trawling. Unfortunately, these closures are circumvented by boats towing gear called pelagic trawls despite the frequent and prolonged contact by this gear with the seafloor. The fishery is able to operate in a gray zone without a clear process for accountability.

The time has come for managing agencies to define gear that contacts the seafloor as bottom contact gear, then develop clear and enforceable standards for pelagic trawl gear. To treat pelagic and bottom trawl gear as separate when both contact the seafloor ignores the original intent of differentiating between them. ALFA maintains that those standards should set a low or zero tolerance limit for seafloor contact and we urge the Board to articulate that goal. Clear standards are also necessary to ensure a level playing field so that fishermen who avoid bottom contact are not placed at a disadvantage. **Again, we urge that this action be applied to areas west of Southeast (140 Degrees West Longitude) since Southeast has an effective trawl prohibition in place with a limited exception for the shrimp beam trawl fishery.**

The Department notes in its comments that the North Pacific Fishery Management Council is struggling to address the same issue and that the Board will create confusion between state and federal waters if the State creates an effective definition for pelagic trawls that does, in fact, limit sea floor contact. ALFA offers a different perspective: the Board will catalyze critically important action to protect seafloor habitat by the Council if the Board takes meaningful action at this meeting. We are startled by the Department's deference to federal fisheries managers in their comments on this proposal and urge the Board to lead, rather than defer to the Council on this issue.

Finally, the Board needs little reminder of the state-wide concern for king salmon stocks. Requiring proven devices, such as salmon excluders, in pelagic trawls to reduce bycatch is consistent with the State and the Board's commitment to resource conservation and sustainable fisheries management. These proposals are not designed to close fisheries; instead they are designed to ensure accountability, adaptability, and stewardship so that Alaska's fisheries remain sustainable for future generations.

⁵⁴National Fisherman. (2023, October 19). Smarter nets and faster data for the Alaska pollock fishery.

<https://www.nationalfisherman.com/smarter-nets-and-faster-data-for-the-alaska-pollock-fishery>

⁵⁵Yochum, N. (2022, May 26). Alaska Bycatch Review Task Force: Salmon Bycatch in the Bering Sea Pollock Fishery [PowerPoint slides]. Alaska Department of Fish and Game.

https://www.adfg.alaska.gov/static/fishing/PDFs/bycatchtaskforce/052622_yochum_ak_bycatch_task_force.pdf

⁵⁶National Fisherman. (2024, January 9). New genetic data fuels debate over Bering Sea salmon bycatch.

<https://www.nationalfisherman.com/alaska/new-genetic-data-fuels-debate-over-bering-sea-salmon-bycatch>

Thank you for the opportunity to comment.

Sincerely,



Linda Behnken
Executive Director



Emily Scott
Outreach Director



ALASKA MARINE COMMUNITY COALITION

March 2, 2026

Alaska Board of Fisheries
c/o Alaska Department of Fish and Game, Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Re: Support for Proposals 163–165 and a practical pathway for enforceable pelagic trawl standards in Alaska state waters

Chair and Members of the Board,

On behalf of the Alaska Marine Community Coalition (AMCC), thank you for the opportunity to comment on Proposals 163–165.

AMCC is a fishermen-founded and led organization made up of harvesters, community members, scientists, and conservation-minded Alaskans. We are pro-fishing. We support sustainable harvests that sustain working waterfronts and locally owned seafood businesses. We also support clear, enforceable rules. Durable fisheries depend on public confidence that management standards are real, verifiable, and applied fairly across gear types.

AMCC supports the core concepts in Proposals 163–165. Together, they present an opportunity to strengthen accountability in state waters while maintaining a viable harvest.

Enforceable Standards in State Waters

Alaska regulation already defines pelagic trawl gear in state waters as gear that does not contact the seafloor. The challenge before the Board is not definitional; it is operational. A standard that cannot be verified on the water invites confusion, dispute, and erosion of trust.

We encourage the Board to adopt a clear, enforceable performance expectation: if trawl gear is authorized as pelagic in state waters, it must operate off-bottom in a manner that can be demonstrated and verified.

This is not a departure from Alaska's management philosophy. It is consistent with the expectation that permit holders are responsible for operating legally at all times, particularly where compliance depends on how gear is fished rather than how it is constructed.

Clear definitions and verifiable compliance protect responsible operators, reduce user conflict, and create stability. Enforceable rules and sustainable harvest are not in conflict; accountability is a foundation for long-term access.

Proposal 163: Keep Pelagic Meaningful

Proposal 163 reinforces the principle that pelagic authorization must reflect off-bottom operation in practice, not just design. AMCC supports the Board adopting an approach that ensures pelagic designation in state waters is distinct from bottom trawling in measurable terms. The goal is to ensure the regulatory standard has a practical effect.

Proposal 164: Verification That Works

Proposal 164 provides the pathway to make the existing pelagic definition enforceable. The most important outcome is a monitoring and documentation framework that can support compliance verification.

AMCC recommends the Board direct development of a framework that includes:

- A clear operational performance standard defining off-bottom expectation
- A verification approach that is auditable and enforcement-ready
- A phased implementation timeline focused first on state waters, where the distinction between pelagic and non-pelagic trawl is explicit

Phasing requirements allows for practical adaptation while delivering measurable progress. A defined on-ramp gives industry time to plan while providing the public confidence that standards are being implemented.

Concerns about cost should be addressed through practical design and external funding opportunities. Routine compliance costs are a normal condition of access to public fisheries. Capital adaptation costs can be supported through programs such as NOAA's Bycatch Reduction Engineering Program, Saltonstall-Kennedy grants, and other innovation pathways.

Proposal 165: Salmon Excluders as Best Practice

AMCC supports Proposal 165 requiring salmon excluders in pelagic trawl nets operating in state waters. Alaska is not starting from scratch. Gulf of Alaska research in 2013–2014 demonstrated feasibility and provides a foundation for implementation. State waters should not become an accountability gap that lags behind demonstrated bycatch reduction practices.

We recommend adoption with a one-season phase-in to support procurement and installation, followed by full implementation. This balances operational reality with measurable progress in reducing salmon bycatch risk.

Leadership and Process

We ask the Board to assert clear direction: enforceable standards, practical implementation, and a defined timeline. Alaska should lead in Alaska waters while coordinating with federal processes where appropriate. Coordination should not mean deferral to federal management.

The Board's role is to establish baseline expectations. Clear standards reduce conflict and move discussion from identity-based arguments toward measurable compliance and problem-solving.

Procedural Concern Regarding Proposal 186

AMCC also wishes to briefly raise a procedural concern regarding Proposal 186. Agenda Change Requests are intended to address unforeseen or imminent biological concerns requiring immediate action. Proposal 186 appears to involve permanent and allocative regulatory changes rather than an emergent conservation crisis.

Permanent allocation decisions are best evaluated in the regular cycle, where full public participation and a complete evidentiary record can inform deliberation. Maintaining a predictable process protects the Board's institutional integrity and ensures durable outcomes.

Thank you for your service to Alaska's fisheries and fishing communities. AMCC appreciates the opportunity to contribute to a practical pathway that strengthens accountability while sustaining harvest in state waters.

Respectfully submitted,
Alaska Marine Community Coalition

Michelle Stratton

Michelle Stratton
Executive Director



Jamie O'Connor
Deputy Executive Director

Submitted by: Rod Arno

Alaska Outdoor Council

Community of Residence: Palmer

Alaska Outdoor Council represents thousands of Alaskans who depend on a wild food source of fish.

Conservation of the resource is the Alaska Outdoor Council's number one purpose. Next is providing that there is a sustainable food source managed on sustain yield to ensure that food source remains available for the future.

Clearly, there's enough scientific data available to raise concerns about over populating the north Pacific with salmon hatchery fish released from Alaskan hatchery. A reduction of salmon hatchery releases in the north Pacific would be the correct action for the board to take during times of low abundance of Chinook and silver salmon.

Also, during times of low abundance of Chinook and silver salmon, halibut, rockfish it's time to clearly restrict the troller fleet and state waters

Alaska PNP Enhancement Group

Board of Fisheries Statewide Meeting

March 17-21, 2026

Anchorage, Alaska

Alaska Board of Fisheries

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RE: Opposition to Proposals 170, 171, & 172

Dear Chair Carlson-Van Dort and Board of Fish Members:

These three proposals have been extensively addressed at previous board meetings (170), or at non-regulation but administrative meetings (171) or by agreement with the Commissioner of ADF&G (172).

PROPOSAL 170 – 5 AAC 40.XXX Require new regulation to reduce the permitted egg take level of each hatchery permit containing pink and chum salmon by 25% of the current permitted capacity for those species

This proposal is predicated on several untruths and relies heavily on speculative correlation from a single journal article alluded to in their narrative, rather than on empirical science. Evidence to the contrary was presented and debated at three recent meetings – January 2025 in Ketchikan, December 2024 in Cordova, and March 2024 for the Upper Cook Inlet. We will therefore present much of the same evidence in our public comments attached to this public comment. First, we will take Proposal 170 as written to correct and/or address their narrative as presented.

The proposal’s statement that there was “no annual Board oversight on hatcheries between 1974 and 1999”, is patently untrue. The Board of Fish (BOF) held numerous meetings during this period to authorize PNP program wild egg takes on dozens of wild stock streams from Ketchikan to Cordova to Kodiak. As previously noted, obtaining broodstock in the 1970s, at the nadir of statewide salmon declines, was considered allocative and therefore fell under the BOF's primary authority (AS 16.10.440(b)) “... the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest.”

Broodstock is no longer obtained from wild salmon streams unless there is a new program established. For a historical and legal perspective please see public comments by John Sund.

Broodstock collected from wild streams had to be managed carefully by ADF&G, as guided by the Board. Escapement goals had to be met first, and potential fish for broodstock needed to be surplus to the Biological Escapement Goals (BEG) or Optimum Escapement Goals (OEG). This effectively meant that fish used for broodstock would be potentially reallocated from commercial or sport fish harvests. These two issues – wild eggs and harvest allocation – fall within the Board's authority and therefore came before the Board on a regular basis.

During this same period (1974-1999), numerous terminal harvest areas came before the Board for adoption. Linked to this were allocation plans adopted into regulation by the Board for Southeast Alaska in 1994 and Prince William Sound in 1997 (modified and readopted in 2006). The Board was a fundamental component in the evolution of the PNP program from the 1970s until now.

The Hatchery-Wild Interaction research program was initiated in 2011 with an established science panel governing and directing the hypotheses, scope of work, budget, grants, and public facing meetings. Annual research reviews and updates were often scheduled temporally adjacent to Board of Fish meetings, with invitations extended to board members. These research reviews and meetings continue to this day and have always been publicly noticed and open.

The proposer's statement that "for most of the 49 years of the PNP hatchery program there was no public review or Board of Fish oversight" is false. The Board of Fish has received presentations from the department outlining the public process and dates of many of these public meetings. Regional Planning Team meetings and PNP board meetings have been publicly noticed from inception and have numbered in the hundreds over nearly five decades. Blatant inaccuracies of this magnitude should merit the proposal disqualifying in itself.

Proposal 170's concluding paragraph states verbatim "We conducted a global literature search of peer-reviewed publications (1970-2021) evaluating how hatchery salmonids affected wild salmonids," This language is clearly from the title of the McMillan paper (2023)¹ which we critiqued and provided to the board two years ago and will do so again.

¹ McMillan J., et.al. 2023. A global synthesis of peer-reviewed research on the effects of hatchery salmonids on wild salmonids

In brief, this synthesis is based primarily on journal articles from the Pacific Northwest. We agree that in many cases the hatchery programs of Washington, Oregon, and California have not and cannot replace salmon populations loss due to several major extant conditions:

1. hydroelectric dams that eradicated the majority of spawning and rearing habitat for salmon,
2. water withdrawal for agriculture and industrial uses, and
3. human encroachment and habitat conversion from wild to urban/ suburban uses, among a host of other degradations.

Alaska's enhancement program has little commonality with the PNW. Alaska's sport fish hatcheries have more in common with PNW hatcheries in terms of captive breeding, out-planting in barren lakes, hatchery releases in freshwater which commingle and at times spawn with wildstock Chinook, as well as supplementation of wild coho and Chinook.

Nowhere in the proposal is there a justification or analysis of how the 25% reduction was arrived at or what outcome is expected. As stated, the previous Board of Fisheries meetings it is simply arbitrary and capricious. Based on the proposer's own words, their lack of rationale, and scientific justification, Proposal 170 should be rejected.

An **addendum** is attached addressing the proposer's suppositions over the past several board cycles.

PROPOSAL 171 – 5 AAC 40. XXX Requires a new regulation or management plan to reduce straying of Prince William Sound pink salmon into Lower Cook Inlet.

The Alaska PNP Enhancement Group is also concerned about hatchery pink salmon straying. This concern was the primary reason for our group's creation of the Hatchery-Wild Interaction study and its governing science panel in 2011.

It is well established in scientific literature that salmon straying is a survival mechanism that buffers against changing environments, therefore fundamentally part of salmon's DNA. If salmon did not stray, they would not have re-colonized Alaska after the last major glacial retreat 15,000 years ago. Wild pink salmon are well known to have the lowest fidelity of *Oncorhynchus spp.* to their wild natal stream or hatchery release site. The Wild Salmon Center estimates that the wild pink salmon stray rate is up to 10%². Alaska wild and hatchery pinks are expected to show a similar rate of straying from the hatchery or natal spawning grounds. Smolt species such

² Wild Salmon Center, <https://wildsalmoncenter.org/salmon-species/pink-salmon/>. Portland, Oregon

as sockeye, coho, and Chinook spend from one to three years in freshwater and have relatively low stray rates compared to pink and chum salmon. Coho show high fidelity stream of origin and in one study by Westley et al.³ found a stray rate of (0.08%–0.94%). In a twenty-year monitoring program, NSRAA found coho stray rates of less than 2%. Additional work determining precise wild pink salmon stray rates for PWS should be the next phase of the Hatchery-Wild research program. Much of the raw data has been collected during the hatchery pink reproductive success research.

Given this knowledge, when the Alaska enhancement program was statutorily created in the mid-1970s, it was anticipated that hatchery salmon would also stray. Specific regulations were promulgated considering this understanding, including use of local broodstocks, imprinting protocols, and aggressive terminal harvest fisheries to reduce the potential for wandering fish. Knutsen et al.⁴ documented that 94% to 99% of enhanced pink salmon are harvested in mixed stock and terminal fisheries, reducing potential for straying. Despite these measures, hatchery pinks driven by their DNA, stray to a higher degree than desired. In a sense we are battling tens of thousands of years of genetics. This ongoing issue continues to be a focus of our research and management efforts.

The Alaska Hatchery-Wild research shows that while hatchery salmon may influence wild salmon, this effect may be short-lived. Hybrid crosses between hatchery and wild salmon have been shown to reduce reproductive success in the first generation, with a relative reproductive success (RRS) of approximately 0.5, or half as successful as a wild x wild cross.

Recent reporting by Shedd et al. (2026)⁵ found that second generation RRS improved to 0.84, or 84% of a wild x wild cross. Third generation cohorts have not been analyzed yet but given the marked improvement in RRS from the first to second generations, differences in RRS are likely to disappear over time. Several Board of Fish cycles ago the department's report to the Board of Fisheries indicate that broad-scale genetic groups have not identified genetic drift in Prince

³ Westley P., et al. 2013. Rates of straying by hatchery-produced Pacific salmon (*Oncorhynchus* spp.) and steelhead (*Oncorhynchus mykiss*) differ among species, life history types, and populations

⁴ Knutsen, et al. 2021 Hatchery-Origin Stray Rates and Total Run Characteristics for Pink Salmon and Chum Salmon Returning to Prince William Sound, Alaska, in 2013–2015

⁵ Shedd, K., King, E., Gruenthal, K., Adkison, M., Wilson, L., Wesley, P., May, S., and Rand, P. 2026. Second generation fitness consequences of Pink Salmon hatchery-origin strays in Prince William Sound

William Sound. However, even if the reproductive success effect were to disappear, we do not suggest straying should be ignored.

Hatchery strays, even if benign, represent a loss to fishermen and the PNP program in terms of harvest and value. Commercial and sport fishing whether on the ocean or in freshwater have effects on salmon, such as size selection, timing of freshwater entry, spawner size, and abundance. Rather than ceasing fisheries, we are compelled to conduct further research, collect data, and implement mitigate measures using the best available science. Program integrity, whether the oil industry, sport charter tourism, aquaculture or any other sector, should be founded on the precautionary principle, problem identification, and the application of corrective measures when known and feasible.

To truly reduce hatchery salmon straying, the continuation and expansion of the burgeoning research program underway in Alaska is essential. Ten years ago, Northern Southeast Regional Aquaculture Association (NSRAA) in Sitka began collaborating with a mariculture group from California to raise seaweed and kelp at salmon release sites, with the goal of studying the effect of mariculture on salmon health and homing fidelity. Unfortunately, the company did not follow through on this initiative. More recently, progress has been made with research on the use of kelp amino acids and their impact on salmon homing behavior. The PNPs are now working with the University of Alaska Southeast and the Sitka Sound Science Center (SSSC) to conduct this research at several sites.

The Sheldon Jackson hatchery in Sitka is working with pink salmon, testing the effect of amino acid scent from split kelp on natal site fidelity. Similarly, an NSRAA facility near Sitka is conducting a parallel experiment with chum salmon, using a robust experimental design with Dissolved Free Amino Acid (DFAA) from a species of seaweed known as split kelp. Baseline groups will not have exposure to DFAA, while DFAA exposure groups will be tested to assess and compare homing fidelity.

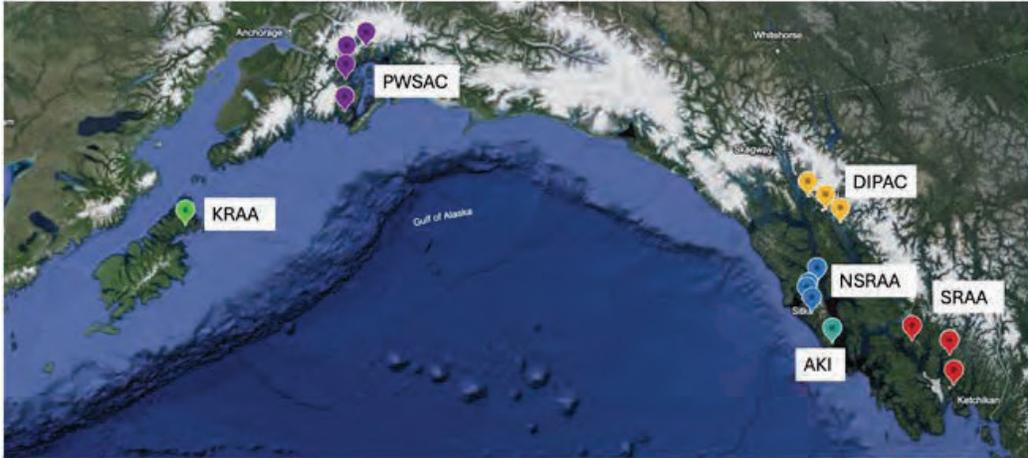


Figure 1. PNP facilities that participated in the initial Integrated Multi-trophic Aquaculture assessment⁶

This ongoing research at the PNP hatcheries represents a critical step in addressing the challenge of hatchery salmon straying. By leveraging partnerships and employing rigorous experimental methods, the industry is proactively working to identify effective solutions to maintain the integrity of both hatchery and wild salmon populations.

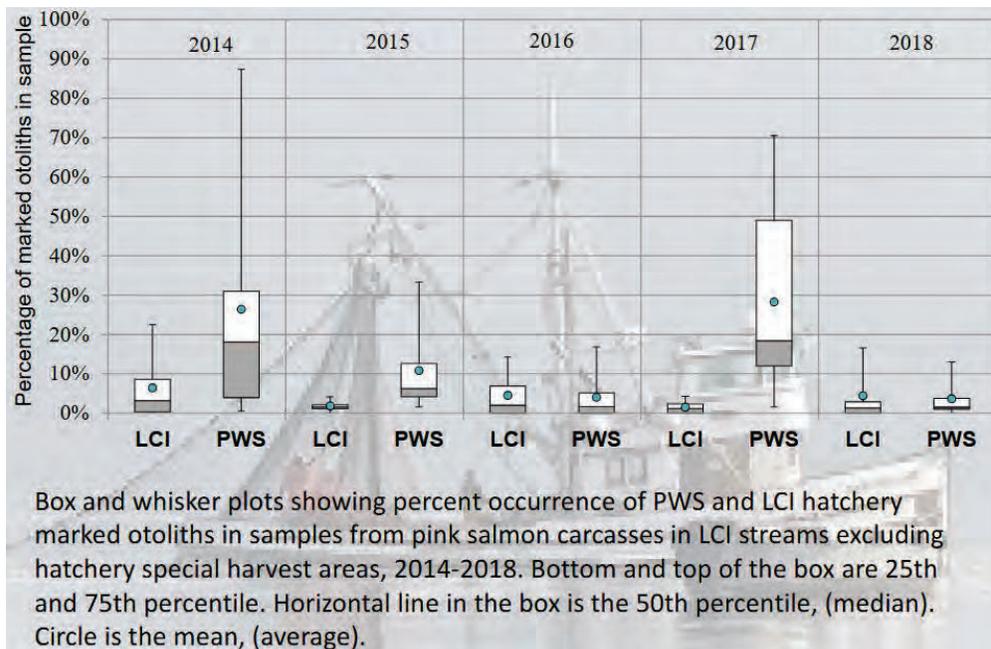


Figure 2. PWS stray proportions in LCI streams, 2014-2018, ADFG Otis & Hollowell 2019⁷

⁶ Bowers, A., & Wilson, T. 2025. Determining site suitability and processing potential at Alaska’s salmon hatchery release sites for the integration of mariculture species. ABEC MIRF Project Final report.

⁷ Otis, T. & Hollowell

PROPOSAL 172 – 5 AAC 40.XXX Require new regulation for a moratorium on pink and chum hatchery production

As of 2019, there was a de facto PNP salmon production moratorium based on an agreement with the Commissioner of Fish and Game. Since that agreement, no new pink or chum salmon egg permits have been requested or issued. The Commissioner has the responsibility and authority to permit, rescind a permit, or decrease a PNP permit.

To usurp the Commissioner's authority under the guise of a Board of Fish 'finding' there is no guarantee that it will have greater longevity. The argument posited for such action is that commissioners come and go. While true, any Board of Fish can change what a previous board has set in regulation. The history of board members shows quite clearly that the Commissioner of Fish and Game changes far less frequently than the board. Every time there is a new board member, it effectively becomes a new board, changing every year or two. There is far more consistency with commissioners and permitting hatchery eggs remains under their authority.

Proposal 172 lists **four** potential elements for a moratorium, all of which are in effect today or are being addressed.

1. **Resolution of uncertainty of hatchery-wild effects.** Research initiated by the PNPs in 2011 aimed to shed light on the effects of hatchery strays on wild stocks. This ongoing research has provided valuable insights into reproductive success of pink and chum salmon. As hypothesized in the 2011 study, the F1 generation showed significantly lower relative reproductive success (RRS), approximately 0.5 or half as successful as wild pinks.

The F2 generation of pinks demonstrated improvement, with 0.85 RRS in the odd-year lineage and 0.73 RRS in the even-year lineage. This suggests that the effects of hatchery strays diminish over subsequent generations, as hybrid crosses recover their reproductive capacity. Future work with F3 generations is likely to show further improvement.

Previous BOF presentations by the department show significant genetic differences in odd and even year pink salmon heterogeneity, but little difference among odd year or even year lineages. Also there appears to be little genetic drift within Prince William Sound (PWS) pink salmon stock groups (even and odd years) after 45 years of enhancement, while at the same time wild pink salmon productivity has increased over the past 35 years. Lower Cook Inlet (LCI) pinks are a geographically adjacent stock group with similar genetic characteristics to PWS. This is partially driven by the fact that Gulf of Alaska pink salmon (PWS and Cook Inlet) were pushed south during the last glacial maximum 15,000 years ago. Whereas pink stocks on the Bering Sea side of the Alaska Peninsula were isolated and are a distinct stock group.

PWS strays in LCI ranged from 3% to 29% in the sampled streams as reported in the 2014-2018 Lower Cook Inlet (LCI) study with three of the five years stray proportion in recipient streams averaged less than 10%. This is similar to the Hatchery-Wild research project as reported above.

Experimentation and research are underway to reduce straying by using Integrated Multi-trophic Aquaculture (IMTA) and Dissolved Free Amino Acids (DFAA). Focused research with split kelp amino acids is being conducted at the Sitka Sound Science Center and NSRAA's Crawfish Inlet project. If proven successful, this technique would be widely introduced to all PNP programs. Since the inception of Alaska's enhancement program, applied research has been consistently pursued to improve program effectiveness, reduce wild stock interactions, and improve environmental quality.

From its inception, Alaska PNPs' long-term, collaborative research approach has been instrumental in developing a deeper understanding of the complex interactions between hatchery and wild salmon populations. The expectation is that these research results will help inform management strategies to mitigate the impacts of hatchery strays and maintain the integrity of wild salmon stocks. Using local wild stocks for

hatchery brood development is a fundamental tenet of the program to minimize genetic effects.

2. **Comprehensive hatchery policy guidelines.** Currently, there are comprehensive enhancement guidelines including policies for genetics, pathology, transport of fish, stocking guidelines, otolith marking, comprehensive salmon planning, broodstock and siting policies. As new information is learned best management practices are adopted.
3. **Regional Comprehensive Plans.** Comprehensive salmon plans are currently available for each region. These plans are a PNP requirement and have been completed for Southeast, PWS, Kodiak, and Cook Inlet. Most of these regions have had one or more updates to their original comprehensive salmon plan. Again, RPT meetings are open to the public and are a statutorily guaranteed venue for public comment and debate.
4. **Results of any independent review.** The Alaska Hatchery Wild Interaction science panel⁸ is comprised of twelve scientists from numerous disciplines and agencies including University of Alaska fishery scientists, NOAA fishery scientists, former Scripps Institute and USDA geneticists, as well as several ADF&G geneticists and scientists. Numerous peer reviewed journal articles have been published and available at ADF&G website. This group of scientists have guided the research hypotheses and review since 2011 which has cost over \$20 million, not including ADF&G in-kind contribution. There are two outside or independent organizations evaluating not only the Alaska hatchery program but Alaska fisheries management and polices – Marine Stewardship Council (MSC) and Certified Seafood International (CSI).

In conclusion, we agree with ADF&G's comments and justification for opposing Proposals 170, 171, & 172. The department's comments closely align with our argument and rationale laid out above in this public comment. Tying Chinook declines to pink salmon is not based in empirical science but rather

⁸ <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2018-2019/hc/or3.pdf>

speculative correlation. Nevertheless, the author of Proposal 170 continues to rely on that speculation without any other supporting evidence. Therefore, we have attached an addendum that addresses their supposition with empirical studies and over a hundred references to delineate what is known about Chinook declines, pink salmon interactions, and climate driven environmental changes

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Thank you for this opportunity to comment. We look forward to working with the Board at the March statewide meeting.

Tessa Frost, Southern Southeast Regional Aquaculture Association (SSRAA)
Scott Wagner, Northern Southeast Regional Aquaculture Association (NSRAA)
Katie Harms, Douglas Island Pink and Chum (DIPAC)
Mike Wells, Valdez Fisheries Development Association (VFDA)
Geoff Clark, Prince William Sound Aquaculture Corporation (PWSAC)
Tina Fairbanks, Kodiak Regional Aquaculture Association (KRAA)
Dean Day, Cook Inlet Aquaculture Association (CIAA)

Addendum: Chinook and Pink Salmon Interactions Research

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Alaska PNP Enhancement Group

Board of Fisheries Statewide Meeting March 2026

Chinook and Pink Salmon Interactions Research - Executive Summary

Defining why Chinook salmon stocks have been in a prolonged low-productivity phase is challenging, and isolating specific drivers is complex. Fortunately, significant research has been published, published in journals and synthesized. The State of Alaska produced a 264-page synthesis on Chinook salmon status (September 2024), that reviewed a dozen topic areas and incorporated hundreds of peer-reviewed studies in response to Wild Fish Conservancy's petition. NOAA Fisheries and ADF&G, at the request of Alaska's Congressional delegation, convened Alaskan scientists in a year-long effort resulting in a 100-page publication that describes salmon productivity trends, summarizes current knowledge, identifies critical gaps, and recommends prioritized research in *Alaska Salmon Research Task Force Report* (June 2024).

One clear point of consensus from the reviews is that many Alaska Chinook salmon populations are in a prolonged low-productivity cycle, with the Yukon and Kuskokwim River systems of greatest concern. Scientists have documented deleterious summer water temperatures in interior spawning areas — on the order of 18°C during July Chinook spawning — temperatures regarded as lethal for spawning Chinook.

This report to the Board of Fisheries is a compilation of the most current research available on factors affecting Chinook salmon health and productivity, some suggesting linkages to pink salmon, but most studies demonstrate declines having nothing to do with pink salmon. Fortunately, it is not all doom and gloom, Chinook are beginning to rebound in the Southeast end of the state.

Is there a smoking gun? There are several, in fact, but there are regional differences. The weight of empirical evidence assembled in recent assessments, document both lethal and sublethal effects on Chinook salmon across life stages, and point to multiple, interacting climate-driven mechanisms as proximate drivers of the current low-productivity phase. Marine perturbations — notably the 2016–2019 North Pacific/Bering Sea marine heat-wave — altered oceanographic conditions and prey fields in ways that reduced growth and survival of juveniles in early marine life. Concurrently, freshwater thermal regimes in many Interior spawning reaches, particularly within the Yukon and Kuskokwim drainages, have reached critically high levels during July spawning periods; such temperatures are

associated with increased adult and embryo mortality, reduced gamete viability, second generation effects, and other sublethal physiological stresses.

Permafrost thaw may be one of the most dramatic and ecologically significant changes occurring in the Interior where some 75 streams have been identified discharging orange plumes of deleterious dissolved iron, cadmium, aluminum, SO₄:Cadmium, and characterized by very low pH from a hydration reaction yielding sulfuric acid. Fish, algae, zooplankton and insect populations have been negatively affected, and the release of the formerly sequestered heavy metals may be linked to the decline of regional chum and chinook salmon populations.

Phenological shifts further compound these effects. Earlier ice-out in the Bering Sea appears to modify the timing and magnitude of primary and secondary production, reducing prey availability at times critical for juvenile Chinook. Earlier smolt migration documented in some systems can produce a trophic mismatch between ocean entry and the spring zooplankton bloom, undermining early marine growth and survival. Consistent with these mechanistic links, a 2023 analysis of Yukon juvenile Chinook production attributed roughly 45% of interannual variability to river temperature or discharge conditions experienced during the parent spawning migration, highlighting the importance of freshwater conditions for subsequent cohort strength.

Predation and shifts in predator populations likely contribute materially to declines in Chinook productivity, size-at-age and age-at-return. Several apex predators that preferentially consume larger Chinook have increased in abundance in recent decades (in some assessments, resident killer whale numbers in portions of the northeast Pacific are estimated to have risen roughly threefold), with consumption estimates on the order of millions of Chinook annually (e.g., ~2.5 million for resident killer whales). Salmon sharks have also been estimated to consume large numbers of salmon (reported ranges ~12.6–25.2 million individuals per year). Recent telemetry and diet studies corroborate substantial salmon shark predation and demonstrate overlapping migratory timing and pathways between these predators and migrating Chinook, providing a clear mechanism for elevated mortality during migration and early marine residence. Because these predators preferentially remove larger individuals, increased predation pressure can drive reductions in mean size-at-age and shifts toward earlier return ages via both direct removals and selective pressure, which may operate synergistically with climate-driven stressors to depress cohort productivity. Pinniped populations have also increased dramatically and target juvenile Chinook and adults.

Collectively, these lines of evidence support a multi-factorial causation model rather than a single, universal “smoking gun.” The relative contribution of each mechanism likely varies among stocks and life stages and is mediated by local habitat, harvest, and trophic context. Alaska has experienced cyclical low productivity phases for millennia followed by recovery. However, Interior Alaska is seeing something quite different – a synergistic effect of excessive freshwater warming, release of sequestered heavy metals from melting permafrost, a warming Bering Sea, and increased predator fields.

This review does not find robust empirical support for hypotheses positing that pink salmon—particularly hatchery-origin pinks—are a driver of Chinook declines, as advanced by Ruggerone and others. In fact, evidence is weak to nonexistent. Available field studies of wild and hatchery pink salmon yield inconsistent results with respect to competitive impacts on Chinook at critical life stages, and regionally divergent return patterns undermine a simple, generalizable competition mechanism. For example, Southeast Alaska has experienced low Chinook returns throughout the past decade while pink returns in that region have also been low (reported >95% are wild pinks), a pattern inconsistent with hatchery-driven pink competition as the dominant cause of Chinook declines. In 2025, Southeast has seen partial rebounds in pink abundance in northern areas alongside recovery of several Chinook stocks: Unuk, Chickamin, and Chilkat Chinook were removed from “stock of concern” status in 2025, further indicating that local productivity dynamics and multi-factorial drivers (rather than a single, basin-wide pink–Chinook competition effect) better explain observed trends.

In Prince William Sound, since 1990 large pink salmon releases co-occur spatially and temporally with Copper River Chinook, yet the Copper River Chinook stock is not classified as a stock of concern. This stock continues to support substantial sport and commercial fisheries and consistently attains its spawner escapement goals (SEGs), demonstrating that high local pink production does not inevitably precipitate Chinook declines. The Copper River case therefore underscores the importance of regional context and stock-specific life-history, habitat, and fishery dynamics when evaluating hypothesized competitive effects of pink salmon on Chinook; it further cautions against broad generalizations.

This report represents a balanced synthesis of current research on Chinook salmon and pink salmon interactions. While scientific consensus is incomplete across all topics, a preponderance of evidence—drawn from NPAFC, NOAA Fisheries, International Year of the Salmon (IYS), ADF&G, and independent investigators—supports the multi-factorial interpretation of recent Chinook low productivity. Below is a concise, academically framed list of topic areas that this report addresses, each with a brief description of its relevance.

Section Titles

1. Introduction: Status of Alaska Chinook Stocks, Are Pink Salmon the Problem? pg.4
2. Warming Climate and Effects on Alaska Chinook Salmon, pg.6
3. Trends in Size at Age, Age of Return, & Health/Condition Factors, pg.12
4. Apex Predators: Salmon Sharks, Killer Whales, and Pinnipeds pg.18
5. Marine Food Dynamics, pg.24
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8. Impact of Pink Salmon on Chinook and Ocean Carrying Capacity, pg.35
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1. Introduction: Status of Alaska Chinook Stocks, Are Pink Salmon the Problem?

Chinook salmon (*Oncorhynchus tshawytscha*) have long been a cornerstone of Alaska's cultural, economic, and ecological landscape. In the recent decade and a half, many-but not all- Chinook salmon populations across the state have declined, prompting concern among scientists, resource managers, and local communities alike.¹

Alaska's Chinook salmon stocks exhibit considerable variation in their status across different regions, some populations have shown resilience or short-term increases, others have fallen dramatically. For instance, Schindler et al. (2013)² reported that Chinook salmon returns to Western Alaska rivers have decreased by an average of 45% since the early 2000's. The Alaska Department of Fish and Game (ADF&G) has documented persistent low abundance of adult returns in numerous Alaska stocks over

¹ Alaska Department of Fish and Game. (2020). Chinook Salmon Stock Status and Research in Southeast Alaska. Technical Report

² Schindler, D., Krueger, C., Bisson, P., Bradford, M., Clark, B., Conitz, J., ... & Scheuerell, M. (2013). Arctic-Yukon-Kuskokwim Chinook salmon research action plan: Evidence of decline of Chinook salmon populations and recommendations for future research. Prepared for the AYK Sustainable Salmon Initiative, Anchorage, AK.

the past decade. As a result, the Board of Fisheries has adopted 'stock of concern' status for 15 stocks as of 2025.³ (see page 36)

Some areas, such as portions of Southcentral Alaska (Copper River), have shown more stability or even modest increases in certain years.⁴ In 2024, the board of fisheries delisted three southeast Alaska stocks - Chilkat, Unuk, and Chickamin. However, the overall trend across much of the state points to a concerning pattern of reduced productivity and abundance for Chinook salmon populations.

The causes of these declines are complex and multifaceted, involving an interplay of environmental changes, food web dynamics, apex predators, localized habitat degradation, fishing pressure, and broader ecosystem shifts. Climate change is implicated through altered ocean conditions, warmer freshwater temperatures during key life-stages, earlier ice-out, primary and secondary productivity timing in marine waters, and potential mismatches between smolt outmigration and plankton blooms (Munro 2019).⁵

This paper will present critical factors in Chinook productivity decline by providing empirical studies and research from NOAA Fisheries, the ADF&G Salmon Ocean Ecology Program, IYS, and North Pacific Rim journal articles. Pink salmon abundance will be one of the facets examined as a potential negative influence on Chinook abundance in Alaska. The information contained herein relies heavily, but not exclusively on NOAA Fisheries Alaska Salmon Task Force Report 2024 developed over a twelve-month period by a panel of Alaska salmon experts⁶, ADF&G Chinook Initiative 2013 & Chinook Symposium 2018⁷, ADF&G Factors that limit Chinook Salmon Productivity 2022⁸, and State of Alaska vs Wild Fish Conservancy letter to NOAA, 2024⁹.

³ ADFG Stocks of Concern Feb'25 <https://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks>

⁴ Cunningham, C. J., Westley, P. A. H., & Adkison, M. D. (2018) Signals of large-scale climate drivers, hatchery enhancement, and marine factors in Yukon River Chinook salmon survival revealed with a Bayesian life history model.

⁵ Munro, A. R. (2019). Summary of Pacific salmon escapement goals in Alaska with a review of escapements from 2010 to 2018.

⁶ <https://repository.library.noaa.gov/view/noaa/61603>

⁷ <https://www.adfg.alaska.gov/index.cfm?adfg=chinookinitiative.main>

⁸ https://www.adfg.alaska.gov/static/fishing/pdfs/research/gravelto gravel/chinookgravelto gravel_researchplan.pdf

⁹ State of Alaska letter September 6, 2024 Request for information, 90-Day Finding on a Petition to List Gulf of Alaska Chinook Salmon as Threatened or Endangered Under the Endangered Species Act.

https://www.adfg.alaska.gov/static/home/news/hottopics/pdfs/soa_comment_letter_on_gulf_of_alaska_chinook_salmon_endangered_species_act_petition.pdf

The State of Alaska response document to the NOAA bureaucrats (not its Alaskan scientists) is a 264-page heavily documented and referenced compendium of the biology, science, and management of Chinook in Alaska. A salient passage quoting from the document:

“Increased abundance of pink salmon is a commonly posited mechanism for reduced growth and productivity in salmon (e.g., Buckner et al. 2023¹⁰, Ruggerone and Goetz 2004¹¹). However, in the Gulf of Alaska, juvenile, immature, and maturing salmon growth and condition have been shown to be driven by bottom-up forces in the ocean, meaning that fluctuations in the primary productivity, not the abundance of other salmon species, would limit juvenile fish growth (Daly et al. 2019b)¹². During 2012 and 2013, there was no bottleneck in the prey resource for pink, chum, and sockeye salmon (Daly et al. 2019a)¹³, demonstrating that these species **were not competing for resources with Chinook** salmon. During 2015–2016 when top-down pressures were thought to have controlled forage fish abundance in the northern Gulf of Alaska, the rearing area for many Alaska Chinook salmon populations (Larson et al. 2014)¹⁴, other salmon (including pink salmon) were not the suspected cause (Arimitsu et al. 2021)¹⁵.”

2. Warming Climate and Effects on Alaska Chinook Salmon

The warming climate has emerged as a critical factor influencing the productivity and survival of Alaska Chinook salmon. As global temperatures rise, both freshwater and marine ecosystems are experiencing significant changes that directly impact salmon throughout their life cycle.¹⁶ However, effects are divergent especially in western Alaska as portrayed by Schoen et.al. (2023).¹⁷

¹⁰ Buckner, R., Beaudreau, A. H., Daly, E. A., Sturdevant, M. V., & Fergusson, E. A. (2023). Drivers of juvenile Chinook salmon growth and condition in the Gulf of Alaska

¹¹ Ruggerone, G. T., & Goetz, F. A. (2004). Survival of Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*) in response to climate-induced competition with pink salmon (*Oncorhynchus gorbuscha*)

¹² Daly, E. A., Brodeur, R. D., & Auth, T. D. (2017). Anomalous ocean conditions in 2015: impacts on spring Chinook salmon and their prey field

¹³ Daly, E. A., Benkwitt, C. E., Brodeur, R. D., Litz, M. N., & Copeman, L. A. (2010). Fatty acid profiles of juvenile salmon indicate prey selection strategies in coastal marine waters

¹⁴ Larson, W. A., Seeb, L. W., Everett, M. V., Waples, R. K., Templin, W. D., & Seeb, J. E. (2014). Genotyping by sequencing resolves shallow population structure to inform conservation of Chinook salmon (*Oncorhynchus tshawytscha*)

¹⁵ Arimitsu, M. L., Hobson, K. A., Webber, D. N., Piatt, J. F., Anson, A. L., Rojek, N. A., ... & McKinzie, M. K. (2021). Trophic pathways supporting juvenile salmon in the productive frontal zone of a glacial fjord.

¹⁶ Alaska Salmon Research Task Force Report, 2024

¹⁷ Schoen, E.R., Howard, K.G., Murphy, J.M., Schindler, D.E., Westley, P.A.H., and von Biela, V.R. (2023). Divergent responses of Western Alaska Salmon to a Changing Climate

Yukon River Chinook are now at record lows: average body size has declined by 6%, fecundity is down 15% and fish are spending less time at sea because they are maturing at younger ages. Yukon chum hit a new low escapement in 2021 but has recovered to its escapement goal range in 2024 and 2025. By contrast Bristol Bay sockeye salmon are at record abundance, although they are spending less time in freshwater and returning as adults at smaller sizes. Schoen et.al. (2023) attribute reduced abundance of Yukon River Chinook to warmer freshwater temperatures and lower river discharge during the adult spawner stage. Chinook elsewhere in the state are seeing similar body size and fecundity declines. Sockeye body size decline is attributed primarily to their own abundance and secondarily to the abundance of Asian chum and pinks.

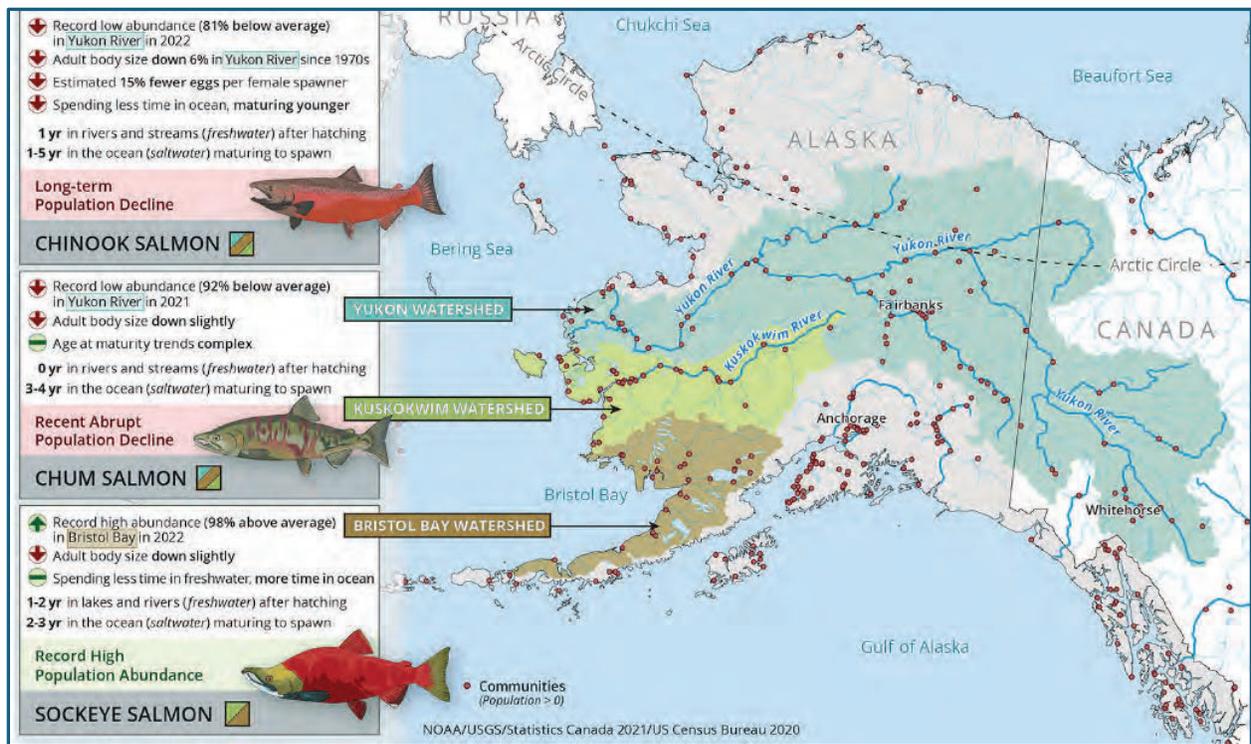


Figure 1. Contrasting trends in abundance and demographics of key salmon stocks in Western Alaska. Dots represent communities. Map and infographic credit: NOAA/Sarah Battle. Salmon illustrations credit: Katie Kobayashi. Figure from Schoen et.al. 2023

In freshwater habitats, increasing air temperatures are altering the thermal regimes of rivers and streams. As the land heats up, freshwater captures some of that heat. Fellman et.al. (2015)¹⁸ found that warmer water temperatures in Southeast Alaska streams are leading to earlier fry emergence and

¹⁸ Fellman, J. B., Hood, E., Dryer, W., & Pyare, S. (2015). Stream physical characteristics impact habitat quality for Pacific salmon in two temperate coastal watersheds.

smolt outmigration. While this might initially seem beneficial, it can lead to a mismatch between the timing of smolt entry into the ocean with the availability of key prey, potentially reducing early marine survival rates. Freshwater warming in interior Alaska is proceeding at more than twice (some science says 4 times) the rate of warming in the contiguous United States, exacerbating ecological change and physiological stresses.

Ocean warming compounds the problem and is also having profound effects on Chinook salmon. Cunningham et al. (2018)¹⁹ linked higher sea surface temperatures in the Bering Sea and Gulf of Alaska to reduced survival rates for Yukon River Chinook salmon. Warmer Ocean temperatures alter the distribution and abundance of prey species, potentially leading to nutritional stress for salmon. In contrast to Chinook, a recent dissertation *Juvenile Salmon Spatial Ecology in the Eastern Bering Sea* by Hart (2023)²⁰ found that juvenile pink salmon may have higher survival associated with increased sea surface temperatures (SST). In earlier work by Farley et.al. (2016) states “warming temperatures in the eastern Bering Sea have led to shifts in the distribution and abundance of key prey species, which can negatively affect the growth and survival of juvenile salmon. For Chinook salmon, these changes in prey availability, coupled with increased metabolic demands due to warmer waters, can result in reduced body condition and lower survival rates.”²¹ Taken together, these studies imply that broad climate-driven shifts in ocean and freshwater conditions—rather than direct competition with pink salmon—are more likely to disadvantage Chinook.

Morita et.al. (2019)²² using long term monitoring data from the Eastern Bering Sea looked at condition factors, growth increments, maturity rates and competition among pink, chum, and sockeye salmon. They found strong, negative density-dependent relationships between chum and sockeye at high abundances, while correlations between pink salmon and the other two species were **weak and not statistically significant**. However, Morita et al. caution that pinks might exert top-down effects on zooplankton biomass that produce delayed density-dependent impacts, potentially reducing the growth of other salmon species later in the season and into the following year.

¹⁹ Cunningham, C. J., Westley, P. A. H., & Adkison, M. D. (2018). Signals of large scale climate drivers, hatchery enhancement, and marine factors in Yukon River Chinook salmon survival revealed with a Bayesian life history model.

²⁰ Hart, L., (2023). Model based estimation of juvenile salmon spatial ecology in the Eastern Bering Sea

²¹ Farley, E. V., et al. (2016). Implications of a warming eastern Bering Sea for Bristol Bay sockeye salmon

²² Morita, K., and Kukuwaka, M., (2019) Intra- and interspecific density-dependent growth and maturation of Pacific salmon in the Bering Sea.

Climate change is also reshaping precipitation patterns and glacial melt rates, which in turn affect river flows and water quality. Shanley et al.²³ projected that by the 2080s, many salmon-producing watersheds in Southeast Alaska will experience significant hydrological changes, including altered timing of peak flows and reduced summer low flows. These changes could impact spawning success and juvenile rearing habitat quality. The King Salmon River on Admiralty Island, the smallest ADF&G monitored population of Chinook in Alaska (BEG 120 – 240 spawners), is already experiencing hydrologic change: alpine glacier shrinkage has diminished flow and altered stream water thermal regimes, increasing risk to this vulnerable population.

Interior Alaska permafrost melting may be one of the most visually dramatic and ecologically significant changes occurring in the Arctic. Sullivan et.al (2025)²⁴ and O'Donnell et.al., (2024)²⁵ identified some 75 streams south of the Brooks Range that discharge large plumes of orange-rust colored water. These plumes contain elevated concentrations of dissolved iron, cadmium, aluminum, SO₄:Cadmium, characterized by very low pH. Sulfate (SO₄⁻²) can be reduced and subsequently produce sulfuric acid, increasing acidity and mobilizing metals that were previously sequestered in permafrost. These naturally occurring contaminants now flow hundreds of miles to the ocean and exceed EPA thresholds by substantial multiples. Fish populations, algae, zooplankton and insects have been negatively affected and the authors suggest this phenomenon may be linked to the decline of regional chum and chinook salmon populations.



Figure 2. An aerial view of the Kutuk River in Alaska's Gates of the Arctic National Park that looks like orange paint spilling into clear blue water (Ken Hill National Park Service). Some 75 rivers have been identified with similar conditions. Cadmium, iron, aluminum create color and extreme low pH.

²³ Shanley, C. S., Pyare, S., Goldstein, M. I., Alaback, P. B., Albert, D. M., Beier, C. M., ... & Wipfli, M. S. (2015). Climate change implications in the northern coastal temperate rainforest of North America

²⁴ Sullivan P., Dial R., Cooper D., Diamond C., Tino C., Gregory D., and Lyons T. (2025) Wild, scenic, and toxic: Recent degradation of an iconic Arctic watershed with permafrost thaw.

²⁵ O'Donnell J. et al., (2024). Metal mobilization from thawing permafrost to aquatic ecosystems is driving rusting of Arctic streams.

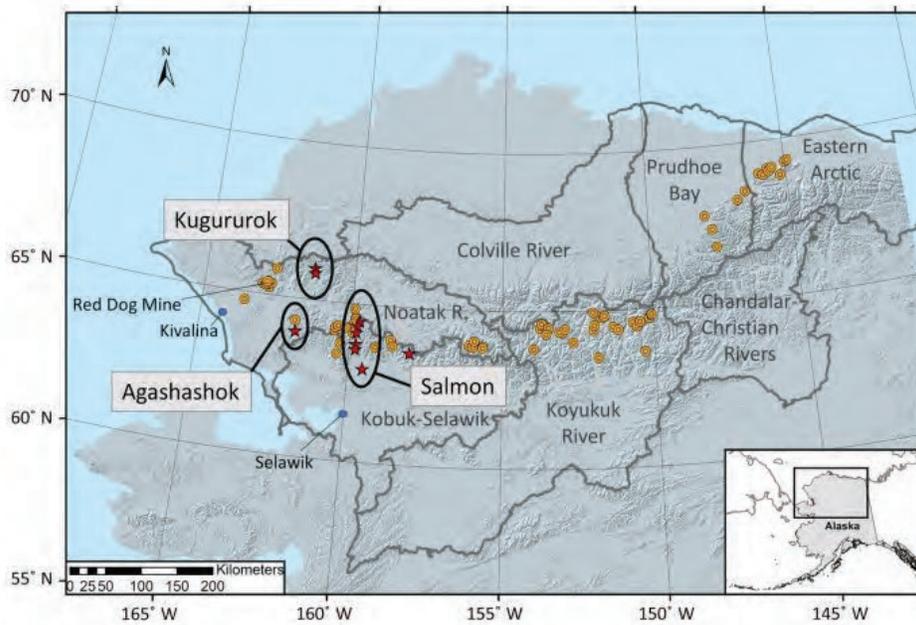


Figure 3. Orange circles indicate orange stream observations, red stars indicate sites where the water samples were collected, and blue circles are nearby villages. Hydrologic Unit Code-6 (HUC) basins are shown as black outlines from the National Watershed Boundary dataset. The hill-shade layer utilizes the USGS National Elevation Dataset. Map generated in Esri ArcMap software. Map credit: Kenneth Hill, NPS.

Together, these findings underscore that both changing biotic interactions and large-scale hydrological shifts driven by climate can indirectly and directly affect Chinook growth, survival, and productivity.

Increased freshwater and sea temperatures have been widely researched. Yasumiishi et.al. (2020)²⁶ investigated western Alaska Chinook production dynamics and found that summer growth decreased with increased sea temperatures in the north and southern Bering Sea, but growth increased with expanse of sea ice and a later ice retreat. Capelin (*Mallotus vilosus*) was identified as an important prey for juvenile Chinook especially during cold SST years. The long warming trend appears to

²⁶ Yasumiishi, E. M., Farley, E. V. Jr, Maselko, J., Aydin, K. Y., Kearney, K. A., Hermann, A. J., Ruggerone, G. T., Howard, K. G., and Strasburger, W. W. 2020. Differential north-south response of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) marine growth to ecosystem change in the eastern Bering Sea, 1974–2010

create conditions for lower quality prey, which reduces fitness and increases mortality over winter.^{27,28}

Work with Chinook salmon in the Bering Sea and Pacific Ocean by Yasumiishi, Farley, Murphy and others complement Morita's analyses of pink, chum, and sockeye interactions. Much of their research will be covered in following sections on Salmon Health, Marine Food Dynamics, and Pink Salmon Impact on Chinook.

Warming waters also facilitate the spread of and increased virulence of pathogens and parasites. Marcogliese et.al.²⁹ warned that higher temperatures could expand the range of certain fish diseases into previously cooler habitats, posing new threats to Chinook salmon populations. This threat is especially evident on the Yukon River, where infections by *Ichthyophonus sp.* are widespread and a significant concern for Chinook health and survival.³⁰

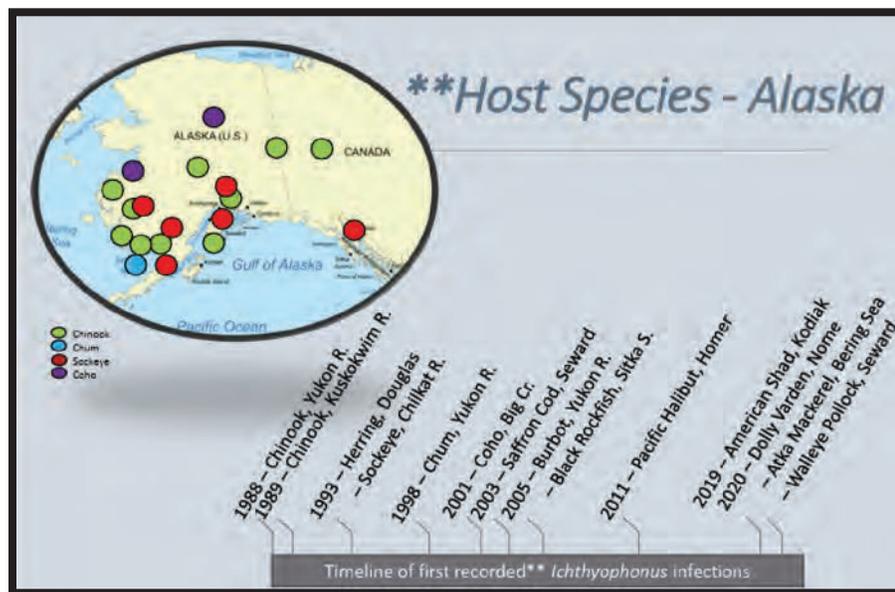


Figure 4. *Ichthyophonus* in Alaska by species and location which is primarily found in Chinook on the Yukon. *Ichthyophonus* was first identified in 1988 From ADF&G 2022

²⁷ Farley, E. V., Starovoytov, A., Naydenko, S., Heintz, R., Trudel, M., Guthrie, C., Eisner, L. R. et al. (2011). Implications of a warming eastern Bering Sea for Bristol Bay sockeye salmon

²⁸ Hunt, Jr, G. L., Coyle, K. O., Eisner, L. B., Farley, E. V., Heintz, R. A., Mueter, F., Napp, J. M et al. 2011. Climate impacts on eastern Bering Sea foodwebs: a synthesis of new data and an assessment of the Oscillating Control Hypothesis

²⁹ Marcogliese, D. J. (2008). The impact of climate change on the parasites and infectious diseases of aquatic animals. *Revue scientifique et technique* (International Office of Epizootics)

³⁰ Investigating the impacts of *Ichthyophonus* on Yukon River Chinook Salmon chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2022-2023/ayk/Investigating%20the%20impacts%20of%20Ichthyophonus%20BOF%20Final.pdf

The effects of climate change on Alaska Chinook are interacting with other stressors—ocean acidification, warming events, and shifting food-web dynamics—to amplify risks to juvenile survival and long-term productivity. For example, Sigler et al. (2016)³¹ found that ocean warming combined with acidification could lead to significant reductions in the quality and quantity of prey available, worsening the nutritional stress to juvenile salmon in the Gulf of Alaska.

In response to these challenges, there is an increasing focus on climate-resilient management strategies. Schindler et al.³² emphasized the importance of maintaining diverse populations and habitats to buffer against climate-induced changes, a concept known as the "portfolio effect." Fortunately, most of Alaska has pristine habitat and the genetic diversity of Chinook remains intact and unchanged by human encroachment.

Mitigating the impacts of climate change will be difficult, short of geo-engineering or some global event that begins to shade the northern latitudes. Continued research and adaptive management strategies will be essential in navigating the challenges posed by a warming climate. An area of research that is somewhat lacking in the Arctic that needs to be addressed is near-shore ecological studies to assess smolt abundance, growth, and prey selection during the first two months of ocean life. Physiologically, this is a stressful time for osmoregulation, prey seeking, and predator avoidance. Studies of pink salmon have shown 50% to 90% mortality in the first forty-five days at sea. Chinook first two months at sea survival may be higher but is currently unknown.

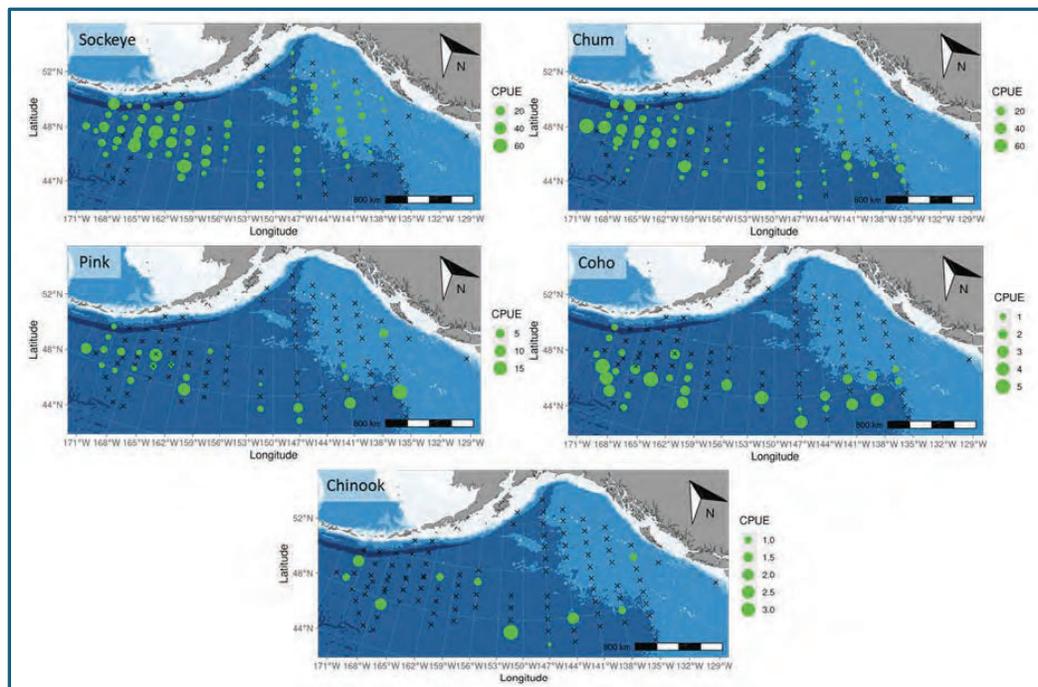
3. Trends in Size at Age, Age of Return, and Health/Condition Factors

Recent multinational research—including programs led by the International Year of the Salmon (IYS) and NOAA Fisheries—has clarified spatial and temporal patterns in Chinook salmon health, age at maturity, and size-at-age across the North Pacific and Bering Sea. The IYS deployed large ocean-going research vessels staffed by international teams from Russia, Japan, Canada, Korea, and the United States to survey salmon during and after the 2015–2018 marine heatwave, producing a broad, coordinated snapshot of salmon condition and distribution during an extreme climatic event.

³¹ Sigler, M.F., Napp, J.M., Stabeno, P.J., Heintz, R.A., Lomas, M.W., Hunt Jr., G.L., 2016. Variation in annual production of copepods, euphausiids, and juvenile walleye pollock in the southeastern Bering Sea.

³² Schindler, D. E., Hilborn, R., Chasco, B., Boatright, C. P., Quinn, T. P., Rogers, L. A., & Webster, M. S. (2010). Population diversity and the portfolio effect in an exploited species

Surface-trawl sampling conducted during the IYS Pan-Pacific Winter High Seas Expedition (2017–2022) measured lipid content, abundance, migratory pathways, and meso-zooplankton distribution, and demonstrated that health metrics vary spatially. Chinook sampled in the Gulf of Alaska generally exhibited lower energy densities than conspecifics in more westerly regions, a pattern consistent with regional differences in prey availability noted by Farley et.al. (2021)³³. Pink salmon were frequently segregated from Chinook; in over half of the IYS samples pinks were absent where Chinook were present, although co-occurrence did occur in some locations. Weitkamp L. et.al. (2025)³⁴ summarize the IYS sampling protocols and 2022 results, including genetic stock assignments for 2,364 salmon and steelhead samples, which reveal marked geographic structuring: the eastern Gulf of Alaska catches were dominated by Southeast Alaska and British Columbia/Washington chum and Pacific Northwest even-year pink stocks, whereas western Gulf catches were dominated by Russian and Japanese chum and Asian pinks. Meso-zooplankton abundance peaked in the western Gulf, coinciding with high abundance of Bristol Bay sockeye and Asian chum and pink runs. (Figure 5-7).



.Figure 5. Maps showing the distribution and abundance of sockeye, chum, pink, coho, and Chinook salmon caught by trawls across the study area in 2022. Note different scales on each map” X indicates zero catch. From Weitkamp L., et.al. 2025. Sockeye were the most abundant species followed by chum salmon.

³³ Farley, E. V., Vestfals, C. D., Leroux, S. J., & Levine, R. M. (2021). Migratory corridors and feeding hotspots of postsmolt Chinook salmon in the eastern Bering Sea.

³⁴ Weitkamp L., Pakhomov E., Howard K., and Gilk-Baumer S, 2025. Internation Year of the Salmon Pan Pacific Expedition

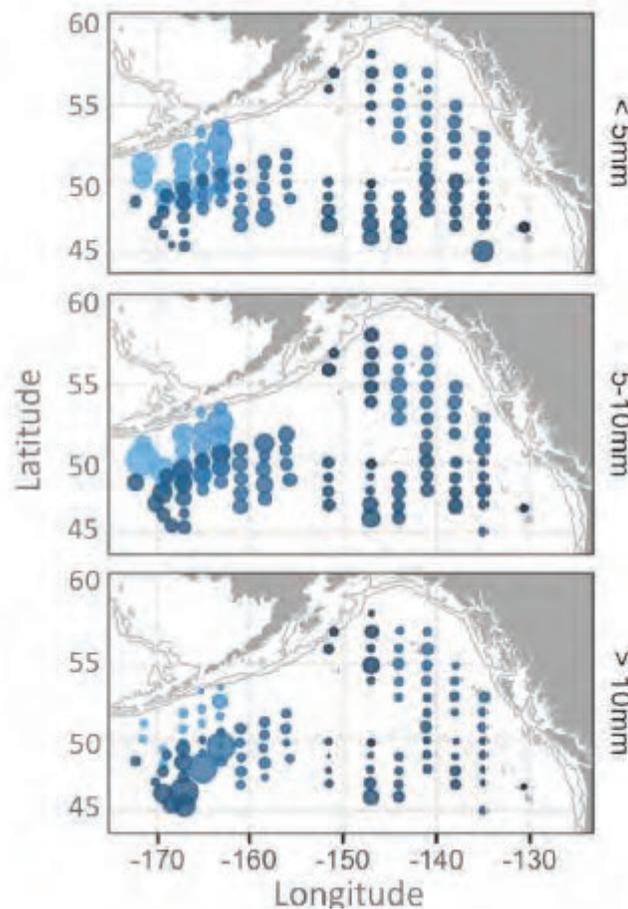


Figure 6. Distribution of meso-zooplankton size-binned biomass (dry weight in mg m^{-2}) collected using bongo nets in the top 250-300 meters during winter 2022. Bubble size indicates biomass and bubble color indicates the day of year (DOY) that the sample was collected. From Weitkamp L. et.al. 2025

Studies of early marine ecology in western Alaska indicate that size at the end of the first summer at sea is a strong predictor of subsequent marine survival. Juvenile Chinook that attain larger size during this critical early marine period possess higher energy reserves, improved condition, and greater resilience to winter mortality and predation. Consequently, favorable ocean conditions and abundant, high-quality prey during the first months at sea are essential determinants of cohort strength. Factors that influence early marine growth—temperature, prey availability and composition, and timing of ocean entry—can have outsized impacts on overall productivity and therefore merit priority in monitoring and management. Chinook salmon’s first 2 months at sea are poorly understood. Interior Alaska chum and Chinook cohorts were among the hardest hit by the 2015–2018

heatwave; observations from the high-seas surveys foreshadowed poor chum returns to the Yukon in 2021.

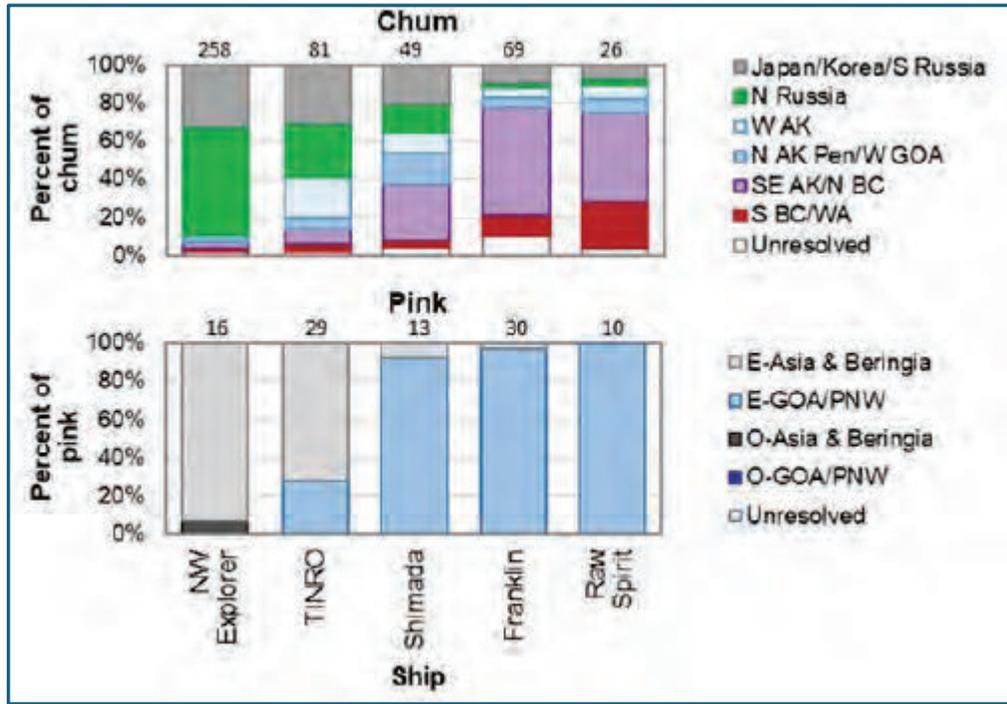


Figure 7. Genetic Stocks. Individual assignment results from the 2022 Pan Pacific Expedition to genetic stock identification reporting groups organized by species and ship. The number of salmon above each column is analyzed. Pink salmon stocks are separated between even (E) and odd (O) year groups. Abbreviations AK Alaska; BC British Columbia; WA Washington; SE Southeast Alaska; Pen Alaska Peninsula; GOA Gulf of Alaska; BB Bristol Bay; Kod Kodiak; Afog Afognak; PWS Prince William Sound; PNW Pacific Northwest. From Weitkamp L. et.al. 2025.

A consistent and concerning theme in recent work is a widespread decline in age at maturity and size-at-age for Chinook salmon. Ohlberger et. al. (2018)³⁵ documented significant declines across Alaska over the past four decades, with reductions in length-at-age of roughly 10% in some populations. Complementing this, the Ocean Salmon Ecology Program and agency collaborators

³⁵ Ohlberger, J., Ward, E. J., Schindler, D. E., & Lewis, B. (2018). Demographic changes in Chinook salmon across the Northeast Pacific Ocean. Fish and Fisheries

have reported declines in the average weight of mature Chinook returning to Alaskan rivers—up to approximately 25% since the 1980s in some systems³⁶. Siegel et al. (2017)³⁷ documented a pronounced demographic shift in the Copper River, where the proportion of 4-year-old returns rose from about 15% in the 1980s to over 50% in recent years, accompanied by a corresponding decline in older, larger spawners; four-year-olds show the most consistent declines in size, whereas two-ocean fish generally do not.

Multiple, interacting hypotheses have been advanced to explain these trends. Ocean warming and altered prey communities may accelerate early growth yet trigger earlier maturation at smaller sizes; Lewis et al.³⁸ present evidence that warmer early marine temperatures can prompt faster juvenile growth and thus earlier maturation. Shifts in forage availability—such as variability in age-0 pollock—can alter juvenile growth trajectories through both competition and direct predation, as reported by Murphy et al.,³⁹ who link changes in Bering Sea prey communities to Chinook condition and maturation timing.

Freshwater conditions also appear consequential: Feddern et al. (2024)⁴⁰ examined 25 Yukon–Kuskokwim Chinook populations and found that reduced productivity correlated with a suite of marine and riverine factors, including smaller spawner size, colder winter SSTs, warmer first-year SSTs, above-average fall peak streamflows, increased sea ice during smolt outmigration, and higher abundance of marine competitors. These results underscore how oceanic and riverine drivers, acting at different life stages, can combine to depress cohort strength.

³⁶ Howard, K. G., Catalano, M. J., Barclay, A. W., & Siddon, E. C. (2020). Changing size and age at maturity of Chinook Salmon *Oncorhynchus tshawytscha* in Alaska

³⁷ Siegel, J. E., McPhee, M. V., & Adkison, M. D. (2017). Evidence that marine temperatures influence growth and maturation of Western Alaskan Chinook salmon

³⁸ Lewis, B., Grant, W. S., Brenner, R. E., & Hamazaki, T. (2015). Changes in size and age of Chinook salmon *Oncorhynchus tshawytscha* returning to Alaska

³⁹ Murphy J., et.al. (2021). Northern Bering Sea surface trawl and ecosystem survey cruise report, 2019.

⁴⁰ Feddern, M., R. Shaftel, E. Schoen, et al. 2024. “Body Size and Early Marine Conditions Drive Changes in Chinook Salmon Productivity Across Northern Latitude Ecosystems.”

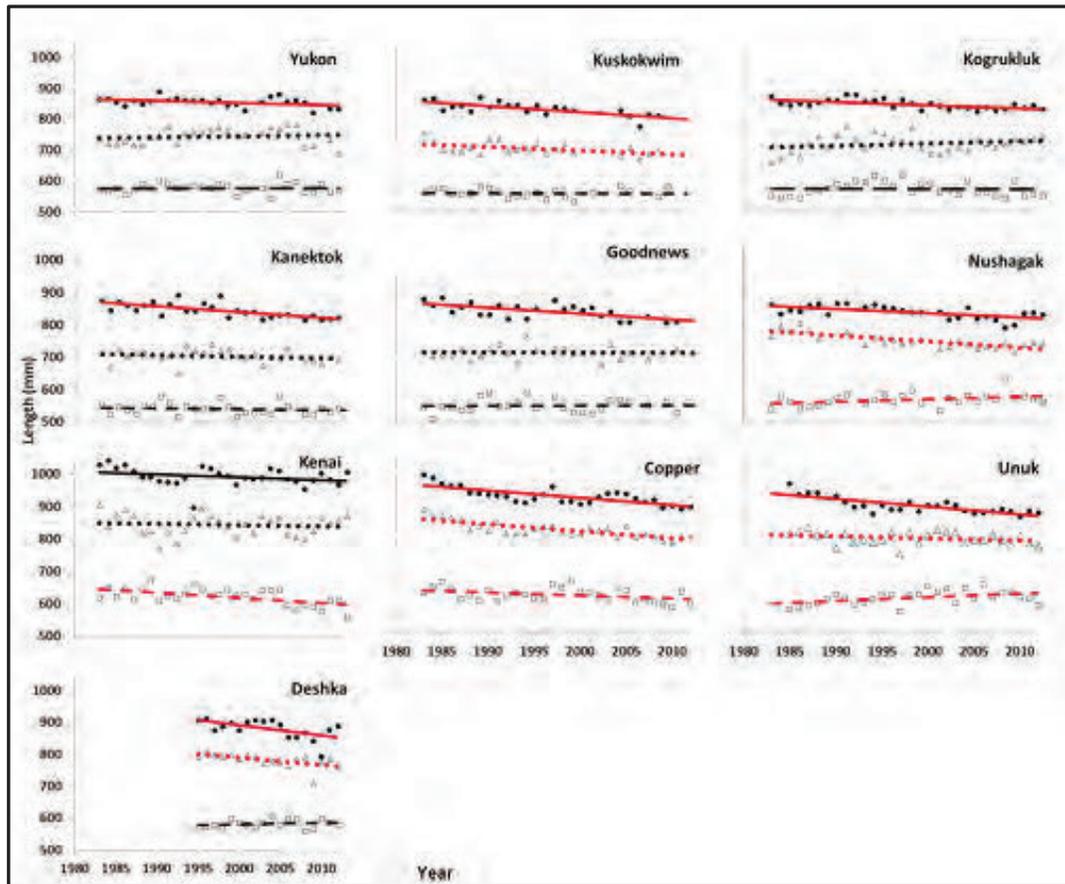


Figure 8. Linear regression of mean annual length (mm) Chinook salmon by stock, age class, and year. Closed circles ● and solid line ___ = 4-ocean, triangles ▲ and dotted line = 3-ocean, open square □ and dashed line... = 2-ocean. Red lines ___ indicate slopes significantly different from zero ($P < 0.05$) Lewis et.al. (2015). Representative Chinook stocks from across Alaska. Top line in each graph is 4-ocean Chinook from 1980 to 2014, all of which show a decline in size. 3-ocean Chinook show mixed trends, whereas the lowest line, 2-ocean Chinook show little change in size over the same period.

Ruggerone and Connors⁴¹ modeled relationships between pink salmon abundance and Chinook productivity and raised concerns that large pink cohorts, particularly when bolstered by hatchery production in odd years, might modify prey fields or impose density dependence that affects Chinook growth and maturation. However, these model-based hypotheses have been contested by more regionally focused empirical studies and do not align with geographic patterns of pink production—

⁴¹ Ruggerone, G. T., & Connors, B. M. (2015). Productivity and life history of sockeye salmon in relation to competition with pink and sockeye salmon in the North Pacific Ocean

for example, the Eastern Bering Sea produces relatively few pinks compared with the Western Bering Sea and Russian Far East. (see fig.17, pg. 40).

Empirical research increasingly applies advanced tools—high-resolution oceanography, telemetry, acoustics, genomics, environmental DNA (eDNA), and satellite/archival tagging—to resolve how changing ocean conditions, prey communities, and predator dynamics jointly shape Chinook growth, survival, and life-history trajectories. Early results from these approaches emphasize spatially explicit variation in condition, diet, and migration pathways, and they highlight the importance of integrating predator dynamics with oceanographic and prey-base studies in stock assessments and management frameworks.

In synthesis, declines in age at maturity and size-at-age are reducing productivity and resilience across Chinook populations and complicating recovery efforts. The prevailing evidence points to multiple, interacting drivers—**extreme marine heating, altered prey fields, predator interactions, and freshwater stressors**—rather than a single dominant cause. While competition from pink salmon may influence local dynamics in some regions, the balance of regional studies indicates that extreme marine conditions together with freshwater factors are principal contributors to the observed declines. Continued integration of long-term monitoring with advanced observational technologies is critical to disentangle mechanisms and to inform adaptive management.

4. Apex Predators: Salmon Sharks, Killer Whales, and Pinnipeds

Predation plays a major role in Chinook salmon survival and population dynamics throughout their life cycle.^{42,43,44} The "critical size and period" hypothesis holds that growth and condition in the initial marine months strongly determine cohort survival: fish that reach a larger size by the end of their first summer have higher overwinter survival and greater chances of maturing. While mortality rates typically decline after that first winter at sea, mounting evidence shows that changing predator dynamics can significantly alter which fish survive to return as spawners. Recent research highlights the role of apex predators, particularly salmon sharks (*Lamna ditropis*) and killer whales (*Orcinus orca*).

⁴² Sturdevant, M. V., Orsi, J. A., & Fergusson, E. A. (2012). Diets and trophic linkages of epipelagic fish predators in coastal Southeast Alaska during a period of warm and cold climate years, 1997–2011

⁴³ Beamish, R. J., & Mahnken, C. (2001). A critical size and period hypothesis to explain natural regulation of salmon abundance and the linkage to climate and climate change

⁴⁴ Duffy, E. J., & Beauchamp, D. A. (2008). Seasonal patterns of predation on juvenile Pacific salmon by anadromous cutthroat trout in Puget Sound

Salmon sharks in the North Pacific have been identified as important consumers of salmon, including Chinook. Nagasawa (1998)⁴⁵ estimated that salmon sharks could consume up to 12.6-25.2 million salmon annually in the North Pacific. Satellite-tagging studies by Carlisle et al. (2015)⁴⁶ reveal seasonal migrations of salmon sharks that closely track the distribution and timing of maturing salmon, indicating a strong top-down predator–prey coupling. Because sharks preferentially take larger individuals, increased shark predation can disproportionately remove the biggest, most fecund Chinook, shifting population size and age structure downward. Williams et al. (2018)⁴⁷ conducted a comprehensive diet study of salmon sharks in the eastern North Pacific and found that Pacific salmon, including Chinook, made up a significant portion of their diet, particularly during summer months.

Killer whales are another top predator whose population and feeding patterns can shape Chinook demographics. Orcas particularly the fish-eating "resident" ecotype, are known to be significant predators of Chinook salmon. Ford et al. (2010)⁴⁸ demonstrated that Chinook salmon are the preferred prey of resident killer whales in coastal waters of the northeastern Pacific, comprising over 70% of their diet in some areas.

Ohlberger et al. (2019)⁴⁹ published a groundbreaking study suggesting that increased predation by recovering populations of killer whales could be a major factor in the decline of Chinook salmon populations. Their research indicated that killer whale predation may be responsible for significant reductions in the abundance of large and older Chinook salmon across their range.

Building on this work, Oke et al. (2020)⁵⁰ used a modeling approach to estimate that killer whales may consume 2.7 to 5 million Chinook salmon annually in coastal waters of the northeastern Pacific. That magnitude of predation—focused on larger, more fecund individuals—has clear implications

⁴⁵ Nagasawa, K. (1998). Predation by salmon sharks (*Lamna ditropis*) on Pacific salmon (*Oncorhynchus* spp.) in the North Pacific Ocean

⁴⁶ Carlisle, A. B., Goldman, K. J., Litvin, S. Y., Madigan, D. J., Bigman, J. S., Swithenbank, A. M., ... & Block, B. A. (2015). Stable isotope analysis of vertebrae reveals ontogenetic changes in habitat in an endothermic pelagic shark

⁴⁷ Williams, S. M., McHugh, M. J., Bester, M. N., Hofmeyr, G. J. G., & Pistorius, P. A. (2018). Salmon sharks: The apex predator you've probably never heard of

⁴⁸ Ford, J. K., Ellis, G. M., Olesiuk, P. F., & Balcomb, K. C. (2010). Linking killer whale survival and prey abundance: food limitation in the oceans' apex predator?

⁴⁹ Ohlberger, J., Schindler, D. E., Ward, E. J., Walsworth, T. E., & Essington, T. E. (2019). Resurgence of an apex marine predator and the decline in prey body size

⁵⁰ Oke, K. B., Cunningham, C. J., Westley, P. A. H., Baskett, M. L., Carlson, S. M., Clark, J., Hendry, A. P., Karatayev, V. A., Kendall, N. W., Kibele, J., Kindsvater, H. K., Kobayashi, K. M., Lewis, B., Munch, S., Reynolds, J. D., Vick, G. K., & Palkovacs, E. P. (2020).

for population productivity: selective removal of big, older spawners reduces average fecundity and can accelerate shifts toward earlier maturation and smaller body size. Taken together with evidence for elevated shark predation and climate-driven reductions in growth, these findings highlight how top-down forces can interact with bottom-up stressors to reshape Chinook life histories and complicate recovery efforts. Chasco et al. (2017)⁵¹ developed an ecosystem model that incorporated apex predator effects and found that competition between recovering marine mammal populations and fisheries for Chinook salmon could be more intense than previously recognized.

Ohlberger et al. (2019) further explored the potential consequences of size-selective predation by killer whales on Chinook salmon populations. They found that intense predation on larger, older fish could lead to evolutionary changes in salmon life history, potentially contributing to the observed trends of earlier maturation and smaller size at age in Chinook populations. Numerous studies document the decline of size at age and decline of older-age chinook.

Manishin et.al. (2021)⁵² used Salcha River Chinook as an indicator for Yukon River populations and found striking shifts in age structure, especially in northern Alaska where ocean-age-5 and older fish have become rare or absent. Their modeling indicates substantially higher mortality after the first winter at sea than previously estimated—an additional ~38% mortality among Chinook entering their third ocean year. The authors explicitly link their results to growing evidence of intense predation, noting consistency with studies implicating salmon sharks and marine mammals (including killer whales) as important sources of mortality.

These findings are supported by tagging and observational work. Seitz et.al. (2019)⁵³ using satellite tags, documented predation on ocean-age-3 Chinook by salmon sharks, providing direct empirical evidence that predators are removing mature, older fish at sea. Together, the modeling and tagging studies suggest that selective removal of larger, later-maturing individuals by predators can help explain the observed declines in size-and-age structure and the reduction in older age classes. In 2025, Alaska East Borough initiated a Chinook satellite tagging program; only three Chinook were tagged, one of which was consumed by a salmon shark several days later (personal communication)⁵⁴

⁵¹ Chasco, B. E., Kaplan, I. C., Thomas, A. C., Acevedo-Gutiérrez, A., Noren, D. P., Ford, M. J., ... & Ward, E. J. (2017). Competing tradeoffs between increasing marine mammal predation and fisheries harvest of Chinook salmon

⁵² Manishin, K. A., Cunningham, C. J., Westley, P. A., & Seitz, A. C. (2021). Can late stage marine mortality explain observed shifts in age structure of Chinook salmon?

⁵³ Seitz, A. C., Courtney, M. B., Evans, M. D., & Manishin, K. (2019). Pop-up satellite archival tags reveal evidence of intense predation on large immature Chinook salmon (*Oncorhynchus tshawytscha*) in the North Pacific Ocean

⁵⁴ Personal communication, Levy C. August 2025.

Pinniped predation is also affecting Chinook populations. Stellar sea lions, harbor seals, and grey seals have increased significantly over the past two decades while chinook populations are showing declines.

NOAA fisheries' 2020⁵⁵ report for the Western Distinct Population Segment (WDPS) Steller sea lion (*Eumetopias jubatus*) describes an annual population growth rate of 2.14 for non-pups and 1.78 for pups. More significantly along the migratory corridor of Chinook salmon from SE Alaska to the Western segment boundary on the Alaska Peninsula, growth rates are higher – 3.01 to 4.2 for non-pups, a rate that would double the population in roughly twenty years. NOAA's aggregate data for 2002-2017 estimate an increase from 30,000 to over 40,000 individuals. Since the 1970's new rookeries have been established in SE Alaska at Hazy Island in 1979, White Sisters in 1990, and Graves Rocks in the late 1990's further indicating population expansion (see Figures 9 & 10).

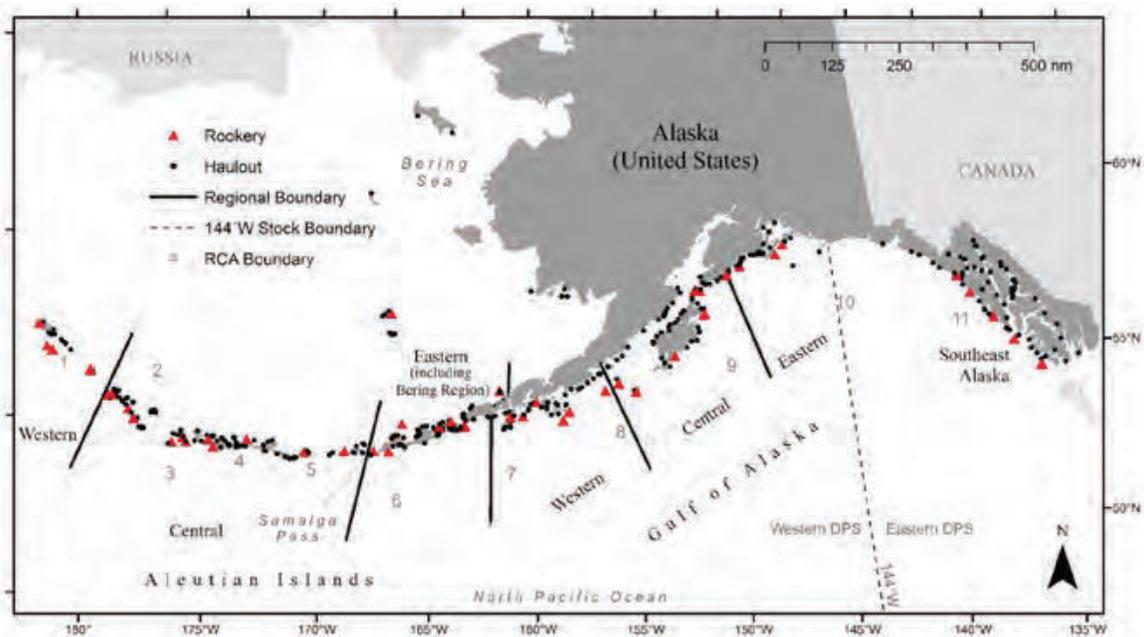


Figure 9. Map of Alaska showing the NMFS Steller sea lion survey regions, rookery cluster areas, rookery, and haul out locations. The line (144°W) separating the eastern and western DPSs also known as Cape Suckling.. Reproduced from Frit et.al. (2016c). NOAA Fisheries

⁵⁵ NOAA Fisheries, 2020. Western Distinct Population Segment Steller sea lion *Eumetopias jubatus* 5-Year Review : Summary and Evaluation

Area	Year Interval	Annual Rate of Change: Non-Pups	-95% CI	+95% CI	Annual Rate of Change: Pups	-95% CI	+95% CI
Total U.S. Western DPS	2002-2017	2.14	1.49	2.78	1.78	1.19	2.34
Eastern Gulf	2002-2017	4.21	2.04	6.26	2.65	0.99	4.63
Central Gulf	2002-2017	3.90	2.88	4.98	3.28	1.73	4.84
Western Gulf	2002-2017	3.01	1.50	4.56	3.65	2.31	5.12
Eastern Aleutians	2001-2016	1.75	0.37	3.13	3.10	2.13	4.00
Central Aleutians	2001-2016	-0.67	-1.71	0.30	-1.29	-2.23	-0.16
Western Aleutians	2001-2016	-6.92	-8.41	-5.41	-7.52	-8.68	-6.59

Figure 10. Annual rates of change (%y⁻¹ with 95% credible intervals) in counts of Stellar sea lion non-pups and pups in the U.S. portion of the WDPS modeled using ageTrend (with data from 1978 to 2017). Regional rates were calculated in the Gulf of Alaska regions for 2002-2017 and 2001-2016 for the Aleutian Island regions. Table reproduced from table provided by K. Sweeney, MML. NOAA Fisheries

NOAA Fisheries notes that pinniped predation is not identified as the primary driver of Chinook declines but increased pinniped numbers in regions that overlap critical Chinook migration routes or spawning areas, particularly in the Gulf of Alaska, could intensify predation pressure on vulnerable Chinook stocks.

Chasco et.al. (2017)^{56,57} found that from 1975 to 2015 the biomass of Chinook salmon consumed by killer whales and pinnipeds increased from 6,100 to 15,200 metric tons, while in that same 40 year period human harvest of Chinook declined from 16,400 to 9,600 metric tons. Killer whales consumed the largest biomass, but seals consumed the greatest number of individual Chinook. The authors' key finding is that over the past 40 years Chinook total removals (harvest + consumption) have been driven primarily by pinnipeds and killer whales (see Figure 11). In a follow-up paper the authors conclude that the Marine Mammal Protection Act (1972) has been more successful than anticipated: killer whales and pinnipeds have recovered dramatically, with negative consequences for Chinook, coho, and sockeye populations.

⁵⁶ Chasco, B. E., Kaplan, I. C., Thomas, A. C., Acevedo-Gutiérrez, A., Noren, D. P., Ford, M. J., ... & Ward, E. J. (2017). Competing tradeoffs between increasing marine mammal predation and fisheries harvest of Chinook salmon.

⁵⁷ Chasco, B. et al. (2017). Estimates of Chinook salmon consumption in Washington State inland waters by four marine mammal predators from 1970–2015

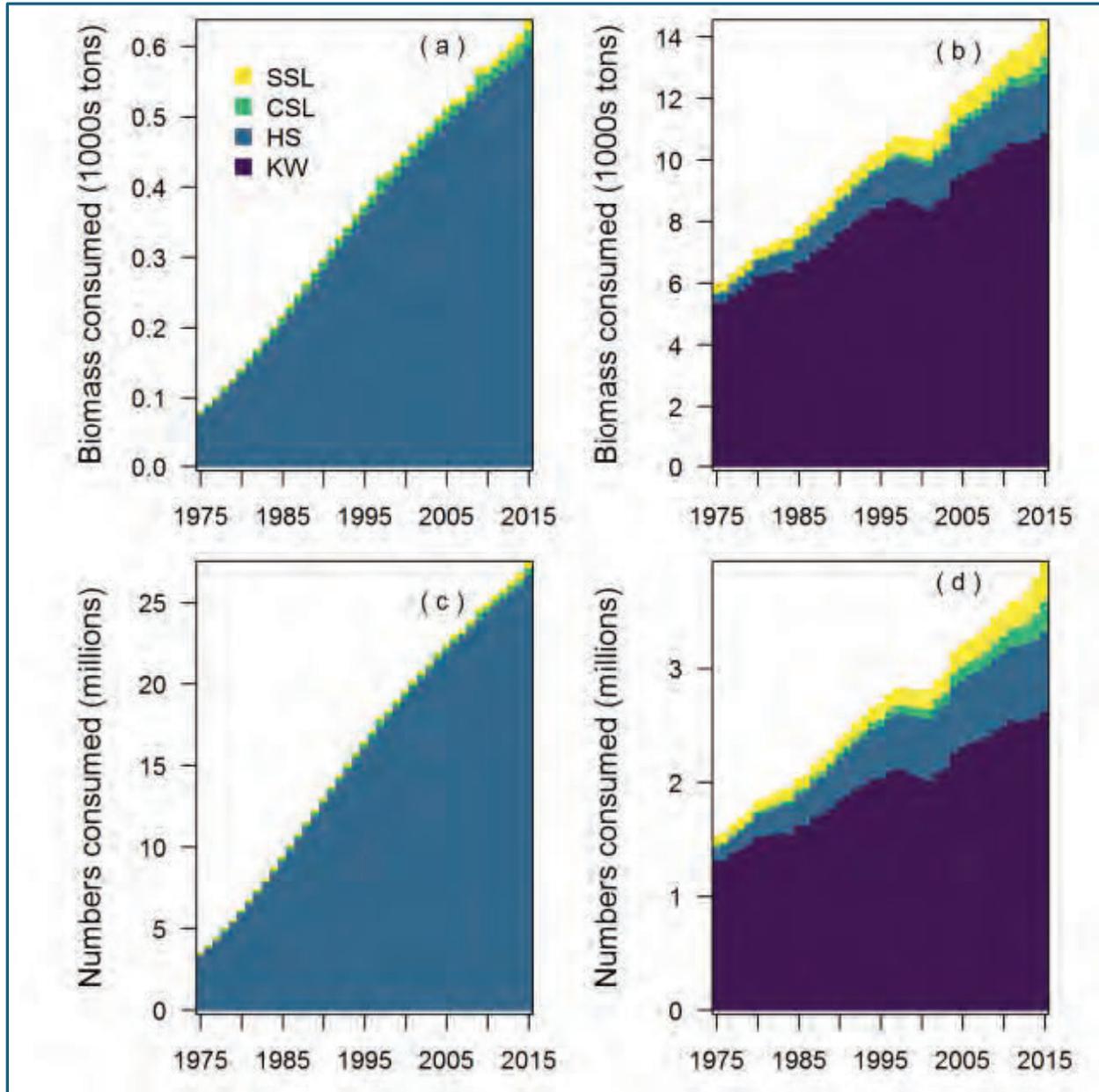


Figure 11. Consumption of Chinook salmon biomass((a) juveniles, (b) adults ocean age one and greater) and total numbers ((c) juveniles, (d) adults ocean age one and greater) by killer whales (KW), harbor seals (HS), California sea lions (CSL), and Stellar sea lions (SSL) from 1975 to 2015, Consumption is summed across all eight model areas. Figure from Chasco B. 2017. Note that the scales are different for each category. In all cases biomass of juveniles and adult Chinook consumed and total numbers of juvenile and adult Chinook consumed have more than doubled during this 40-year period.

Washington State Academy of Science 2022⁵⁸ convened an expert panel to assess pinniped abundance, the impact of pinniped predation on salmon populations, trophic relationships, and adaptive management options including lethal and non-lethal methodologies. The committee reviewed Chasco et al. (2017), NOAA fisheries research & monitoring, and much of the contemporary science cited in this section on apex predators.

The panel concluded that pinnipeds are primarily salmonivorous. Some individuals specialize by targeting smolts, while others preferentially target adult Chinook. The report's principal finding states:

“.....the preponderance of evidence supports the hypothesis that current populations of pinnipeds are a contributing factor in the decline and depression of salmon populations in Washington State waters.”

That conclusion does not automatically imply pinniped predation is equally significant in Alaska. However, NOAA's WDPS (2020) documents many of the same trends—substantial pinniped population increases, rookery expansion, elevated consumption, and regional Chinook declines—indicating pinnipeds are likely a contributing factor in Alaskan waters as well.

Converging model results and field observations suggest that post-first-winter mortality—driven in part by apex predators (killer whales, salmon sharks, seals, & Stellar sea lions)—may be an underappreciated driver of Chinook productivity declines. This underscores the need to integrate predator dynamics with oceanographic and prey-base studies when diagnosing population changes and designing management responses.

Future research directions include improving our understanding of the spatial and temporal dynamics of apex predator-prey interactions, quantifying and refining the relative impacts of different predator species on Chinook salmon populations.

5. Marine Food Dynamics

Recent research has highlighted the importance of marine food availability as a critical factor influencing the growth, survival, and productivity of Chinook salmon populations. Changes in ocean

⁵⁸ Washington State Academy of Science 2022. Pinniped predation on salmonids in Washington Portions of the Salish Sea and Outer Coast

conditions and food web dynamics can significantly impact salmon health and condition. Recent marine heat waves in the Bering Sea and North Pacific Ocean have had significant impacts on Chinook salmon populations. These shifts are repeatedly linked to poorer fish condition, slower growth, and higher overwinter mortality for Chinook cohorts that enter a changed ocean environment.

Yasumiishi et al. (2020)⁵⁹ reported significant declines in the body condition of juvenile Chinook and chum salmon in the eastern Bering Sea during the marine heat wave years. They found that salmon had lower lipid content and reduced energy density compared to previous years, indicating poorer feeding conditions and a higher risk of overwinter mortality. These health condition declines likely translate into reduced early-marine survival and weaker cohort strength for affected years.

Building on this work, Murphy et al. (2021)⁶⁰ examined the impacts of the marine heat wave on the distribution and abundance of forage fish species that are important prey for salmon. They discovered that warming waters led to northward shifts in the distribution of key prey species, potentially creating a mismatch between salmon migration patterns and food availability.

Farley et al. (2020)⁶¹ conducted comprehensive surveys in the Gulf of Alaska during the International Year of the Salmon expeditions. Their findings revealed that Chinook salmon caught during the marine heat wave years had significantly lower energy reserves compared to historical averages. This reduction in lipid stores likely drives salmon survival, maturation timing, and reproductive success, reinforcing the work of Yasumiishi and Murphy et.al.

These studies collectively demonstrate how extreme ocean conditions can exacerbate food limitations for Chinook and other salmon species, highlighting the vulnerability of these populations to climate-driven changes in marine ecosystems.

Shuntov and Temnykh (2011)⁶² conducted extensive surveys in the western Bering Sea and provided valuable insights into the marine ecology of Pacific salmon, including Chinook. Their work

⁵⁹Yasumiishi, E. M., Farley, E. V. Jr, Maselko, J., Aydin, K. Y., Kearney, K. A., Hermann, A. J., Ruggerone, G. T., Howard, K. G., and Strasburger, W. W. 2020. Differential north–south response of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) marine growth to ecosystem change in the eastern Bering Sea, 1974–2010

⁶⁰Murphy, James & Howard, Kathrine & Garcia, Sabrina & Moss, Jamal & Strasburger, Wesley & Sewall, Fletcher & Lee, Elizabeth. (2021). Juvenile Yukon River Chinook Salmon in a Warming Arctic..

⁶¹Farley, E.V., Jr., J.M. Murphy, K. Cieciel, E.M. Yasumiishi, K. Dunmall, T. Sformo, and P. Rand. 2020. Response of Pink salmon to climate warming in the northern Bering Sea.

⁶²Shuntov, V. P., & Temnykh, O. S. (2011). Concerning modern concepts of the role of Pacific salmon in the ecosystems of the far eastern seas and the north Pacific Ocean

suggested that changes in ocean productivity and zooplankton community structure could have substantial effects on salmon feeding and growth. They noted that while overall biomass of forage resources might not have decreased significantly, shifts in the composition and distribution of prey species could create localized food limitations for salmon.

Shuntov et al. (2017)⁶³ extended this body of work by examining long-term shifts in the nekton community of the western Bering Sea and North Pacific and their links to salmon variability. They found that salmon abundance closely tracked changes in key prey groups—particularly small pelagic fishes and squid—illustrating how shifts at lower trophic levels propagate up the food web. Their results underscore that the ocean’s carrying capacity for salmon is not static but fluctuates with community composition and productivity, which are themselves sensitive to climate variability and marine heat events. Taken together with findings on reduced salmon energy density and altered prey fields during warm years (e.g., Yasumiishi et al. 2020), Shuntov et al. highlight the need to account for dynamic trophic interactions when assessing salmon production.

Daly et al. (2017)⁶⁴ examined juvenile Chinook diets off the coasts of Oregon and Washington and found that during years of poor ocean conditions—marked by reduced upwelling and warmer temperatures—diet diversity and prey quality declined. Reduced prey diversity and a shift toward lower-energy items imply nutritional stress during a critical growth window, which can reduce size at the end of the first summer and lower overwinter survival. This work reinforces findings from the Bering Sea and Gulf of Alaska: climate-driven changes in ocean physics and productivity can create bottom-up food limitations that directly reduce juvenile growth and cohort strength. Daly et al. highlights the value of integrated monitoring of ocean conditions, prey fields, and juvenile condition to anticipate poor survival years.

Ruggerone and Irvine (2018)⁶⁵ argue that increased abundance of pink and chum salmon, partly due to large-scale hatchery production, might be leading to food limitations for other salmon species, including Chinook. Their modeling speculates that competition from abundant pink and chum may

⁶³ Shuntov, V., O. Temnykh, and O. Ivanov. 2017. On the persistence of stereotypes concerning the marine ecology of Pacific salmon (*Oncorhynchus* spp.).

⁶⁴ Daly, E. A., Brodeur, R. D., & Auth, T. D. (2017). Anomalous ocean conditions in 2015: impacts on spring Chinook salmon and their prey field.

⁶⁵ Ruggerone, G. T., & Irvine, J. R. (2018). Numbers and biomass of natural-and hatchery-origin pink salmon, chum salmon, and sockeye salmon in the North Pacific Ocean, 1925-2015

interact with poor ocean conditions to exacerbate Chinook declines in some systems. However, to reiterate by contrast, Daly and Shuntov’s empirical work emphasizes bottom-up forcing,

Hertz et al. (2016)⁶⁶ used stable isotope analysis to examine the marine diets of Chinook salmon across the North Pacific and found pronounced regional and temporal differences in prey composition. Their results underscore that local oceanographic conditions strongly shape food availability, so populations occupying distinct oceanic niches experience different prey regimes and nutritional risks. Consequently, some Chinook stocks—those with more restricted or specialized ocean distributions—are likely more vulnerable to food-limitation during poor ocean years, highlighting the need for regionally targeted monitoring.

NOAA Fisheries research indicates that warming in the Bering Sea and Gulf of Alaska is shifting the timing and spatial distribution of zooplankton blooms, increasing the risk of a trophic mismatch between smolt ocean entry and peak prey availability (Yasumiishi et al., 2020)⁶⁷. These changes—together with altered prey composition and reduced energy density of available forage—create acute early-marine stress for juvenile Chinook, undermining growth during the critical first summer at sea. Work from the Ocean Salmon Ecology Program corroborates these findings, documenting early-marine stressors in Yukon Chinook that are consistent with seasonal mismatches and lower prey quality.

Ohlberger et al. (2018)⁶⁸ proposed that size-selective mortality—driven by a combination of food limitations and elevated predation—helps explain the widespread decline in Chinook size-at-age. When high-quality prey is scarce, juveniles grow more slowly and cohorts enter the ocean in poorer condition; those nutritional stresses, combined with predators that preferentially remove larger fish, can favor earlier maturation at smaller sizes. Collectively, these and related studies show how extreme ocean conditions amplify food-limitation effects and make Chinook populations especially vulnerable to climate-driven changes in marine ecosystems.

⁶⁶ Hertz, E., Trudel, M., Brodeur, R. D., Daly, E. A., Eisner, L., Farley Jr, E. V., ... & Harding, J. A. (2015). Continental-scale variability in the feeding ecology of juvenile Chinook salmon along the coastal Northeast Pacific Ocean

⁶⁷ Yasumiishi, E. M., Farley, E. V. Jr, Maselko, J., Aydin, K. Y., Kearney, K. A., Hermann, A. J., Ruggerone, G. T., Howard, K. G., and Strasburger, W. W. 2020. Differential north–south response of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) marine growth to ecosystem change in the eastern Bering Sea, 1974–2010

⁶⁸ Ohlberger, J., Ward, E. J., Schindler, D. E., & Lewis, B. (2018). Demographic changes in Chinook salmon across the Northeast Pacific Ocean. *Fish and Fisheries*, 19(3), 533-546

Interactions with pink salmon appear to be a minor factor in many regions: recent work by Yasumiishi et.al.(2024)⁶⁹ has not found consistent negative effects and in some analyses shows weak or even slightly positive associations, reinforcing that bottom-up ocean conditions and predator dynamics are the primary concerns.

Marine zooplankton dynamics associated with Prince William Sound pink salmon are consistent with findings from Yasumiishi and Shutov. Cooney (1993)⁷⁰ estimated pink fry consumption in PWS in the early 1990s—when pink production was comparable to 2025 levels—at 0.6–8% of total herbivore production and 2.0–32.2% of microzooplankton production. Those estimates assumed no pink salmon mortality; typically, early marine mortality is 50 to 90% within the first forty-five days (Parker, 1968)⁷¹. Applying realistic fry mortality reduces consumption to roughly 0.8-3.2% for herbivore production and 3.0-10.0% of microzooplankton - results are consistent with research done by Orsi et.al.⁷² in Southeast Alaska.

Boldt et.al. (2002)⁷³ used a bioenergetic approach in PWS through a bioenergetic approach in the late 1990’s and estimated that aggregate primary and secondary (zooplankton) consumption by pink salmon was about 0.06-0.45% of annual zooplankton biomass for near shore and offshore areas. If standing zooplankton biomass were held constant for a ten-day period, pink salmon consumption would be roughly 15% of calanoid copepods and 19% of amphipods. However, calanoid copepods and amphipods are not static; reproduction, advection and upwelling continually replenish prey.

Prey	Density (#/m ²)	Wet weight (×10 ⁻³ g)	Standing stock (g C/m ²)	Pink salmon consumption (% of standing stock)
Large copepods	265.3928	0.6160	0.0093	1.51
Amphipods	31.8471	0.3910	0.0007	1.90
Cladocerans	7,452.2293	0.0700	0.0297	0.45
Larvaceans	2,813.1635	1.4870	0.2384	0.05

Figure 12. Estimates of zooplankton density (Purcell 2000), standing stock, and pink salmon consumption, assuming the area of PWS is 8.8x10⁹ m² (Grant and Higgins 1910), and a carbon to wet weight conversion factor of 0.0898

⁶⁹ Yasumiishi, E. M., C. J. Cunningham, E. V. Farley, L. B. Eisner, W. W. Strasburger, J. A. Dimond, and P. Irvin. 2024. Biological and environmental covariates of juvenile sockeye salmon distribution and abundance in the southeastern Bering Sea, 2002-2018

⁷⁰ Cooney R. T., 1993 A theoretical evaluation of the carrying capacity of Prince William Sound, Alaska, for juvenile Pacific salmon

⁷¹ Parker, R.R. 1968. Marine mortality schedules of pink salmon of the Bella Coola River, Central British Columbia

⁷² 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

⁷³ Boldt, J.L., Halderson, L.J., 2002. A bioenergetics approach to estimating consumption of zooplankton by juvenile pink salmon in Prince William Sound, Alaska.

for large calanoid copepods, 0.0949 for amphipods, and 0.0844 for other prey (Omori 1969). Large copepod, amphipod, cladoceran (Boldt 2001) and larvacean (K. Coyle, U of Alaska Fairbanks.

Boldt et.al. conclude: “This study indicates that juvenile pink salmon did not consume a large proportion of zooplankton biomass or production in PWS.”

A 2005 study by Cross et.al.⁷⁴, using bioenergetics modelling examined instantaneous zooplankton biomass and pink salmon consumption in near shore and offshore regions of PWS and estimated pink salmon consumed 64-107% of their theoretical maximum prey consumption – values not representative of open-ocean dynamics. The researchers acknowledged that PWS is not a closed system and “advection and production of zooplankton continually replenish the forage base”.

Collectively, these studies indicate that while local and short-term consumption by pink salmon can be substantial, longer-term and basin-scale estimates typically indicate only a modest proportion of total zooplankton production is consumed. Considering the importance of zooplankton standing stock dynamics to wild and enhanced salmon, PWSAC has maintained consistent zooplankton sampling at all release sites for decades. The PWSAC data shows variable but consistently high spring zooplankton densities.

6. Marine Harvest, Interception, and Bycatch of Chinook Salmon

Chinook salmon are subject to directed harvests such as sport & sport charter, and S.E. troll; and non-directed or incidental marine harvests such as seine, gillnet, or trawl fisheries. Interception fisheries are defined as Chinook harvested in marine or freshwater fisheries prior to arriving at its natal spawning grounds. Chinook harvested in marine waters or downriver in the Yukon or Stikine Rivers on their migration to spawning grounds, tens of miles or hundreds of miles away, are considered interception fisheries, or sometimes called mixed stock fisheries.

Commercial and recreational fisheries targeting Chinook salmon in marine waters are important economic drivers in many Alaskan coastal communities. These fisheries have faced increasing restrictions in recent years due to declining Chinook abundance. Purse seine fisheries in S.E. Alaska, and Kodiak are required to release incidental harvest of Chinook 28” in length or greater, often coined non-retention.

⁷⁴ Cross, A.D., D.A. Beauchamp, K.W. Myers, and J.H. Moss. 2005. Consumption demand of juvenile pink salmon in Prince William Sound and the coastal Gulf of Alaska in relation to prey biomass

The Pacific Salmon Commission (PSC) plays a crucial role in Chinook salmon harvest in the Pacific Northwest and Alaska. The PSC's Chinook Technical Committee (2020)⁷⁵ reported that coast-wide Chinook salmon catches have generally declined since the 1970s and 1980s, with some fluctuation. This decline is largely due to reduced abundance and stricter harvest regulations aimed at protecting vulnerable populations.

Chinook salmon harvests have been particularly low in recent years. The Alaska Department of Fish and Game (2021)⁷⁶ reported that commercial harvests of Chinook salmon in 2020 were among the lowest on record, continuing a trend of below-average productivity over the past decade.

The Bering Sea pollock fishery has been a focus of bycatch reduction efforts. Stram and Ianelli (2015)⁷⁷ provided a comprehensive review of Chinook salmon bycatch management in this fishery, including the implementation of catch limits and incentive programs to reduce bycatch. These measures have generally been effective in reducing but not eliminating Chinook bycatch, with annual catches decreasing from peak years of over 120,000 fish in the early 2000s to an average of around 20,000 in recent years (North Pacific Fishery Management Council, 2022)⁷⁸.

However, concerns remain about the impacts of this bycatch on specific salmon populations. Guthrie et al. (2021)⁷⁹ used genetic stock identification techniques to determine the origins of Chinook salmon caught as bycatch in the Bering Sea. They found that while the bycatch included salmon from a wide geographic range, some vulnerable stocks, particularly from western Alaska, were disproportionately represented in some years.

Chinook salmon bycatch also occurs in Gulf of Alaska groundfish fisheries, including those targeting pollock, Pacific cod, and rockfish. Whittle et al. (2019)⁸⁰ analyzed bycatch patterns in these fisheries and found significant variability both spatially and temporally. The North Pacific Fishery

⁷⁵ Pacific salmon commission chinook technical committee report, Annual Report of catch and escapement for 2019. TCChinook (20)-01

⁷⁶ Alaska Department of Fish and Game. (2021). Chinook Salmon Stock Status and Research in Southeast Alaska. Technical Report.

⁷⁷ Stram, D. L., & Ianelli, J. N. (2015). Evaluating the efficacy of salmon bycatch measures using fishery-dependent and -independent data

⁷⁸ North Pacific Fisheries Management Council Report 2022. //npfmc.b-cdn.net/wp-content/PDFdocuments/bycatch/BeringSeaSalmonBycatchFlyer.pdf

⁷⁹ Guthrie, C. M., Nguyen, H. T., Guyon, J. R., Cunningham, C. J., Hamon, T. R., & Templin, W. D. (2021). Genetic stock composition analysis of Chinook salmon bycatch in the 2019 Bering Sea groundfish fisheries.

⁸⁰ Whittle, J. A., Fissel, B. E., Dalton, M. G., Garber-Yonts, B. E., Lee, S. T., & Kasperski, S. (2019). Socioeconomic effects of Chinook salmon bycatch management measures in the Gulf of Alaska groundfish trawl fishery.

Management Council has implemented bycatch limits for these fisheries as well, with closures occurring if limits are reached.

High seas driftnet fisheries historically caught significant numbers of Chinook salmon, but these fisheries were largely banned in the early 1990s. However, IUU (Illegal, Unreported, and Unregulated) fishing remains a concern. A study by Pramod et al. (2014)⁸¹ estimated that IUU fishing in the North Pacific could still be impacting salmon populations, though quantifying these impacts remains challenging.

Chinook directed fisheries, bycatch, and interception fisheries are regulated and well documented by harvest number and genetic stock groups. These fisheries have been active for decades and in some cases over a hundred years and these relatively small harvests compared to predation by apex predators, do not explain the decline in Chinook over the past two decades. In S.E. Alaska several Chinook stocks are rebounding and have been removed from stock of concern status. It may be that the negative Pacific Decadal Oscillation (PDO)⁸² is swinging back to a more positive productivity regime, although the PDO index is thought to be less predictive in the advent of large marine heat waves, strong El Ninos, and changes in the North Pacific Gyre Oscillation.

7. Freshwater Habitat Changes

Freshwater habitats in most of Alaska remain largely pristine, with a few notable exceptions- such as the northern pike invasion in Cook Inlet and localized mining impacts along remote stretches of the Yukon River, as documented in the State of Alaska response to WFC⁸³. Even so, Chinook salmon face growing challenges from changing freshwater temperatures.

Recent studies report a range of effects in both spawning and rearing areas, including warmer summer temperatures that can reduce embryo and juvenile survival, promote earlier fry emergence and smolt outmigration which increase the risk of mismatches with ocean prey. Additionally, altered flow regimes from changing precipitation and glacial melt degrade rearing habitat (Howard et al.

⁸¹ Pramod, G. & Nakamura, Katrina & Pitcher, Tony J. & Delagran, Leslie, 2014. Estimates of illegal and unreported fish in seafood imports to the USA

⁸² Mantua, N. J., S. R. Hare, Y. Zhang, J. M. Wallace and R. C. Francis (1997): A Pacific interdecadal climate oscillation with impacts on salmon production.

⁸³ State of Alaska letter September 6, 2024 Request for information, 90-Day Finding on a Petition to List Gulf of Alaska. Page 22.

2015)⁸⁴. These freshwater stressors, while occurring against a backdrop of generally intact habitat, compound marine-driven pressures and contribute to reduced Chinook productivity. Howard et.al. also noted increased summer water temperatures, which can exceed thermal tolerances for Chinook salmon, particularly in low-flow conditions.

The retreat of glaciers and loss of snowpack are reducing the buffering of stream flows and temperatures, resulting in more extreme low-flow events during summer months. This can lead to the drying of critical spawning and rearing habitats, as documented by von Biela et al. (2020)⁸⁵ in their study of the Knik River system.

von Biela et.al. (2020)⁸⁶ in another paper that year- *Evidence of prevalent heat stress in Yukon River Chinook salmon* reached three major clear conclusions: (1) water temperatures around 18°C approximate a threshold for heat stress in adult Chinook during the spawning period; (2) summer water temperatures routinely exceeded that threshold each July over the last two decades; and (3) molecular indicators—gene transcription patterns and protein expression—demonstrate widespread physiological heat stress in those fish (see map next page).

Subsequent observations by von Biela, Feddern, and colleagues document lethal or near-lethal spawning temperatures in multiple interior systems, reinforcing their findings. These temperature extremes offer a more direct mechanistic explanation for the pronounced Chinook and chum declines in the Yukon–Kuskokwim drainages than other hypotheses: acute heat can cause immediate mortality, while sublethal exposure reduces egg viability, lowers adult fecundity and condition, and degrades next-generation fitness through lower egg deposition and poorer offspring survival. Importantly, interior and northern Alaska rivers are warming faster than much of the rest of the state, increasing the frequency and severity of temperature exceedances during the critical spawning window. Taken together, the physiological, molecular, and observational evidence from von Biela and collaborators elevates freshwater thermal stress as a primary, geographically concentrated driver of population collapse in these interior systems—and a priority target for monitoring, vulnerability assessment, and adaptive management.

⁸⁴ Howard, K. G., Dubois, L., & Falke, J. A. (2015). Assessing the thermal resilience of Alaska's Chinook salmon populations

⁸⁵ von Biela, V. R., Scheuerell, M. D., Buhle, E. R., & Hinton, S. E. (2020). Habitat metrics indicate juvenile Chinook salmon are more limited by degraded spawning habitats than early marine conditions.

⁸⁶ von Biela, V. R., Bowen, L., McCormick, S. D., Carey, M. P., Donnelly, D. S., Waters, S., Regish, A. M., Laske, S. M., Brown, R. J., & Larson, S. (2020). Evidence of prevalent heat stress in Yukon River Chinook salmon.

Murdoch et al. (2024)⁸⁷ in their study *Multiple environmental drivers across life stages influence Yukon River Chinook salmon productivity* corroborate von Biela's findings further up the Yukon River in Canada. Using a multi-stage analysis, they show that positive drivers of Yukon Chinook productivity include robust snowpack and cooler winter freshwater temperatures, while the strongest negative influences are wetter rearing-season precipitation, warmer upriver temperatures, accumulated rearing degree-days, and earlier ice-out. Importantly, pink salmon abundance ranked among **the least influential variables** in their models. Together with von Biela's physiological and molecular evidence of heat stress, Murdoch et al. strengthen the conclusion that freshwater thermal and hydrological changes—rather than interspecific competition with pinks—are primary drivers of the severe productivity declines in Yukon River Chinook.

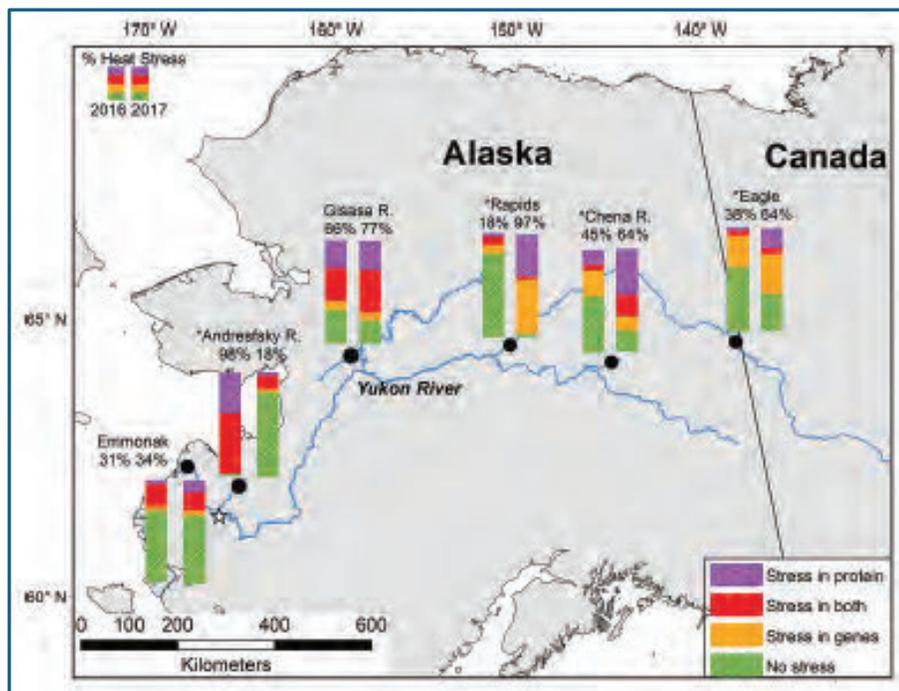


Figure 13. A map depicting the percentage of Chinook salmon in each capture location (black circles) and year with evidence of heat stress. Paired stacked bar charts reflect the heat stress classifications from gene transcript and HSP70 protein for fish captured in summer 2016 (left) and 2017 (right). Fill reflects the proportion of individuals in each of the four heat stress categories: hatched green – no evidence of heat stress in either gene transcript or HSP70 protein; gold – heat stress identified only in gene transcript; red – heat stress identified in gene transcript and elevated HSP70 protein; and purple – heat stress identified only by elevated HSP70 protein. Numbers near each bar are the sum across the three categories that identified heat stress presence. From von Biela 2020⁷³. **Extreme high heat stress** in 2016 for Andreasfshy (98%), Gisasa (66%), and in 2017 for Gisasa (77%), Rapids (97%), and Chena (64%).

⁸⁷Murdoch, A., B.M. Connors, N.W.R. Lapointe, J. Mills Flemming, S.J. Cooke, and C. Mantyka-Pringle, Multiple environmental drivers across life stages influence Yukon River Chinook salmon productivity 2024.

In addition to climate change, human activities are transforming some freshwater habitats in ways that impact Chinook salmon. These impacts may be relatively small in the context of Alaska’s mostly pristine habitat, but the results can be locally important. A report by the Alaska Department of Fish and Game highlighted several key threats, including urbanization, resource extraction, and infrastructure development, pointing out that these can degrade riparian areas, increase sedimentation, and alter hydrology.

Dunker et al. (2018)⁸⁸ and Deacy et al. (2021)⁸⁹ document how localized, human-induced habitat alterations—river modification, resource extraction, land-use change, and invasive species—have harmed Chinook in Alaskan watersheds. These changes reduce spawning success, lower juvenile survival, and alter migration timing and pathways, which can compound climate-driven stresses and increase vulnerability for already at-risk populations.

Mining in the Yukon River basin poses a localized but important threat to Chinook spawning and rearing habitat. Schoen et al. (2017)⁹⁰ and Scanlon et al. (2021)⁹¹ document how mining operations can increase sediment loads and release heavy metals into tributaries, degrading water quality and physical habitat in affected reaches. Elevated turbidity and sediment deposition can smother redds and reduce egg and alevin survival, while contaminants such as mercury and other metals can bioaccumulate and produce sublethal physiological and behavioral effects that reduce juvenile survival and adult fitness.

Over the past two decades the Anchorage Bowl and Cook Inlet region have experienced the introduction of invasive northern pike (*Esox lucius*) and an aquatic plant Elodea, —that degrade Chinook freshwater habitat and alter predator–prey dynamics. Elodea chokes waterways, reduces flow, and can lower dissolved oxygen, degrading rearing conditions for juvenile salmon. Northern

⁸⁸ Dunker, K. J., Sepulveda, A. J., Massengill, R. L., & Rutz, D. S. (2018). The response of northern pike and other aquatic taxa to a rapidly changing environment in the Susitna River, Alaska.

⁸⁹ Deacy, W. W., Armstrong, J. B., Leacock, W. B., Robbins, C. T., Larrivee, D., & Gustine, D. D. (2021). Landscape heterogeneity shapes the thermal portfolio of a mobile consumer.

⁹⁰ Schoen, E. R., Wipfli, M. S., Trammell, E. J., Rinella, D. J., Floyd, A. L., Grunblatt, J., ... & Platte, R. M. (2017). Future of Pacific salmon in the face of environmental change: Lessons from one of the world's remaining productive salmon regions.

⁹¹ Scanlon, B., Frenette, M., Minuk, L., Twardek, W., Chu, C., & Smokorowski, K. (2021). Evaluating the Impacts of Mining Disturbances on Chinook Salmon (*Oncorhynchus tshawytscha*) Populations in the Yukon River Basin

pike, which are native to northern and western Alaska but invasive in Southcentral Alaska, thrive in shallow, low-flow, vegetated waters and are effective predators on juvenile Chinook (Dunker et al., 2018⁹²; Jalbert et al., 2021⁹³; Inskip, 1982⁹⁴; Stuby, 2023⁹⁵). Northern Cook Inlet (NCI) is unique in the Gulf of Alaska in that the freshwater predation regime has shifted substantially over recent decades; the establishment of pike in key rearing habitats likely contributes to local declines in juvenile abundance and recruitment. Though these impacts are geographically localized, they can have outsized effects where they coincide with other stressors, underscoring the need for targeted monitoring, control efforts, and habitat restoration in invaded systems. The impact of northern pike on Alexander Creek Chinook productivity has been evident over the past two decades, which coincides with the northern pike invasion (figure 14).

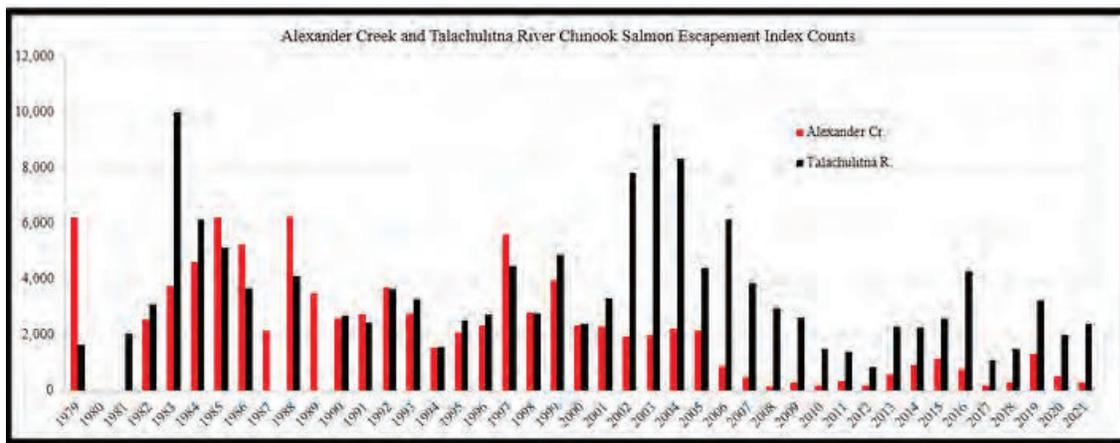


Figure 14. Comparison of Chinook salmon escapement index counts in Alexander Creek (northern pike present) and Talachulitna River (no northern pike present), 1979-2021. (from ADF&G) Severe Chinook decline beginning in 2006 in Alexander Creek, whereas Talachulitna River did not sustain comparable decline.

8. Impact of Pink Salmon on Chinook and Ocean Carrying Capacity

Conjectures that abundant pink salmon (*Oncorhynchus gorbuscha*) are driving Chinook declines has received substantial attention in the media, but the evidence is speculative and context-dependent.

⁹² Dunker, K. J., Sepulveda, A. J., Massengill, R. L., & Rutz, D. S. (2018). The response of northern pike and other aquatic taxa to a rapidly changing environment in the Susitna River, Alaska

⁹³ Jalbert, C. S., Falke, J. A., López, J. A., Dunker, K. J., Sepulveda, A. J., & Westley, P. A. H. (2021). Vulnerability of Pacific salmon to invasion of northern pike (*Esox lucius*) in Southcentral Alaska

⁹⁴ Inskip, P. D. (1982). Habitat suitability index models: Northern pike.

⁹⁵ Stuby, L. Fishery Management Report for Sport Fisheries in the Yukon Management Area, 2017, Alaska

Conner et.al. (2024)⁹⁶, argue that warming oceans disproportionately favor pink salmon: they have the broadest environmental tolerances, the simplest spawning requirements, and consequently the greatest capacity for rapid numerical expansion among Pacific salmon. That perception is often conflated with hatchery effects, yet most pink salmon in the North Pacific and Bering Sea are wild (~85%)—Southeast Alaska returns (harvest + escapement) can exceed 100 million adults in some years, and roughly 97% of those are wild; the Alaska Peninsula also supports very large pink cohorts without any hatchery inputs.

Ecologically, large pink cohorts may, in theory, reduce food availability, although work by Orsi et.al. (2005)⁹⁷ demonstrate little reduction in zooplankton standing biomass. Many empirical and modeling studies point to bottom-up ocean conditions and predator dynamics as the dominant drivers of Chinook performance. Several regional analyses (e.g., Morita et al., Yasumiishi, Murdoch et al., NOAA/ADF&G task-force findings) show either weak or inconsistent relationships between pink abundance and Chinook productivity; in most regions pinks appear to have little measurable impact, while in others they may exacerbate food-limitation during years of poor ocean productivity.

Heard et.al.⁹⁸ estimated that 30 billion pink and chum salmon fry enter the Bering Sea and North Pacific Ocean each year, 25 billion of these are from wild streams, intertidal habitat, and rivers, while the other 5 billion pinks, chum, sockeye, Chinook, and coho are from Russian, Japanese, Canadian, PNW, and Alaska hatchery programs. Of the hatchery fish, Russia releases ~1.2 billion pinks, Japan releases ~1.3 billion chum fry, and Alaska releases 1 billion pinks and 0.8 billion chum salmon.⁹⁹ In concurrence with Heard, Ruggerone and Irvine (2018) estimated that 85% of pink salmon abundance is wild.¹⁰⁰ Looking at total nektonic production which includes squid and all fishes, salmon is only 3.4% of this biomass and pink salmon is less than 1%. This indicates that pink salmon have low to moderate impacts on oceanic food webs, and they respond to, rather than control, changes in ocean

⁹⁶ Conners, B.M., Ruggerone, G.T., & Irvine, J.R. 2024. Adapting management of Pacific salmon to a warming and more crowded ocean

⁹⁷ 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.

⁹⁸ Heard, W. R. 2011. A comparison of salmon hatchery programs in Alaska and Japan, p. 71-78 In R. Stickney, R. Iwamoto, and M. Rust (editors)

⁹⁹ North Pacific Anadromus Fisheries Commission, Annual Report 2022

¹⁰⁰ Ruggerone, G. T., & Irvine, J. R. (2018). Numbers and biomass of natural-and hatchery-origin pink salmon, chum salmon, and sockeye salmon in the North Pacific Ocean, 1925-2015

productivity. Pauley et.al. (1996) looked at North Pacific Ocean mass balancing and estimated total salmon biomass consumes < 1% of the estimated zooplankton biomass.¹⁰¹

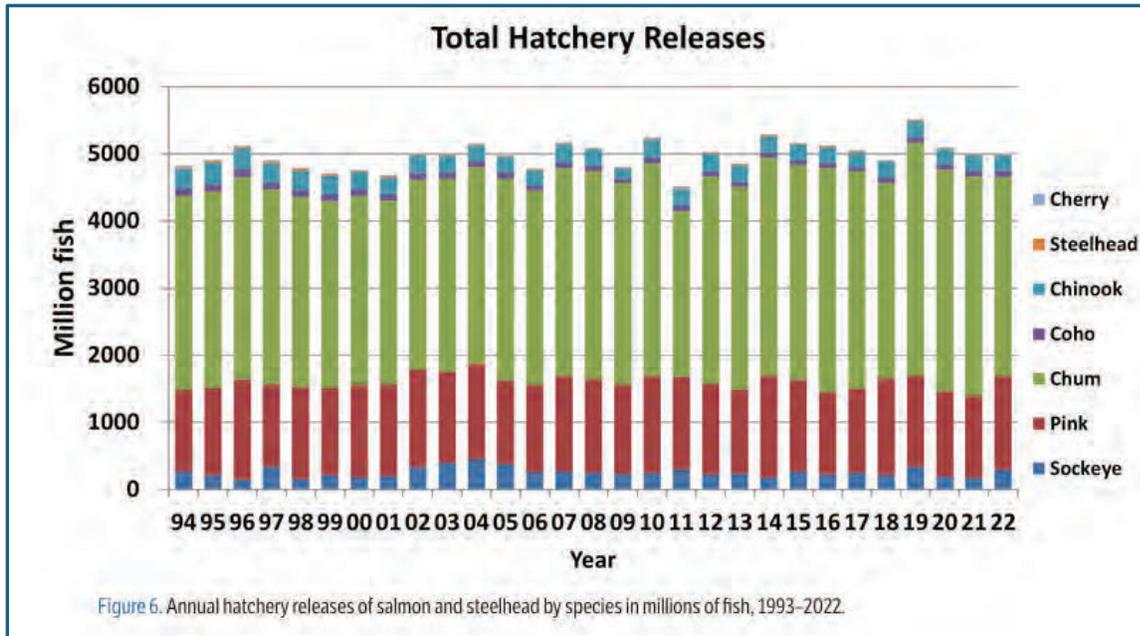


Figure 6. Annual hatchery releases of salmon and steelhead by species in millions of fish, 1993–2022.

Figure 15. Annual hatchery releases of salmon and steelhead trout by from Russia, Japan, U.S., Korea, and Canada in millions of fish, 1993–2022. NPAFC Note the release of fry has been stable at 5 billion for three decades

Wild pink salmon have surged in recent decades, with Alaska returns peaking in the early-to-mid 2010s—2013 saw a record 219 million pinks (Ruggerone and Irvine 2018). More recently, productivity has shifted to the western Bering Sea, where Russian harvests exploded between 2018–2023 and reached a record 500 million pinks in 2018 (about 2.3 times Alaska’s record). This dramatic increase in abundance has prompted concern about potential competition and other ecological interactions in the marine environment (see map graphic on page 39). Importantly, hatchery production from Alaska and Russia accounts for only about 15% of pink salmon returns (and an even smaller share of total catch plus escapement), so most of the recent growth has occurred in wild populations.

¹⁰¹ Pauley, D., V. Chrisensen, and N. Haggan. 1996. Mass-balance models of Northeastern Pacific ecosystems

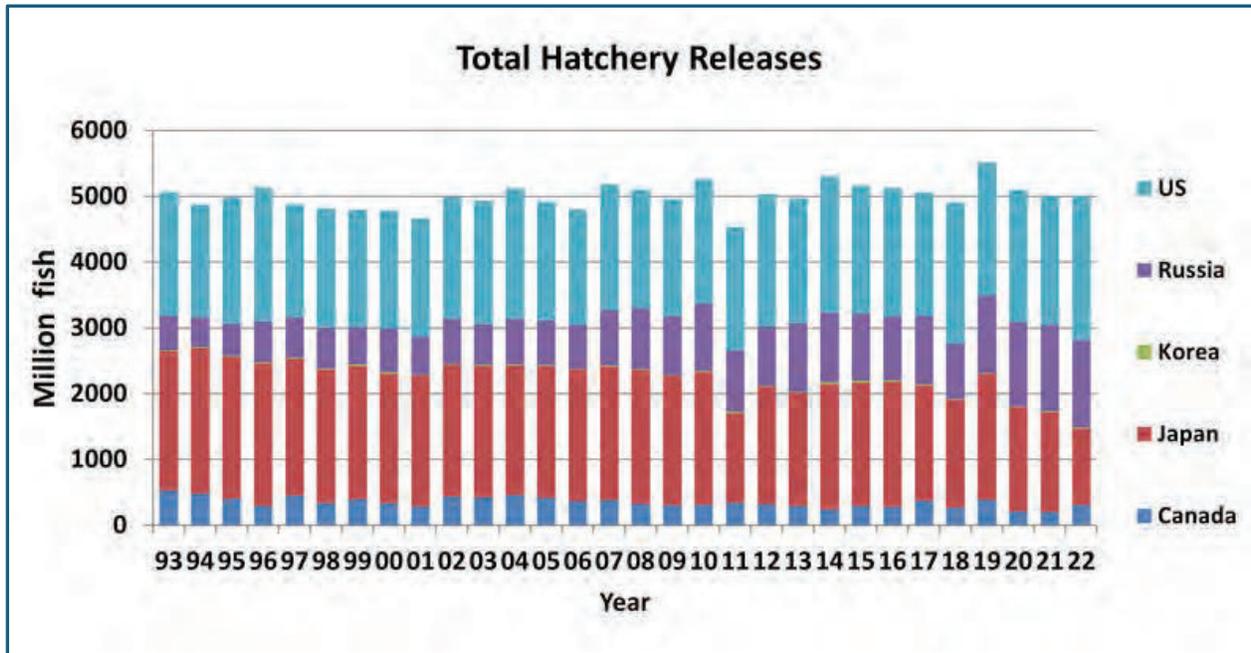


Figure 16. Annual hatchery releases of salmon and steelhead from Russia, Japan, U.S., Korea, and Canada by species in millions of fish, 1993-2022, NPAFC

Bottom line: pink salmon abundance may be a contributing, regional stressor to chum and sockeye—especially in enclosed or highly productive rearing areas or in poor-productivity years, but it is not the primary, statewide cause of Chinook declines.

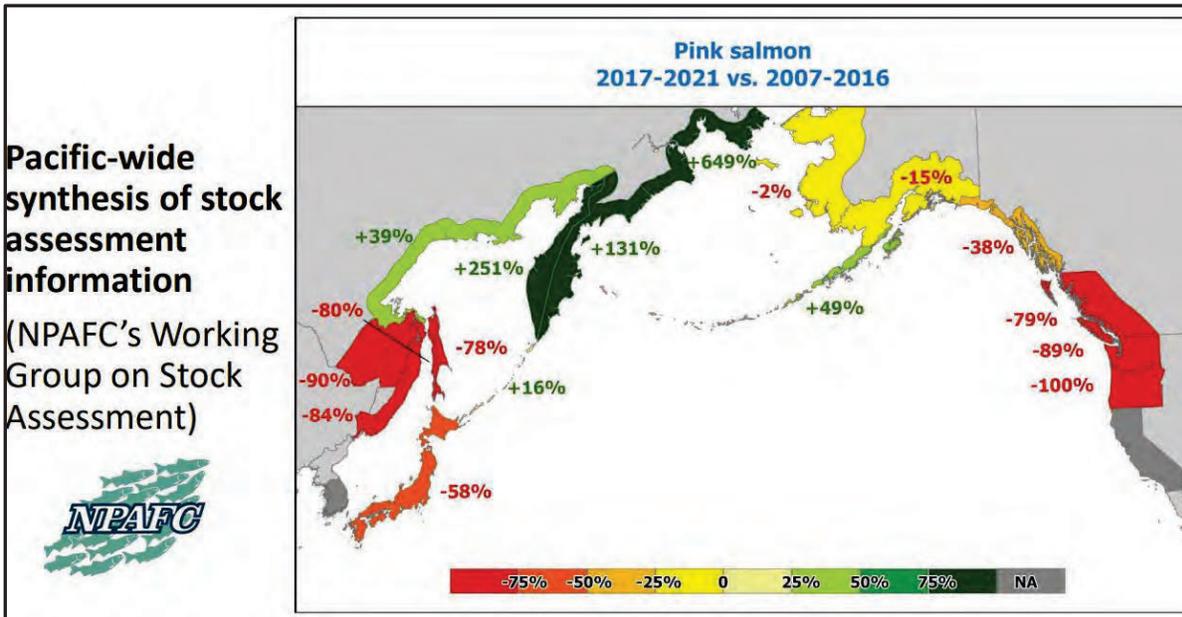


Figure 17. Pacific ocean productivity is not a fixed value, but rather a dynamic interplay of environmental factors such as water temperature, upwelling, sea ice, El Nino, La Nina, Pacific gyre, among others, and biological factors such as primary and secondary productivity, nektonic biomass such as squid, pollock and capelin. This graphic depicts pink salmon harvest and escapement from around the Pacific Rim 2017-2021 compared to 2007-2016. The northwest Bering Sea systems (Russian) recorded their highest returns ever in 2018, over two times Alaska's record year in 2011. Note the Alaska Peninsula is doing relatively well compared to the rest of Alaska in the past seven years. In the past many scientists believed the Pacific Decadal Oscillation, a 20 to 30 year periodicity phenomenon, drove productivity, sometimes favoring the Pacific Northwest while Alaska suffered, and then flipping to favoring Alaska.

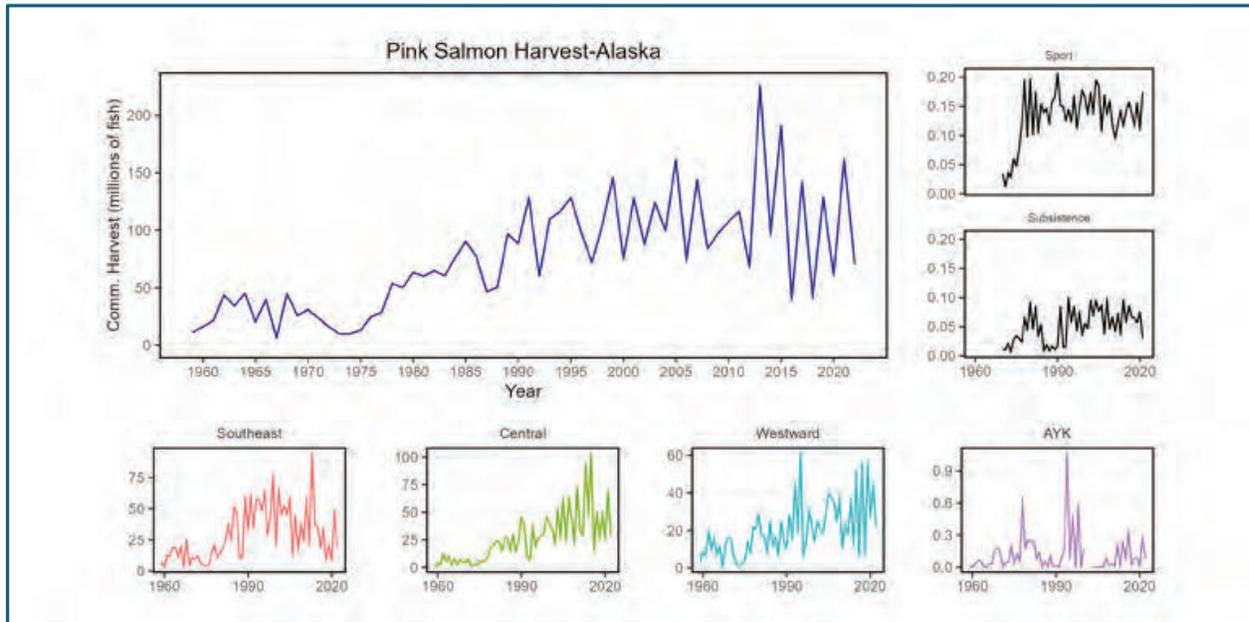


Figure 18. Number (millions) of pink salmon harvested in Alaska (1959-2023 as reported annually to NPAFC). Series include total commercial harvest (main panel), commercial harvest for ADF&G Commercial Fisheries Region (lower panels), and sport and subsistence harvest through 2021 (side panels). Note change in scale of Y-axis. Data source: ADF&G, adapted from NPAFC (2023). Odd-even year pattern evident in most years, odd-year 2013 record

A modeling study by Ruggerone and Connors (2015)¹⁰² looked at the relationship between pink salmon abundance and the growth and survival of other salmon species, including Chinook, coho, and sockeye salmon. They found a correlative relationship that high pink salmon abundance can negatively impact the growth of these other salmon species during their critical early marine life stages. However, numerous researchers conducting empirical studies have found neutral and, in some cases, positive correlations with pink and Chinook salmon growth¹⁰³.

¹⁰² Ruggerone, G. T., & Connors, B. M. (2015). Productivity and life history of sockeye salmon in relation to competition with pink and sockeye salmon in the North Pacific Ocean

¹⁰³ Yasumiishi, E. M., C. J. Cunningham, E. V. Farley, L. B. Eisner, W. W. Strasburger, J. A. Dimond, and P. Irvin. 2024. Biological and environmental covariates of juvenile sockeye salmon distribution and abundance in the southeastern Bering Sea, 2002-2018

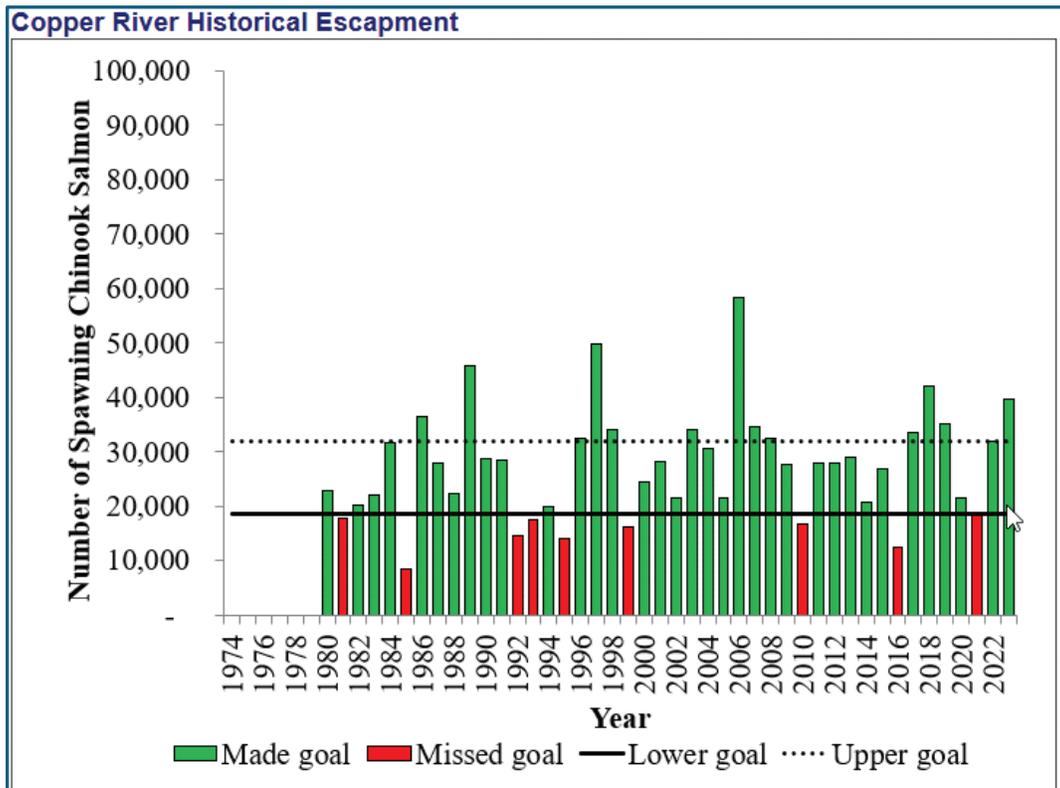


Figure 19. Copper River Chinook escapement from 1974 to 2023 showing most years within the escapement range goals. Escapements have averaged just over 29,500 Chinook salmon since 1999, near the upper escapement goal. Another 8,000 to 12,000 Copper River Chinook are harvested annually by all user groups.

The most proximate pink salmon enhancement programs in PWS were initiated in the 1970’s and at full production by 1990. Each spring wild and hatchery pink salmon fry biomass enters PWS and constitutes a large biomass compared to the Copper River spring Chinook smolt biomass. Copper River Chinook, as spring smolt, would be considerably larger in size, than two-gram pink salmon. There would be little diet overlap between pinks and Chinook at this stage as reported earlier. Furthermore, Copper River escapements since 1980 tell the story best pinks and Chinook comingle sustainably in PWS.

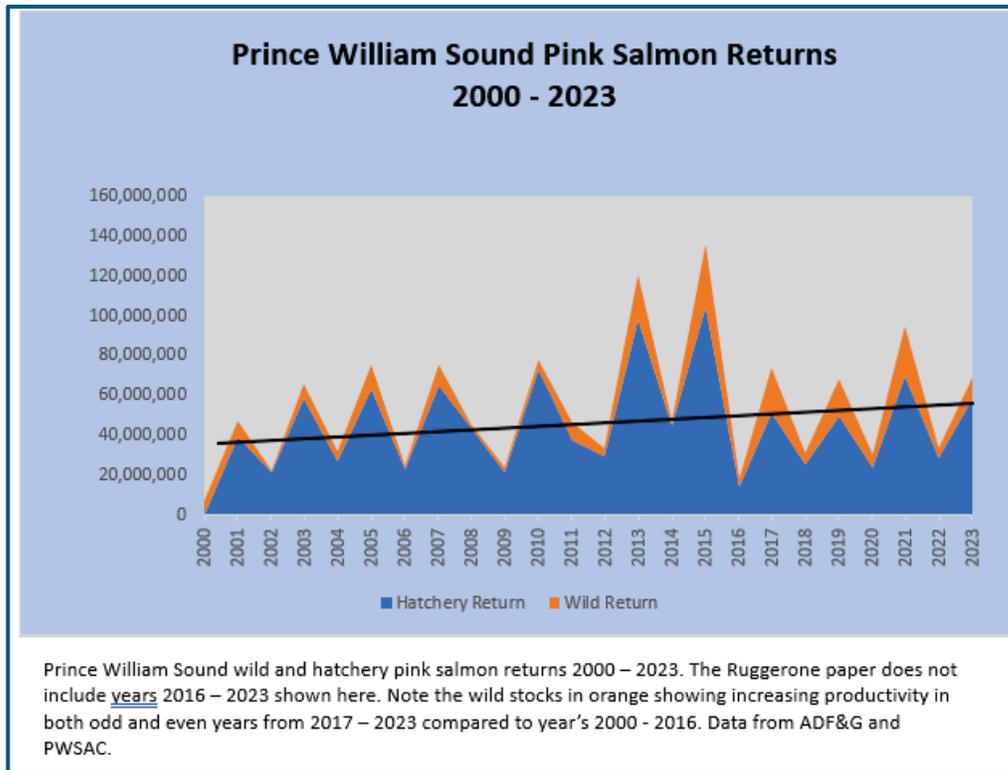


Figure 20. Wild pink salmon in PWS are trending up especially compared to the early 2000's. Figure 9 on the previous page shows Copper River Chinook making the lower escapements goal for most years, coinciding with a decade of increasing pink productivity.

The hypothesis by Ruggerone posits that juvenile pink salmon biomass, which tends to dominate the nearshore marine environment, may deplete the available prey resources through increased prey competition. If true this can lead to reduced growth and potentially lower survival rates for other salmon species, especially those that occupy similar ecological niches.

However, Wertheimer et al. 2018¹⁰⁴ in High Ocean Biomass states 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

¹⁰⁴Wertheimer A. & Heard B., 2018. High Ocean Biomass of Salmon and Trends in Alaska Salmon in a Changing Climate

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).

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 coastal habitats (Brodeur et al. 2007).

ADF&G summed up a well-documented alternative view from Ruggerone in their letter to WFC¹⁰⁵:

*“Life history theory predicts slower growth and later age at maturity in prey limited situations, such as found for Japanese chum salmon in the North Pacific (Morita et al. 2005), the opposite of the observation that Chinook salmon are maturing at younger ages. Increased abundance of pink salmon is a commonly posited mechanism for reduced growth and productivity in salmon (e.g., Buckner et al. 2023; Ruggerone and Goetz 2004). However, in the Gulf of Alaska, juvenile, immature, and maturing salmon growth and condition have been shown to be driven by bottom-up forces in the ocean, meaning that fluctuations in the primary productivity, not the abundance of other salmon species, would limit juvenile fish growth (Daly et al. 2019b). During 2012 and 2013, there was no bottleneck in the prey resource for pink, chum, and sockeye salmon (Daly et al. 2019a), demonstrating that these species were **not competing for resources with Chinook salmon**. During 2015–2016 when top-down pressures were thought to have controlled forage fish abundance in the northern Gulf of Alaska, the rearing area for many Alaska Chinook salmon populations (Larson et al. 2014), (including pink salmon) were not the suspected cause (Arimitsu et al. 2021). Estimates vary among Alaskan populations, but Oke et al. (2020) used length declines from many populations and fecundity data from two time points (1986 and 2005) from one river (Yukon; Jasper and Evenson 2006) to estimate the median reduction over the last 30 years in eggs-per-female for Chinook salmon at 15%, statewide. Even if egg deposition declined 15%, escapement goals designed to ensure high fisheries yields would be ample to maintain reproductive output well above levels that might threaten population viability.”*

¹⁰⁵ State of Alaska letter September 6, 2024 Request for information, 90-Day Finding on a Petition to List Gulf of Alaska

Research conducted during International Year of the Salmon (IYS) and earlier Russian studies provide additional understanding of the complex interactions between pink salmon and other salmon species, as well as the overall ecosystem-level effects.

For example, Shuntov and Temnykh (2011)¹⁰⁶ argued that the ocean carrying capacity for Pacific salmon is not necessarily fixed, and that the ecosystem can potentially support higher total salmon abundance, including both pink and other salmon species. They suggested that the impact of pink salmon on other salmon may be more nuanced and context-dependent rather than simple competition for resources.

In a follow-up study, Shuntov et al. (2017)¹⁰⁷ further explored the trophic relationships among Pacific salmon in the Far Eastern seas and North Pacific Ocean. They found that while there is some dietary overlap among salmon species, the degree of competition varies depending on specific oceanographic conditions and food web dynamics. The Shuntov et.al. paper was conducted during the juvenile pink salmon rearing year for the record 500 million 2018 Russian return.

A study by Kaeriyama et al. (2012)¹⁰⁸ found that Chinook and pink salmon have relatively limited dietary and depth niche overlap in the North Pacific Ocean, indicating that direct competition for resources may not be a significant factor. This suggests that the potential impacts of pink salmon on Chinook salmon may be more complex and mediated through indirect, ecosystem-level interactions.

von Biela et al. (2020)¹⁰⁹ looked at the importance of habitat quality indicators at Knik River, Alaska, including redd superimposition (density of salmon nests), water temperature, and stream flow. These indicators were used to assess the quality of spawning habitats for Chinook salmon. The researchers also looked at indicators of early marine habitat quality, such as sea surface temperature and upwelling, to understand the influence of these factors on juvenile Chinook salmon including juvenile abundance, size, and condition. The study found that indicators of spawning habitat quality

¹⁰⁶ Shuntov, V. P., & Temnykh, O. S. (2011). Concerning modern concepts of the role of Pacific salmon in the ecosystems of the far eastern seas and the north Pacific Ocean.

¹⁰⁷ Shuntov, V., O. Temnykh, and O. Ivanov. 2017. On the persistence of stereotypes concerning the marine ecology of Pacific salmon (*Oncorhynchus* spp.).

¹⁰⁸ Kaeriyama, M., Seo, H., Kudo, H., & Nagata, M. (2012). Perspectives on wild and hatchery salmon interactions at sea, potential climate effects on Japanese chum salmon, and the need for sustainable salmon fishery management reform in Japan

¹⁰⁹ von Biela, V. R., Scheuerell, M. D., Buhle, E. R., & Hinton, S. E. (2020). Habitat metrics indicate juvenile Chinook salmon are more limited by degraded spawning habitats than early marine conditions

as outlined above were more consistently related to juvenile Chinook salmon abundance, size, and condition than indicators of early marine habitat qualities.

These results suggest that juvenile Chinook salmon in the Knik River system are more limited by degraded spawning habitats than by early marine conditions. This has important implications for understanding the key factors driving Chinook salmon productivity in Alaska. Overall, this study provides valuable insights into the relative importance of freshwater versus early marine habitat quality for juvenile Chinook salmon.

Finally, the international organization North Pacific Anadromous Fish Commission with a membership consisting of Canada, Japan, United States, Korea and Russia states in TECHNICAL REPORT 21 Review of Pink Salmon in the Pacific, Arctic, and Atlantic Oceans, 2023:

“Pink salmon spend approximately 18 months growing and rearing in the ocean but only weeks to a few months in freshwater before migrating to the ocean..... The ecosystem consequences of interactions between expanding numbers of pink salmon, especially in certain years (as odd- and even-numbered years have different pink salmon abundances, depending on the geographic area), and other aquatic species **remains a topic of scientific debate**. Further research is needed, especially as pink salmon access new areas where effects may differ from those in areas of traditional occupancy. In the ocean, pink salmon overlap in diet with many other species of fish and high abundances of pink salmon can deplete food resources. When numerous, pink salmon may affect the growth or mortality of non-salmon species, including fish, seabirds, and marine mammals, due to potential competition for zooplankton and other prey species. **However, 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.**”

The weight of empirical evidence from international scientists, NOAA Fisheries, the NPAFC, and ADF&G indicates that pink salmon—whether wild or hatchery-origin—are not the primary driver of Alaska Chinook declines. Multiple, independent lines of research point to a suite of stronger, geographically variable stressors: pervasive freshwater heat stress in western and interior Alaska; rising selective mortality from apex predators (notably resident killer whales, salmon sharks and pinnipeds) that disproportionately remove older, larger Chinook; long-standing, large-scale

productivity cycles; rapid loss of Bering Sea ice and recurrent marine heat waves; and shifts in ocean prey communities that reduce early marine growth and overwinter survival.

Taken together, these factors—acting across life stages and interacting in complex ways—better explain the widespread reductions in size-at-age, age at maturity, and cohort strength observed from Ketchikan to Kotzebue. Pink salmon may contribute locally or episodically to competition or trophic change, but the preponderance of data supports a multifactorial, climate- and predator-driven explanation for Chinook declines. The implication for management is clear: effective recovery strategies must address the multiple oceanic and freshwater drivers simultaneously, prioritize region-specific vulnerabilities (for example, interior river thermal stress and predator impacts), and integrate continued monitoring and adaptive actions rather than focusing narrowly on pink salmon abundance.

Pink salmon's success reflects their ecological plasticity: broad environmental tolerances, rapid life cycle, and relatively low natal-stream fidelity let them exploit changing ocean and coastal conditions more readily than other salmon species. That plasticity is an evolutionary advantage—enabling large, fast-responding populations—but it also fuels concern, because booming pink runs can amplify visible ecosystem changes and prompt questions about impacts on co-occurring species. In short, their adaptability is both the trait that makes them resilient under rapid change and the reason they are often singled out in debates about marine-ecosystem dynamics.

A final note of optimism: most Chinook stocks are meeting escapement goals across the state, and the number of "stocks of concern" is declining. Natural swings in ocean productivity are beginning to favor the North Pacific, and several Southeast Alaska stocks (Chilkat, Unuk, Chickamin) have recently been removed from the stocks-of-concern list, with more recoveries possible in the coming years. The Kenai River Chinook met its escapement goal in 2025. These improvements show that when effective management, intact habitat, and favorable ocean conditions align, Chinook populations can rebound.

9. Conclusions

Chinook salmon declines across Alaska reflect a multifaceted complex in which interacting oceanic, freshwater, and biotic factors combine to reduce cohort strength, body size, and age at maturity. High-seas surveys from the International Year of the Salmon and NOAA Fisheries document spatial heterogeneity in condition and prey fields, with Gulf of Alaska Chinook generally exhibiting lower energy densities than conspecifics in more western regions. Early marine growth—size attained by the end of the first summer at sea—emerges consistently as a key determinant of overwinter survival and cohort productivity, and is tightly linked to temperature, prey availability and composition, and timing of ocean entry.

Concurrent trends include widespread declines in size-at-age and shifts toward younger age at return (notably increased proportion of 4-year-olds), with attendant reductions in per-spawner fecundity and population resilience. Counterintuitively, two-ocean Chinook have not declined in size. Evidence indicates these trends are driven by multiple interacting mechanisms rather than a single cause: extreme marine heating and altered prey communities; deleterious freshwater conditions (reduced streamflow at spawning, increase autumn rearing streamflow, spawner size, release of sequestered heavy metals, ice sheet timing); and biological interactions most particularly predation. Apex predators and pinnipeds have increased regionally and can exert substantial consumptive pressure; model and empirical studies implicate predator-driven mortality as an important contributor to total Chinook removals alongside reduced human harvest. Competition hypotheses, particularly those implicating pink salmon and hatchery production remain regionally variable and are not uniformly supported by empirical data. Hatchery pink salmon are a small biomass compared to wild pinks, and miniscule compared to total nektonic biomass.

Advances in observation and analytical tools (high-resolution oceanography, telemetry, acoustics, genomics, eDNA, and tagging) are beginning to resolve spatially explicit links among ocean conditions, prey fields, predator dynamics, and Chinook life histories. To disentangle causal pathways, it is essential that integrated long-term ocean and near-shore surveys continue to couple predator dynamics, prey community assessment, and freshwater metrics.

Stocks of Concern (as of February 2025)

System	Species	Area	Year Designated [a]	Level of Concern	Year Last Reviewed [b]
Chilkat River	Chinook	Southeast	2017	Delisted	2024
King Salmon River	Chinook	Southeast	2017	Management	2024
Unuk River	Chinook	Southeast	2017	Delisted	2024
Stikine River	Chinook	Southeast	2021	Management	2024
Andrew Creek	Chinook	Southeast	2021	Management	2024
Chickamin River	Chinook	Southeast	2021	Delisted	2024
Taku River	Chinook	Southeast	2021	Management	2024
Chuitna River	Chinook	Cook Inlet	2010	Management	2023
Theodore River	Chinook	Cook Inlet	2010	Management	2023
Alexander Creek	Chinook	Cook Inlet	2010	Management	2023
East Susitna River	Chinook	Cook Inlet	2019	Management	2023
Kenai River (late run)	Chinook	Cook Inlet	2023	Management	2023
Karluk River	Chinook	Kodiak	2010	Management	2023
Ayakulik River	Chinook	Kodiak	2019	Management	2023
Chignik River	Chinook	Chignik	2023	Management	2022
Nushagak River	Chinook	Bristol Bay	2022	Management	2022
Yukon River	Chinook	Yukon	2000	Yield	2022
Norton Sound Sub-district 5 & 6	Chinook	Norton Sound	2003	Yield	2022

[a] Indicates start of Alaska Board of Fisheries cycle in which Stock of Concern was designated (e.g. 2024/2025 BOF cycle = 2024).

[b] Indicates start of Alaska Board of Fisheries cycle in which Stock of Concern was last reviewed (e.g. 2024/2025 BOF cycle = 2024).

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March 2, 2026

To: The Alaska Board of Fisheries

Re: Comments on Proposal 186 Central District Drift Gillnet Fishery Management Plan

We respectfully request that the Board decline to adopt Proposal 186 during this out-of-cycle meeting and instead address this issue during the next regular Upper Cook Inlet (UCI) cycle in 2027.

Proposal 186 does not arise from a sudden conservation emergency or a newly discovered biological crisis. The concerns cited in support of this proposal, incomplete coho escapement counts at the Deshka and Little Susitna weirs, environmental conditions affecting weir operations, and changes associated with the federal EEZ drift gillnet fishery, are not new or unforeseen developments.

The operational challenges at both the Deshka and Little Susitna weirs have been well documented for multiple years. High July water temperatures, delayed fish movement, late-summer rain events, and flooding have repeatedly interrupted weir operations and resulted in incomplete counts. These monitoring limitations were present during the last UCI cycle and were known to the Department and the Board. They do not represent a new biological event warranting out-of-cycle regulatory action.

The recent federal administration of the EEZ drift gillnet fishery does not constitute an unforeseen effect under the Board's out-of-cycle criteria. Prior to 2024, those same EEZ waters were harvested under State management, and the sockeye harvest from those areas was included in total harvest calculations used for management decisions, including application of the drift gillnet one-percent rule. The recent shift in regulatory oversight did not introduce new harvest areas, new fishing efforts, or new biological impacts. It represents a change in administrative authority, not a new conservation circumstance or an unforeseen management consequence.

Proposal 186 would impose significant area-based commercial fishing restrictions that carry clear allocative implications. Issues of allocation and long-term management structure are precisely the types of matters intended for full consideration during a regular UCI meeting, where all stakeholders can participate and the Board can review comprehensive data.

While coho escapement concerns should continue to be monitored carefully, the Department retains existing in season management authority to respond to conservation needs through emergency orders. There is no demonstrated crisis requiring immediate regulatory restructuring outside of the normal cycle.

For these reasons, we respectfully request that the Board defer action on Proposal 186 and consider the matter during the 2027 Upper Cook Inlet regular meeting, where it can be fully evaluated within the proper management and allocative context.

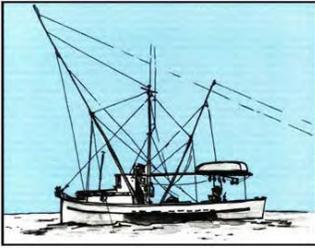


Norm Darch
Executive Director

Submitted by: Dustin Slinker
Alaska Sport Fishing Association
Community of Residence: Anchorage

Proposal 186

A great number of the members of the Alaska Sport Fishing Association have enjoyed many years of fishing the Matsu Valley Drainage of the Northern Cook Inlet for wild Chinook and Coho Salmon. Wild salmon continue to struggle to make their way to the Northern Cook Inlet Drainages. We truly hope the board will act in favor of proposal 186 and allow wild salmon stocks to return to the Northern Cook Inlet. The below escapements goals over the past three seasons for coho should be alarming enough.



Alaska Trollers Association

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March 2, 2026

Art Nelson, Executive Director
Honorable Board of Fisheries Members
Alaska Board of Fisheries
333 Raspberry Road
Anchorage, AK 99518-1565

Re: Comments on the Statewide Finfish and Supplemental Issues

Dear Mr. Nelson and Honorable Board of Fisheries Members,

Please find the comments below from the Alaska Trollers Association (ATA) for the Statewide Finfish and Supplemental Issues meeting scheduled for March 17 – 21, 2026. ATA represents the trollers who participate in the small boat Southeast Alaska fishery in an area that stretches from Dixon Entrance to Cape Suckling. Trollers catch one salmon at a time, and pride themselves in delivering the highest quality salmon on the market. The troll fleet is a major economic contributor in Southeast Alaska as 85% of our permit holders are Alaska residents. Our fishery supports many Alaskan families who reside in small towns where there are few other opportunities and ATA is proud to have represented the troll fleet since 1924.

Thank you for your time and consideration of our comments,

Patrick Baum

President, Alaska Trollers Association

Proposal Comments

<u>Proposal</u>	<u>ATA position</u>	<u>Comments</u>
170	oppose	<p>ATA opposes this proposal for the reasons described below and urges the Board of Fisheries members to oppose the proposal or take no action.</p> <p>This proposed cut to hatchery production is not based on scientific evidence and instead relies on a heavily speculative correlation. At three recent Board of Fisheries meetings no action was taken on similar proposals. The proposer offers no justification for the reduction or explanation of the expected outcome with such a cut to hatchery production.</p> <p>Reducing hatchery chum production will have significant negative economic consequences for all user groups, processors and communities in Southeast Alaska. The cut to pink and chum production will impact opportunities for trollers to harvest these species and limit the ability of hatcheries to produce other important species like coho and king salmon because there will be less revenue available from cost recovery to support these programs. This reduction would make it more difficult for trollers to make a living, driving more permit holders out of business.</p>
176, 177, and 178	oppose	<p>ATA opposes these proposals and encourages the Board of Fisheries to do the same.</p> <p>These proposals would result in an increased harvest of king and coho salmon which are critical for us to make a living as trollers. Some fishermen are better at catching fish than others and these proposals would allow the good fishermen to harvest the fish for others on the boat that are otherwise unable to catch their bag limits.</p> <p>These proposals are authored by charter industry stakeholders and in Southeast Alaska this sector harvests a large portion of the sport fishing allocation of king salmon. The growth of this sector in recent years has resulted in the sport fishery exceeding their allocation several times. It has also resulted in the reallocation of king salmon from the commercial troll fishery to the sport fishing allocation at the recent Board of Fisheries meeting in Southeast Alaska.</p>
179	oppose	<p>ATA opposes a statewide annual limit on king salmon because it does not work in Southeast Alaska. In Southeast Alaska our king salmon quota is based on an allocation set through the Pacific Salmon Treaty process. The department sets annual harvest limits based on the overall quota. Furthermore, in Southeast Alaska an angler cannot retain a king salmon under 28 inches.</p>

Proposal Comments Continued – Alaska Trollers Association

<u>Proposal</u>	<u>ATA position</u>	<u>Comments</u>
180	oppose annual limit / support reporting requirement	ATA opposes a statewide annual limit on king salmon because it does not work in Southeast Alaska with our obligations under the Pacific Salmon Treaty. However, we do support the requirement to e-report king salmon harvest or requirement to submit an annual sport fishing harvest record for king salmon to ADF&G. We need better, real-time data on king salmon harvested in the sport fisheries so we can improve the management of our king salmon fisheries.
181	support	ATA supports the department's proposal to update the definition of sport fishing gear so that there is less confusion and the definition is aligned with statute.
183	support	ATA supports the department's proposal that allows sport fishing regulations and bag limits to be easily enforced. Allowing someone to mutilate a fish to avoid a citation is unfair to other users and this practice should be prohibited as it will be if this proposal passes.
184	support	ATA supports the department's proposal to update the sport fishing definition of rockfish so that it is consistent with the definition that is used in the commercial and personal use fisheries. This makes sense from a management perspective.



Alaska Whitefish Trawlers Association

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

March 2, 2026

Alaska Board of Fisheries
Board Support Section
ATTN: BOF Comments
P.O. Box 115526
Juneau, AK 99811-5526

Submitted via online portal

Re: Opposition to Proposals 11, 163, 164, 165

Dear Chair Van Carlson-Van Dort:

Alaska Whitefish Trawlers Association (AWTA) is a Kodiak-based association representing commercial harvesters that fish for pollock, Pacific cod, rockfish, flatfish, halibut, sablefish, Tanner crab, and tender for salmon. AWTA businesses are family-owned and operated commercial fishing businesses, and most of our vessel owners, captains, and crew live in Kodiak with their families. Fish caught by AWTA members is primarily delivered to shore-based plants in Kodiak, helping to make Kodiak a top-ten commercial fishing port in the U.S.¹ that relies on a diverse mix of fisheries, including trawl groundfish, salmon, crab, halibut, and sablefish. Trawl fisheries generally operate throughout the year and deliver enough landings to keep shore-based processing plants operating, which provides a place for all gear types and fisheries to deliver.

AWTA Opposes Proposals 11, 163, 164, and 165

Proposal 11 seeks to close all waters of Alaska west of 170° W. longitude to commercial groundfish fishing with nonpelagic and pelagic trawl gear. AWTA members rely on trawl fisheries and oppose any proposal that categorically shuts down trawling in areas currently open to trawl gear. This proposal does not identify actual problems caused by trawling, relying instead on innuendo and inaccurate assumptions rather than science. This approach hurts the Alaska seafood brand and all Alaskan commercial fisheries. The Alaska Department of Fish and Game (Department) Staff Comment report² itself says negative impacts from trawl gear to golden king crab seafloor habitat are merely **implied**, and that potential benefits stemming from this proposal are largely unknown and difficult to assess³. In other words, there is no actual and known reason to close this area to trawling, and if the closure is put in place there will be no way to tell if it “worked.” In the meantime, Alaskan fishermen using trawl gear will lose fishing area and opportunity.

¹ NOAA Fisheries, *Fisheries of the United States 2023*

² Alaska Department Of Fish And Game Staff Comments On Commercial Regulatory Proposals Committee Of The Whole For The Alaska Peninsula, Aleutian Islands, Bering Sea, And Chignik Pacific Cod Alaska Board Of Fisheries Meeting Anchorage, Alaska, October 30–31, 2025 (Staff Comments)

³ Staff Comments at page 53

AWTA Comments to Alaska BOF March 17-21, 2026 meeting
March 2, 2026
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The proposal also glosses over the fact that extensive protected areas already exist within state-waters in the Aleutian Islands District west of 170. Table 29 in the Staff Comments⁴ shows the already small amount of area currently open to trawl gear, ranging from 6% to 38%. What is not as clear from Staff Comments is that impacts from this proposed closure will fall predominantly on small Alaska-based trawlers who generally need to operate closer to shore because they are smaller, and deliver to shore-based plants. In addition, the community of Adak has been working to re-open its processing plant and closing this area to trawl gear is going to hurt that effort by limiting fleets that have historically delivered to Adak. We are not suggesting this proposal should only be applied to the larger trawl catcher-processors, catcher-processors maintain and expand markets for Alaskan seafood and smaller operations benefit from this activity. Proposal 11 has no documented or known benefits, and if approved it will hurt Alaskan coastal communities and Alaskan fishing businesses.

Most members of the trawl catcher-processor and Golden King Crab fleets fishing in this area have been actively working together to improve communication and avoid gear conflicts. It is not clear that the F/V Alaska Trojan⁵ has been participating in this collaborative effort. Crab bycatch by trawl catcher-processors is low, with Table 30 in Staff Comments showing zero crab bycatch in four out of six years between 2020-2025⁶. We encourage the Board to allow the existing communications and voluntary collaboration between the fleets to continue, rather than imposing a closure that will hurt Alaskan communities and fishing businesses.

Proposals 163 and 164 would establish a new presumption that all trawl gear operated in state waters is bottom-contact gear, and require the Department to approve (currently non-existent) monitoring technology that could prove absence of bottom contact to rebut the presumption. There are multiple problems⁷ with this approach, but primarily these proposals as drafted would impose an impossible compliance standard, require technology that does not exist, and essentially shut down trawl in state waters. AWTA members rely on trawl, as do communities like Kodiak, Sand Point, and Unalaska, and we strongly oppose both of these proposals.

There seems to be an assumption that trawlers operating in the Gulf of Alaska (GOA) and Prince William Sound (PWS) regularly put their pelagic nets on the bottom. This is not accurate. The seafloor in the GOA and PWS are rocky, and our pelagic nets are relatively delicate. Contact with the bottom (or sunken ship wrecks) shreds our nets, requiring time-consuming and expense repairs

⁴ Staff Comments at page 50, Table 29

⁵ Proposal 11 notes that it was submitted by Linda Kozak on behalf of the F/V Alaska Trojan

⁶ Staff Comments at page 44 Table 30. There was no crab bycatch in 2020, 2022, 2023 or 2025, and one crab caught as bycatch in 2024. In 2021 there were 396 crab caught as bycatch, making the average across the six-year period 66 crab per year.

⁷ These proposals also seem to rely on the assumption that all trawl gear, and impacts therefrom, are the same, which is not accurate. Pelagic, (or midwater) trawl gear is very different from bottom gear, is designed to operate differently in the water column, and it does not make sense to conflate the two. The way trawl gear behaves in the water also depends on vessel towing speed, trawl doors and how they are configured, type and configuration of trawl net, currents, tide and more. The proposals seem to assume a gear standardization that does not currently exist.

AWTA Comments to Alaska BOF March 17-21, 2026 meeting
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or replacement, and lost fishing time. On average a pelagic trawl net alone for our members costs \$110,000, and we are not going to intentionally damage an expensive piece of gear.

Proposal 165 asks the Department to establish criteria for salmon excluder devices and maintain a list of approved excluders. The proposal itself demonstrates a lack of understanding and collaboration with trawl operations. First, salmon excluder devices are already widely used in both Bering Sea and Gulf of Alaska pollock trawl operations. Secondly, we do not go to the trawl gear store and buy standard off-the-shelf nets; every trawl operation has a different gear setup that works for that particular vessel. Excluders that work in the Bering Sea on Bering Sea trawlers do not function the same in GOA trawl operations. As a result, it would be difficult to develop and maintain a list of “approved excluders” as outlined in Proposal 165- that is simply not how trawl gear works. The technology of excluders is also continually evolving and improving, and it would be unfortunate to delay implementation of more effective excluder devices simply because they are not on a list. Getting an excluder added to this list will require time-consuming field testing, as per the proposal, as well as an indeterminate approval process, and ultimately slow innovation.

Finally, we note that trawl fisheries off Alaska are subject to extensive management measures and habitat protections through federal management, including identification and protection of Essential Fish Habitat through a rigorous and peer-reviewed scientific process. We support sustainable management of all of Alaska’s fisheries, provided management is science-based and supported by actual data and information, not just inuendo and implications.

Thank you for the opportunity to comment.

Sincerely,



Patrick O'Donnell, President
Alaska Whitefish Trawlers Association
Owner/Operator of F/V Caravelle

Submitted by: Frances Alderson
F/V Ocean Cape

Community of Residence: SITKA

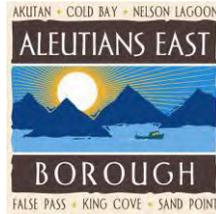
Dear Chair Carlson Van-Dort and Board members,

I am a 30 year resident of Sitka, Alaska and I've been personally and financially invested in Alaska's commercial fisheries since 1986. I am writing to express my support for proposals 163,164 and 165. These three proposals place reasonable requirements on pelagic trawl fisheries. Alaska fisheries across the board have had to adhere to updated monitoring requirements. It is onerous and expensive but it is necessary. If we all want to be able to keep fishing we ALL need to invest in the developing technologies that allow us to harvest our resources in the most sustainable manner possible. Fishermen don't like change. You know that. But if the industry is going to continue to develop new aggressively effective ways of harvesting fish, we need an investment in accountable monitoring as well. Please support proposals 163,164 and 165.

Thank you for your time,

Frances Alderson

F/V Ocean Cape



March 2, 2026

Alaska Board of Fisheries
 Marit Carlson-Van Dort, Chair
 Via email: dfg.bof.comments@alaska.gov

RE: Opposition to Proposals 163-165

Chair Carlson-Van Dort and Board Members,

The Aleutians East Borough is the municipality that represents the coastal communities of Akutan, King Cove, Sand Point, False Pass, Nelson Lagoon, and Cold Bay. **We would like to provide comments on our opposition to Proposals 163, 164, and 165.** The Borough and its communities are entirely fisheries-based economies; commercial fishing provides employment for residents, subsistence for families, and fish tax revenue to support community services. Though the Borough relies heavily on fish tax from salmon, taxes are also generated the rest of the year from other species such as pollock, cod, sablefish, and crab.

The Borough also has year-round residents that operate small <58' multi-gear vessels homeported in King Cove and Sand Point, that participate in pollock and Pacific cod trawl. The <58' trawl fleet has historically averaged 18 vessels, but has since dropped to 11 vessels in 2025, the lowest participation on record. These vessels deliver to shoreside processors in Sand Point and False Pass, where additional fish tax revenue is also generated for those communities. Operating these plants in the winter provides employment opportunities and economic activity, and the trawl fishery provides a critical level of volume needed for processors to provide markets for other lower volume fisheries.

By redefining all trawl gear as non-pelagic, **Proposal 163 is another attempt to oversimplify a complex problem, and circumvent all of the work currently happening to solve this exact issue.** Pelagic trawl gear is used for pollock, and bottom trawl gear is used for Pacific cod. These are two very different fisheries with very different gear that operate differently in the water and conflating the two is not an effective management strategy. This proposal is designed to set up the Alaska Department of Fish and Game (ADF&G) and the fishing fleet for failure. It outlines programs that ADF&G either doesn't have the authority to create or have the funds to pay for and doesn't yet have the tools to enforce. There is already a significant effort underway by industry and scientists through the North Pacific Fishery Management Council process to conduct gear innovation, further define trawl gear and develop meaningful enforcement based on evidence. An approach that considers the wide range of vessel size and type, gear used, area of operation, and behavior, all of which contribute to how, when and to what degree a vessel might have bycatch or contact the seafloor.

As it stands, Proposal 163 and 164 would effectively shut down the small boat pollock trawl fishery in the Western Gulf of Alaska (WGOA), as the majority of the 58' fleet harvest comes from state waters. While the majority of the pollock and Pacific cod trawl fisheries occur in federal waters, the area inside state waters is critically important, and nearly all of the state waters portion in the WGOA is from the <58' fleet, roughly 95% and 91% respectively across the 10-year average. The local WGOA fishermen rely on state waters for several reasons: as refuge in bad weather; as an area they can use to avoid bycatch; and to compete with larger vessels that have more options for fishing offshore. The majority of state waters are already closed to bottom trawling. One exception is the small area in the WGOA, where access is restricted to vessels that are <58', a [measure established in 2010 by the Board of Fisheries](#) to protect these small vessels who are fishing for Pacific cod.

For the same reasons as above, Proposal 164 is another “catch-all” provision that is not within the authority of ADF&G, provides no clear guidance on how such a costly program would be funded and maintained, and does not have currently achievable objectives. As a prior Principal Investigator of the WGOA trawl electronic monitoring project for federal fisheries, I am well aware of the immense scope and cost of implementing a monitoring program which took nearly 6 years to implement. The reason that program was successful, was by having full and voluntary support of the fleet, outlining the specific objective (EM for compliance with full retention requirements and counting and sampling onshore), determining data review protocols and costs, and thoughtfully designing a program that accounted for the nuances of different fisheries. This guaranteed the end result was a meaningful improvement that truly achieved the stated goal of monitoring and was usable by federal managers, not just a big brother surveillance tactic. Combined, these two proposals will put pollock vessels and fishery managers in a position to fail, effectively eliminating the pollock fishery for small boat fishermen in the WGOA.

Regarding Proposal 165, we are always in support of finding innovative tools to improve fishing practices. However, we are not in support of bluntly requiring a tool across all fisheries before it has been vetted for use in those fisheries. Salmon excluders are widely used, but they are often used on larger vessels with different horsepower and towing behavior than small vessels. It is unclear whether salmon excluders are actually effective for small vessels, and may perform worse than nets without excluders. Furthermore, the relative volume of pollock in large vessel trawl is much greater than that of a small vessel, so the impacts of pollock that leak from an excluder will be disproportionately worse for a small vessel. This is important for both the fishermen and meeting bycatch objectives, because pollock escaping in great number just mean the vessel is on the water fishing longer (not good for bycatch). Until it is demonstrated that salmon excluders are effective for all types of small vessels and don't exacerbate the problem, we cannot support forcing WGOA fishermen to bear this burden although some are continuing to explore, research and share viable options for small vessels on their own.

We recognize this a complex issue and it will require everyone working together to solve it in a meaningful way. These proposals may have good intentions, but they are not implementable. They will only serve to hurt the small local fleet, communities and Alaskans.

Sincerely,



Charlotte Levy, Fishery Analyst
Natural Resources Department

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Pete Alexson. I have fished Kodiak for salmon for the past 38 years. I live year-round in Homer, Alaska, and I operate a seiner called the Nanvak.

I oppose Proposals 170, 171, and 172. In Kodiak, processors have struggled to stay afloat, with companies selling out or disappearing. Fish volume is vital to keep processors operating—without processors, there is no commercial fishery. Reducing hatchery production risks a devastating outcome for the processing sector and, as a result, for fishermen and coastal communities that depend on that infrastructure.

Living in Homer, I have seen what just two hard salmon seasons can do to a local economy. These proposals would compound instability and make recovery harder.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,
Pete Alexson
Homer, Alaska (Kodiak fishery participant)

[REDACTED]

March 2, 2026

Dear Members of the Board of Fisheries:

My name is Grace Allan. I am a commercial fisherman, longtime community member of Kodiak, and small business owner. I operate the F/V Alyssa Claire.

I recently purchased my own salmon seiner after years of fishing in multiple fisheries. These proposals would make it feel as though the State of Alaska does not support young fishermen taking financial risk in an already challenging industry. Profit margins for new entrants are thin, and unjustified cuts to hatchery programs increase that risk significantly.

Kodiak depends heavily on salmon fishing. The summer fishery provides income that supports local businesses, schools, healthcare providers, and long-term residents. If adjustments to hatchery programs are necessary, they should be gradual and based on sound scientific evidence, not broad reductions without clear data.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Grace Allan
Kodiak, Alaska



Submitted by: Amber Allen

Community of Residence: Willow, AK.

I support proposals 163, 164, 165, and 186. We have owned and operated a small sport fishing guide service in the Mat-Su Valley for going on 18 years now. It is imperative for the Board of Fish to pass proposals 163, 164, and 165, which will ban trawling in state waters in all Oceans in Alaska 3 miles from shore. Trawling is devastating the populations of salmon returning to Alaska rivers, especially the Mat-Su Valley and if something doesn't happen, the next generation is not going to get to fish for King Salmon or Coho Salmon. Proposal 186 restrictions central district commercial fishing from fishing a mixed stalk fishery, by making them fish further out where Red Salmon are more prone to migrate. This will allow more coho/silver salmon to return to the Mat-Su Valley rivers, In the passed 12 years, sometimes the central district commercial fisherman are able to catch 180,000 silvers in one day of fishing in these mixed stalk fisheries, when coho are supposed to be a sport use fish, by commercial fishing regulations.

Submitted by: Ben allen

Community of Residence: Willow, alaska

There needs to be additional conservation of fishery resources, the current management strategy and implementation is not working. My problem is the least impactful user groups are bearing the greatest burden. Restricting in river users has been a failed strategy. I haven't been able to harvest King salmon on willow creek since 2012. I live on Willow Creek full time. You are not allowed to even catch and release kings with a barbless hook on Willow creek, but nets are allowed to drag the bottom of the ocean within 3 miles of shore. Please pass 163,164 & 165.

The Cook Inlet commercial drift gill net fishery is an unsustainable fishery. This fishery has gotten out of hand with kenai sockeye escapement. The last truly good year of coho to the deshka and little Susitna was in 2018. Go figure the kenai red run was weak in 2018 and the central district didn't fish as hard. For the last several years management has blatantly disregarded the central district drift gillnet fishery management plan guidelines as outlined in page 21 of the regulation booklet. Proposal 186 if adopted, will put a plan in place that will allow all user groups to participate and have opportunity. I have lost track of the EOs closing and restricting the little su and deshka coho sportfishery, but nearly ever since 2012. It's a problem that's not going away unless additional conservation where the greatest consumption occurs (central district). Fish where there is the greatest concentration of the fish you are targeting- not in the middle of Cook Inlet in a mix stock fishery.

Please adopt 186

Submitted by: Spencer Allen

Community of Residence: Homer, AK

Good afternoon,

My name is Spencer Allen. I have been an Area E drift gillnet permit owner and operator since 2003. I became an Alaska resident in 1990 and have also crabbed, long lined, seined all across the state. My son is also a fisherman and is trying to buy in. I am committed to sustainable and viable Alaskan fisheries. Below are my thoughts on the following proposals.

Proposal 170: I oppose proposal 170. This will have a negative impact on PWS hatcheries and lower the fish available for common property harvest. This will lead to a larger concentration of boats and increase pressure on wild stocks. Hatchery chum is a primary income source for myself and much of the fleet. A reduction will only harm my fishery with no known benefits.

Proposal 171: I oppose proposal 171. This proposal is open ended and does not have a clear directive. If passed it will destabilize the PWS hatcheries that are designed to support wildstocks and benefit all user groups. Wild and hatchery fish have been interacting for decades and there have been no negative effects.

Proposal 172: I oppose proposal 172. Pink and Chum production has been stable for years. This is too broad of a restriction and does not leave production levels to the ones best informed to make these decisions.

Proposal 187: I oppose proposal 187. This would shut down commercial fishing opportunities in an extremely remote and not fully utilized fishery. There is no conservation concern and fish and game already has the power to change the district lines to adjust for shifts in the river.

Other proposals :

I support Proposal 164 – Establish bottom contact monitoring for pelagic trawl gear:;

I support Proposal 165 – Require salmon excluders for pelagic trawl gear:;

I support Proposal 174 – Seine vessel/skiff engine operation requirements:;

I support Proposal 175 – Dipnet mesh and configuration requirements: ,

I support Proposal 180 – Annual Chinook bag limit of 5 for sport fish:

Thank you for your consideration,

Spencer Allen

PC25

Submitted by: Brenda Ambrose

Community of Residence: Ruby

Stop trawling in AK waters. AK constitution states resources to be protected and managed for residents/subsistence... not out of state enterprises or commercial interests. Kings and chums will either go extinct or can follow the turnaround seen in South America. I want my children to experience sport and subsistence fishing and expect leaders to protect these resources for future generations.

PC26

Submitted by: Bethany and Luther Andersen

Community of Residence: Kasilof

STOP the destruction of the ocean ecosystem ! Trawlers are not sustainable and they destroy coral beds, kill marine Maness of all sizes, create wanton waste by discarding dead 'carbon ch' they don't want. For too long 'agencies' have turned a blind eye. This HAS TO STOP!

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Kavik Anderson, and I am a commercial fisherman based in Kodiak, Alaska. I fish with the Katie Lady, Kestrel, and Cindria Gene.

I would lose opportunity to fish if hatchery production is reduced. These proposals would mean less fish across the dock and reduced opportunity for fishermen and communities that rely on consistent access to salmon.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Kavik Anderson
Kodiak, Alaska



Submitted by: Greg Arthur

Community of Residence: Anchorage

I would like to partially support and partially oppose Proposal 175 that would modify the definition of dip net mesh size and configuration. I support reducing the maximum mesh size to 3.5" in an effort to reduce entanglement of Chinook salmon. I also want to recognize that this does put an economic burden on participants of dip net fisheries given that everyone would need to invest in a new mesh bag for their dip net.

I strongly oppose changing the definition to exclude the use of a rope tied to a vessel that is participating in the dip net fishery. As written the proposal states that it avoids extending the functional length of the net handle. Unless someone's submerged the net handle and was holding it under the water, this is functionally impossible and doesn't make sense as written. Eliminating the use of a rope also significantly reduces the availability and access to this fishery to people with disabilities or who are smaller in stature. All Alaskans should have the opportunity to participate in this fishery and this proposed change to the gear type definition puts an undue burden on the residents of the state participating in this fishery.

Proposal 175 should be amended to only reduce the maximum mesh size from 4.5" to 3.5". The additional proposed language should be removed.

ASHBURN & MASON P.C.

MATTHEW T. FINDLEY • LAURA (DULIC) FISHER • STEPHANIE X. HUANG
REBECCA E. LIPSON • DONALD W. MCCLINTOCK III • MICHAEL S. SCHECHTER • THOMAS V. WANG
OF COUNSEL JULIAN L. MASON III • A. WILLIAM SAUPE

March 2, 2026

Via BOF Online Submission Form

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 Proposals 170, 171, and 172 (Comment Due Date: March 2, 2026)

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 proposals.

INTRODUCTION

In anticipation of the March 2026 Statewide Finfish and Supplemental Issues Meeting, Proponents have submitted three proposals to the Board of Fisheries (“Board”)—Proposals 170, 171, and 172 (collectively, the “Proposals”)—related to limiting hatchery operations. These proposals are not new ideas—rather, they again seek to have the Board override and usurp authority belonging to the Alaska Department of Fish and Game (“Department”) regarding hatchery operations. The proposals are summarized as follows:

Ashburn & Mason, Public Comments in Opposition to Proposals 170, 171, and 172

March 2, 2026

Page 2

- **Proposal 170:** Proponent asks the Board to “[r]educe the permitted egg take level of each hatchery permit containing pink and chum salmon by 25% of the current permitted capacity for those species.”
- **Proposal 171:** Proponent asks the Board to “[a]mend Prince William Sound hatchery permits to reduce pink salmon egg take capacity . . . sufficient to reduce straying into Lower Cook Inlet streams to levels specified in the Prince William Sound/Copper River Comprehensive Salmon Plan.”
- **Proposal 172:** Proponent asks the Board to “establish[] a moratorium on any increase in egg take of [pink and chum salmon] . . . relative to permitted levels as of 2025” and to keep the moratorium in place until more conclusive scientific studies on hatchery-wild salmon effects could be done and hatchery policies could be updated.

In submitting these proposals, Proponents ask the Board to: (1) exceed its statutory authority and override the hatchery permitting decisions of the Department, which AS 16.10.440(b) expressly prohibits; (2) arbitrarily limit hatchery production without persuasive or credible evidence that doing so will result in any benefit, while the overwhelming evidence is that enacting these proposals will cause immediate and significant harm; (3) override the legislature’s express decision to support hatchery activities; (4) financially ruin hatcheries statewide; and (5) cause severe economic harm to all the permit holders, crew, businesses, and communities that rely on a healthy and robust

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commercial fishing industry in Prince William Sound (the “Sound” or “PWS”), Kodiak, and Southeast Alaska.

The comments here focus on the primary reason these proposals must be rejected—*the Board simply does not have the statutory authority to act on any of them.* To be clear, however, there is no current scientifically validated evidence offered in support of these proposals, and the studies these proposals claim are needed regarding hatchery-wild effects *are already underway.* Proponents—who have biased special interests—are simply conjecturing that released hatchery fish in Prince William Sound and Southeast Alaska are the cause of fisheries declines and closures *statewide*, including fisheries in Western Alaska hundreds of miles from the hatcheries in question. For example, there is no credible evidence that reducing pink and chum egg take levels by 25% would actually have a positive effect on Alaska wild salmon stocks (Proposal 170). The proposal simply suggests that the Board take action and see what happens. In addition, asking the Board to reduce egg take capacity to reduce straying to levels specified in the Prince William Sound/Copper River Comprehensive Salmon Plan is unsupportable and implausible without further scientific study, as current scientific studies have not confirmed what levels of straying are detrimental to wild stocks (Proposal 171). Finally, placing a moratorium on any increases in pink and chum egg take levels to allow for completion of further scientific studies is unnecessary, as the Department already balances such considerations when it issues hatchery permits and directs further scientific study (Proposal 172).

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Putting aside all these scientific failings, again, *the Board lacks statutory authority to amend hatchery permits and override the permits issued by the Department in the manner advocated by Proponents.* 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,¹ including but not limited to how 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.²

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.³ 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.

¹ AS 16.10.400–.480; 5 AAC 40.005–.990.

² AS 16.10.445; 5 AAC 40.300; 5 AAC 40.340; 5 AAC 40.840.

³ *E.g.*, AS 16.05.251.

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The Proposals seek to disrupt this well-established division of authority by interjecting the Board into the realm of production management. Specifically, the Proposals ask the Board to limit or 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.

Only one of the proposals, Proposal 172, cites any authority that would allow the Board to take the requested actions here, but both citations are inapposite. *First*, AS 16.05.251(a)(9) grants the Board authority to enact new regulations for "prohibiting and regulating the live capture, possession, transport, or release of native or exotic fish or their eggs." However, and importantly, *the same statute* further down in paragraph (f) notes that the Board "may *not* adopt regulations or take action regarding the issuance, denial, or conditioning of a permit under [the hatchery permitting statute], . . . [or] the construction or operation of a farm or hatchery . . ." (emphasis added). Thus, the Board may not rely on this statute to approve proposals regarding hatchery permitting and operations. *Second*, AS 16.10.440(b) only addresses the Board's limited authority to enact new regulations 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. These provisions in no way grant the Board authority to override Department permitting decisions and try and shut down hatchery operations by fiat.

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Indeed, when AS 16.10.440(b) was enacted in 1979, the legislature’s reference to “the source and number of salmon eggs” 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 in wild systems. 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 from returning hatchery broodstock, captured in terminal harvest areas, not in wild systems, with little or no allocative implications.

To remove any doubt, the Department and the Attorney General’s office both opposed a similar proposal in 2023 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,”⁴ 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.”⁵ Likewise, the Department has filed comments here opposing Proposals 170, 171, and 172.

⁴ Attorney General’s Office Comments to Proposal 43, Lower Cook Inlet Meeting Cycle 2023.

⁵ 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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ABOUT ASHBURN & MASON AND PWSAC

Ashburn & 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 PWSAC and other regional private nonprofit hatchery organizations, such as Valdez Fisheries Development Association (“VFDA”), Kodiak Regional Aquaculture Association (“KRAA”), and Northern Southeast Regional Aquaculture Association (“NSRAA”). 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”) and 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 an innovative legal framework for the creation and operation of the state’s PNPs and regional aquaculture associations.

Over the past 50+ 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

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wild salmon stocks. In fact, all of PWSAC’s 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.⁶ The importance of protecting and developing natural resources such as salmon is embedded in the Alaska Constitution, which directs the

⁶ *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* at 4 (6th ed. 2025), available at https://akleg.gov/docs/pdf/citizens_guide.pdf (Many Alaskans concluded “that the federal government’s vigilance as a trustee of the public interest was really a cloak for the interests of bureaucrats and economics 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* at 14 (1999), available at 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.”).

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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.”⁷ The Alaska Constitution proclaims that “fish, wildlife, and waters are reserved to the people for common use,”⁸ and dictates that “[f]ish, 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.”⁹ Further, the Constitution expressly references the goal of “promot[ing] the efficient development of aquaculture in the State,” and protecting Alaska’s economy from outside interests:¹⁰

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 Prince William 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

⁷ Alaska Const. art. VIII, § 2.

⁸ Alaska Const. art. VIII, § 3.

⁹ Alaska Const. art. VIII, § 4.

¹⁰ Alaska Const. art. VIII, § 15. The Constitution has since been amended to provide for the limited entry permit system now in place, *see infra* note 12, but the reference to promoting the “efficient development of aquaculture” remains unchanged.

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constitutional amendment provided the basis for limited entry legislation for commercial fisheries,¹¹ and the state hatchery program was initiated through the creation of the Fisheries Rehabilitation & Enhancement Division (“FRED”).¹²

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

¹¹ 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, and the Board of Fisheries. *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.”).

¹² 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.”¹³ 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.”¹⁴ The Department is also generally charged to do everything possible to assist with hatchery operations.¹⁵

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.¹⁶ 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.¹⁷ The Act stated that its purpose was to “authorize the private ownership of salmon hatcheries by qualified non-profit corporations for the purposes of contributing, by artificial means, to the rehabilitation of the State’s depleted and depressed

¹³ AS 16.05.092(1) and (3) (emphasis added).

¹⁴ AS 16.05.020(2) (emphasis added).

¹⁵ AS 16.10.443.

¹⁶ AS 16.10.500–.560; *see generally* Alaska Division of Investments, “Loan Programs: Fisheries Enhancement,” available at <https://www.commerce.alaska.gov/web/inv/LoanPrograms/FisheriesEnhancement> (last visited Feb. 25, 2026).

¹⁷ These provisions are now codified at AS 16.10.375 *et seq.*

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salmon fishery.” Further, as noted above, a separate fisheries enhancement loan program was created in 1976 to provide state financing for nonprofit hatcheries.¹⁸

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 1988,¹⁹ 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.²⁰

Alaska law provides that the hatcheries may only be non-profit.²¹ By design, the hatcheries are allowed to recover operating and capital expenses, as well as costs for

¹⁸ 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.”).

¹⁹ AS 16.10.480.

²⁰ 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.

²¹ *See* AS 16.10.380; AS 16.10.400(a).

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research and development and expansion of the production system, including wild stock rehabilitation work.²² 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, 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 Alaska Department of Fish and Game,²³ the Limited Entry Act,²⁴ the Private Non-Profit Hatcheries Act,²⁵ and the Fisheries Enhancement Revolving Loan Fund,²⁶ 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

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

²² AS 16.10.455.

²³ AS 16.05.010 *et seq.*; *see also* 5 AAC 40.100–.990.

²⁴ *Supra* note 12.

²⁵ AS 16.10.375–480.

²⁶ AS 16.10.500–.560.

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incubate and release each year,²⁷ and to regulate all other details of hatchery operation.²⁸

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.²⁹

Of particular relevance to the issues 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 Department is also required to conduct public hearings near the proposed hatcheries and to consider comments offered by the public at the hearings before issuance of a permit.³⁰

All state hatcheries are operated pursuant to a permit issued by the Department.³¹ Standard permit conditions include: (1) provisions that eggs used for broodstock come from a source approved by the Department;³² (2) no placement of salmon eggs or resulting

²⁷ AS 16.10.445; 5 AAC 40.300; 5 AAC 40.340; 5 AAC 40.840.

²⁸ AS 16.10.375–.480; 5 AAC 40.005–.990.

²⁹ AS 16.10.400(f).

³⁰ AS 16.10.410.

³¹ AS 16.10.400; AS 16.40.100–.199; 5 AAC 40.110–.240.

³² 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

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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.³³

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.³⁴ The basic management plans include a complete description of the facility, including the special harvest area, broodstock development schedules, and description of broodstock and hatchery stock management.³⁵

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

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.

³³ 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).

³⁴ 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 “prepare a regional comprehensive salmon plan . . . to rehabilitate natural stocks and supplement natural production . . .” 5 AAC 40.340.

³⁵ See generally McGee, at 329.

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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.³⁶ The AMP also addresses how PNP's will conduct their cost recovery harvest at each hatchery and other specifics of hatchery operation.³⁷

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.

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.”³⁸ 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.³⁹ To the best of our knowledge,

³⁶ 5 AAC 40.840.

³⁷ McGee, at 329.

³⁸ AS 16.05.221.

³⁹ AS 16.05.251.

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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):

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 Proponents 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.⁴⁰ As an initial matter, the plain text of the statute does not authorize the generalized across-the-board percentage reduction set forth in Proposal 170, the ambiguous “changes” in PWS hatchery production “sufficient to reduce straying” into Lower Cook Inlet streams set forth in Proposal 171, or the sweeping moratorium set forth in Proposal 172 that would limit the Department’s decisions on hatchery permitting. 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.*” Thus, it does not allow Proposal 170’s

⁴⁰ 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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across-the-board percentage reduction to all hatchery permits, which is not a well-considered amendment to a specific permit that would implement a scientifically-validated-alternate-egg-take number.

Even less does the statute allow for the far more ambiguous actions recommended by Proposals 171 and 172, which essentially presume, without evidence, negative outcomes for scientific studies that have yet to be done. For example, Proposal 171 cites to a 2018 Otis study which observed hatchery salmon straying from PWS to Lower Cook Inlet streams at an alleged average of 22%.⁴¹ The proposal then demands that PWS hatchery salmon straying levels be at or below the “levels specified in the Prince William Sound/Copper River Comprehensive Salmon Plan,” which recommends a straying level “below 2% of the wild-stock escapement over the long term.”⁴² However, the very 2018 Otis study that Proponent cites to in support of Proposal 171 *explicitly states* that “it is not clear what level of straying is benign and what levels should be prevented to avoid

⁴¹ Otis, Edward O. *et al.*, *Observations of Pink Salmon Hatchery Proportions in Selected Lower Cook Inlet Escapements, 2014-2017* (Oct. 2018) (ADF&G Special Publication No. 18-11), available at <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2018-2019/ws/SP18-11.pdf>. While Proponent alleges straying at 22%, the undersigned could not determine how Proponent got to that number based on the study.

⁴² ADF&G, *Prince William Sound/Copper River Phase 3 Comprehensive Salmon Plan* at 25 (Oct. 1994) (ADF&G Special Publication No. 23), available at <https://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesPlanningRegional.enhance>.

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potentially negative impacts,” and that “threshold” straying levels will “likely differ by species, population, and perhaps even population segment (e.g., intertidal vs. river spawners), which further complicates the interpretation of straying results.”⁴³ Regardless of the science available, however, it is the Department’s wheelhouse, not the Board’s, to make decisions based on the available science and issue hatchery permitting and operations decisions as part of its comprehensive regulatory regime. These proposals are no more than the attempts of special interest groups 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 the Board that has served all stakeholders well for decades.

In addition, any argument that AS 16.10.440(b) 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,⁴⁴ its legislative history and

⁴³ Otis et al., at 10.

⁴⁴ E.g., *Monzulla v. Voorhees Concrete Cutting*, 254 P.3d 341, 345 (Alaska 2011) (citing *In re Hutchinson’s Est.*, 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”)).

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intent,⁴⁵ and over 40 years of consistent administrative interpretation and practice, during 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.⁴⁶

The current version of 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 in wild systems, 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.

⁴⁵ *E.g.*, *Native Vill. 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)).

⁴⁶ *E.g.*, *Marathon Oil Co. v. State, Dep't of Nat. Res.*, 254 P.3d 1078, 1082 (Alaska 2011); *Premera Blue Cross v. State, Dep't of Com., 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) (holding that agency decisions based on "long-standing, consistent, and widely known" interpretations of agency expertise should be given "great weight").

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Further, as the Department Commissioner explained to the Board addressing a 2018 emergency petition asking the Board to intervene in hatchery permitting, “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.”⁴⁷ In 1976, AS 16.10.440 read:

- (a) Fish released into the natural waters of the state by a hatchery operator under secs. 400-470 of this chapter 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 may promulgate regulations necessary to implement secs. 400-470 of this chapter.

This statutory language generated significant confusion given the overall authority vested in the Commissioner to manage the creation, operation, and permitting of nonprofit hatcheries discussed above. How were hatcheries to operate if both the Board and the Commissioner had overlapping authority? The statute was thus amended in 1979 to answer this question and make clear that all aspects of hatchery permitting and operations lay with the Commissioner, and it left the allocation of the fish in the common property water to the Board of Fisheries.

⁴⁷ 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.

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The legislative history of the 1979 amendment to section 440(b) confirms this intent and demonstrates that this statutory language was never intended to be used by the Board as a backdoor 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.⁴⁸

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.

⁴⁸ Alaska House Journal, March 15, 1979, pp. 601–02 (emphasis added).

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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(a)(9), which grants the Board limited authority to "prohibit[] and regulat[e] the live 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/exotic eggs.

Additional evidence that the Department, not the Board, is responsible for regulating hatchery egg take can be found at 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

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responsibility for regulating those two closely related hatchery activities to the Commissioner.⁴⁹

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 the permit,” and the Department’s mandate vis-à-vis Section 445(b), it is quite clear that the Board has little to 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.⁵⁰ There is an extensive Regional 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”⁵¹ As mentioned earlier, there is also an intricate system of basic and annual hatchery plans that are reviewed annually by the Department,

⁴⁹ E.g., 5 AAC 41.090 (granting the Commissioner authority to delegate provisions under 5 AAC 41 to persons within *the Department*).

⁵⁰ 5 AAC 40.110–.245.

⁵¹ 5 AAC 40.340 (emphasis added).

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performance reviews, and, in appropriate cases, permit alterations.⁵² 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 regulations 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, again, 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 same Proponent of Proposal 170 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 year 2000 production level.⁵³ The Attorney General’s office filed comments that this proposal was likely “beyond the Board’s authority, which is

⁵² See 5 AAC 40.185; 5 AAC 40.840; 5 AAC 40.860; 5 AAC 40.245.

⁵³ Proposal 43 for Lower Cook Inlet Finfish Board Meeting, at 41-42 (Nov. – Dec. 2023), available at https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/proposals/LCI_all.pdf.

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limited by AS 16.05.251(f) and AS 16.10.400 – 16.10.440.”⁵⁴ 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*.⁵⁵

Likewise, the Department *affirmatively opposed* Proposal 43, 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 by the department for which there is specific statutory authority would upset the balance

⁵⁴ State of Alaska Department of Law, Comments on Proposals for the November 28 – December 1, 2023 Board of Fisheries Meeting for Lower Cook Inlet Finfish, at 3 (Nov. 22, 2023) (commenting on Proposal 43), available at <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/lci/dol-memo-lci.pdf>.

⁵⁵ *Id.* at 4 (emphasis added).

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of the statutory scheme chosen by the legislature.”⁵⁶ 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).”⁵⁷ 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.⁵⁸

The same reasoning applies here. There is no credible, scientifically validated evidence whatsoever that such a dramatic decrease in hatchery egg take across all pink and chum hatcheries in Alaska—as proposed by Proposal 170—will have any impact, positive or negative, on wild stocks, while conversely it would have catastrophic economic effects on the hatcheries themselves and the many that depend on them for sustenance and their

⁵⁶ Department Comments on Proposal 43, Lower Cook Inlet Finfish Board Meeting, at 95-98 (Nov. – Dec. 2023), available at https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2023-2024/lci/rc2_staff_comments_lci.pdf (quoting State of Alaska Department of Law, Memorandum on Authority of the Board of Fisheries Over Private Nonprofit Hatchery Production, at 12 (Nov. 6, 1997) (“1997 AG Opinion on Board Authority”), available at <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2019-2020/hc/law.pdf>).

⁵⁷ *Id.* at 97-98 (quoting 1997 AG Opinion on Board Authority, at 13).

⁵⁸ *Id.* at 98 (emphasis in original).

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livelihoods. This is a matter of simple arithmetic 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 Has Historically Opposed Proposals Similar to the Current Proposals as Misguided and Beyond the Board’s Authority

After opposing Proposal 43, discussed in the previous section, the Department continued to maintain the same position on other proposals similar to the current hatchery-related proposals, especially Proposal 170, concluding that they are beyond the Board’s authority.⁵⁹ It has also repeatedly referenced the prior 1997 Attorney General opinion, which states that “Board action that effectively revokes or prevents the issuance of a hatchery permit is probably not authorized.”⁶⁰

For example, in response to another proposal (Proposal 78) in late 2024, which proposed reducing PWS and VFDA hatchery pink and chum permitted egg take by 25%, the Department again concluded:

The department **OPPOSES** this proposal. Hatchery egg-take levels are established through an iterative process involving department staff and

⁵⁹ Department Comments on Proposal 78, Prince William Sound and Upper Copper/Upper Susitna Rivers and Shellfish (Except Shrimp) Board Meeting, at 197-200 (Dec. 2024), available at https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2024-2025/pws/rc2_staff-comments_12-3-24.pdf.

⁶⁰ *Id.* at 199 (quoting 1997 AG Opinion on Board Authority, at 2).

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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.

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.⁶¹

Likewise, and most recently, the Department opposed Proposal 156 in early 2025 that again sought to “[r]educe the permitted egg intake of pink and chum salmon of each applicable Southeast hatchery for pink and chum salmon by 25%.”⁶² The Department again stated:

The department **OPPOSES** this proposal because the changes to Alaska hatchery salmon production envisioned by this proposal are likely to have little effect on marine competition among salmon species. The department recognizes that straying of hatchery-produced chum salmon in Southeast Alaska has impacted the ability to assess status of wild chum salmon returns in some areas and is analyzing this problem to determine whether changes to

⁶¹ *Id.* at 200 (emphasis in original).

⁶² Department Comments on Proposal 156, Southeast Alaska King Salmon, Groundfish, and Shellfish Board Meeting, at 215-19 (Jan. – Feb. 2025), available at https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2024-2025/se/rc2_staff-comments_12-30-24.pdf.

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hatchery release practices could reduce straying of hatchery produced chum salmon. 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 and the commissioner can amend a permit if the hatchery is not in the best interest of the public or to mitigate the adverse effects of the hatchery operation. 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 reduce adverse effects on wild salmon stocks. No evidence was provided in this proposal to support that current permitted pink and chum salmon egg-take levels adversely affect wild stocks, in or outside the southeast enhancement area.

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 production of other species of salmon and may have harvest allocation affects, which are a primary concern of the boards of the PNP corporations.⁶³

In short, the Department has been consistent in its position on proposals seeking to disrupt the regulatory balance between the Department and the Board mandated by the legislature.

E. The Department Submitted Comments Opposing All Three Proposals Here

Consistent with past practice above, the Department has again submitted comments opposing Proposals 170, 171, and 172 here.⁶⁴

⁶³ *Id.* at 218-19.

⁶⁴ Department Comments on Proposals 170, 171, and 172, Statewide Finfish and Supplemental Issues Board Meeting, at 85-99 (Mar. 2026), available at https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2025-2026/state/adfg-staff-comments_2-27-26.pdf.

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Regarding Proposal 170, the Department states:

The department **OPPOSES** this proposal as written. Although there are a significant number of publications on interactions between hatchery production and wild stocks of salmon, very few are directly applicable to Alaska's salmon populations. Salmon hatcheries outside of Alaska are used to mitigate lost production (e.g., reduced spawning habitat and dams), have different harvest management plans for adult returns, and are not subject to the same precautionary statutes, regulations, and policies as Alaska hatcheries. Alaska policies were designed to avoid past mistakes of hatchery programs operating in the contiguous United States. The publications that do focus on Alaska hatchery/wild interactions have primarily been correlative studies that infer negative interactions at sea, despite multiple other potential causes that may lead to the same result. Over the past 50 years of Alaska hatchery production, the department has strived to meet the legislature's directive to enhance Alaska's salmon fisheries, while at the same time protecting wild stocks. The department will continue to closely monitor the hatchery program and take steps to address concerns if there is a compelling reason to amend the terms of a hatchery permit based on data that provide clear evidence the amendment will have a reasonable probability of measurably reducing identified adverse effects on wild salmon stocks. The permitted capacity of pink and chum salmon has remained the same since 2019. When the department has detected impacts of hatchery fish on wild stocks, such as in the case of Crawfish Inlet, where straying hatchery chum salmon impeded the department's ability to estimate area wild stock escapement, the department took action to reduce hatchery releases in the area. Effectiveness of this hatchery release reduction will be evaluated in coming years.⁶⁵

Regarding Proposal 171, the Department states:

The department **OPPOSES** this proposal because there is not a mechanism relating Prince William Sound (PWS) hatchery pink salmon egg-take levels to the amount of PWS hatchery pink salmon present in Lower Cook Inlet streams. It is likely that factors other than egg-take level exert influence on the rate of straying. Hatchery egg-take levels are established through an iterative process involving department staff and stakeholders. Hatchery

⁶⁵ *Id.* at 88.

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operations are permitted with consideration of minimizing impact on wild salmon stocks, and the commissioner can amend a permit if the hatchery is not in the best interest of the public. The commissioner may alter the permit to mitigate the adverse effects of the hatchery operation. The department will continue to closely monitor the hatchery program and take steps to address concerns if there is a compelling reason to amend the terms of a hatchery permit that is based on analysis of data and provides clear evidence the amendment will have a reasonable probability of measurably reducing identified adverse effects on wild salmon stocks. The department's current hatchery/wild interaction study is working to establish baseline genetic data, which, when applied to the overall conclusions of the study, will guide the department in production decisions. The permitted capacity of pink salmon in Prince William Sound has remained the same since 2019.

When the department has detected impacts of hatchery fish on wild stocks, such as in the case of Crawfish Inlet, where straying hatchery chum salmon impeded the department's ability to estimate area wild stock escapement, the department took action to reduce hatchery releases in the area. Effectiveness of this hatchery release reduction will be evaluated in coming years.

If the board were to generate a regulation to reduce pink salmon egg-take numbers, it should also consider the effect that changes to permitted egg capacity will have on the hatchery association's financial stability, its ability to produce other species of salmon, and the resulting changes to allocation of harvest among gear groups. Each hatchery association takes these things into account when annually reviewing hatchery production.⁶⁶

Regarding Proposal 172, the Department's opposition is almost identical to its opposition to Proposal 171:

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 and the commissioner can amend a permit if the hatchery is not in the best interest of the public or to mitigate the adverse effects of the hatchery operation. The department will continue

⁶⁶ *Id.* at 95.

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to closely monitor the hatchery program and take steps to address concerns if there is a compelling reason to amend the terms of a hatchery permit that is based on analysis of data, and provides clear evidence the amendment will have a reasonable probability of measurably reducing identified adverse effects on wild salmon stocks. The permitted capacity of pink and chum salmon has remained the same since 2019.

When the department has detected impacts of hatchery fish on wild stocks, such as in the case of Crawfish Inlet, where straying hatchery chum salmon impeded the department's ability to estimate area wild stock escapement, the department took action to reduce hatchery releases in the area. Effectiveness of this hatchery release reduction will be evaluated in coming years.⁶⁷

In summary, the Department's opposition to these Proposals mirrors the comments here regarding the Board's statutory authority and the lack of evidence that any of these Proposals will have a positive impact on the problems they are meant to address.

II. THE BOARD DOES NOT HAVE AUTHORITY TO PROMULGATE NEW HATCHERY PERMITTING REGULATIONS AS PROPOSED BY PROPOSALS 170, 171, AND 172

Proposals 170, 171, and 172 seek to have the Board promulgate new regulations regarding hatchery permitting. All three proposals ask either for statewide reductions in hatchery permit egg take or for a reduction in PWS hatchery permit egg take. However, in neither circumstance can the Board issue regulations to do so. Rather, as explained in detail above, any such authority lies with the Department. Furthermore, past proponents of similar proposals have sought to have the Board *amend* existing regulations to allow for a

⁶⁷ *Id.* at 98-99.

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reduction in egg take, but as explained below, the Board can neither amend nor create such regulations.

Previously, the proponent of Proposal 78 in late 2024 proposed similar reductions in hatchery production in both Cook Inlet and Kodiak,⁶⁸ both times seeking to amend 5 AAC 40.820, which addressed the creation of hatchery basic management plans *statewide*.⁶⁹ In likely recognition that the Board may not amend a statewide regulation to

⁶⁸ 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; Proposal 43 for 2023 Lower Cook Inlet Finfish Board Meeting to amend 5 AAC 40.820 to “[a]mend 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.

⁶⁹ 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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address hatchery permitting in specific regions, that proponent changed tactics and sought to amend a Prince William Sound-specific regulation addressing hatchery fish. But the fundamental problem remained that there was no place in the Board regulations addressing amendment of hatchery permits. That proponent sought to shoehorn the permit amendment into an unrelated regulation, but it simply could not do so. As discussed above, the Board lacks statutory authority to set egg take policy for returning hatchery fish, full stop. Here, none of the three Proposals pertain to the Board's harvest allocation authority, and thus the Board has no authority to promulgate the types of regulations the Proponents seek.

Moreover, the Board *cannot* have such authority, because it would be completely untenable for two agencies—the Board and the Department—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 policies advocated for by special interest groups through statutes that the legislature had always intended to govern the Board's authority to regulate harvest allocation, not egg take from returning hatchery salmon.

CONCLUSION

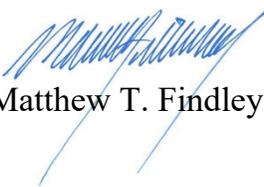
Back in the early 1970s, Prince William Sound experienced recurring wild salmon run failures, which caused serious financial distress throughout the region. In response,

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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 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, and consistent with the comments of the Department, the Board should reject Proposals 170, 171, and 172.

ASHBURN & MASON, P.C.



Matthew T. Findley



Stephanie X. Huang

Submitted by: Avery Ault

Community of Residence: Homer

I am in full support of prop 177 for the conservation of or local fish species. It will limit the amount of damage to fish that's get released, those fish can be kept. And it will ensure a fair fishing practice for disabled of injured clients on guided angler boats.

Submitted by: Erik Bakke

Community of Residence: Homer

I want no trawling in state waters. Trawling is too destructive, our fisheries are too valuable, and so many are already struggling. It's mind boggling that you allowed trawling in PWS this year.

If you're going to allow pelagic trawling, it should be severely constrained. To that end:

Proposal 11 - Support

Proposal 163 - Support

Proposal 164 - Support

Proposal 165 - Support

Proposal 166 - Support

Proposal 167 - Support

Proposal 168 - Support

Proposal 169 - Support

Other proposals:

Proposal 173 - Support

Proposal 174 - Support

Submitted by: Kent Barkhau

Woodstock Fisheries LLC

Community of Residence: Sitka

Thank you for the opportunity to submit comments prior to board deliberation. My name is Kent Barkhau. I have lived in Alaska for 46 years. Our family has depended on the health, diversity and abundance of our marine waters to provide a living that has allowed my wife and I to raise our family here. Our commercial fishing has been with hook and line for Sablefish, Halibut, and Salmon. In addition to the economic livelihood, our family greatly benefits and relies on subsistence harvest to sustain us.

I stand in support for proposals 163, 164, and 165.

Alaska State regulations currently prohibit seafloor contact by pelagic trawls. However, analysis and statements made to the North Pacific Fishery Management Council establish that there is substantial contact by "pelagic" trawls with the seafloor. Without corrective action this substantial bottom contact by "pelagic" trawls will

continue and seafloor ecosystems will continue to be degraded or destroyed in areas that have been identified for needed protection. These protected habitats contribute to ecosystem health and productivity in adjacent areas and indeed to a degree throughout the entire North Pacific.

We need enforceable and verifiable rules for keeping these nets off the sea floor. Industry will have to adapt to be able to do so or they should no longer be able to fish in these areas. Proposals 163 and 164 will provide this result.

I support proposal 165 as a "no-brainer" provided that the required salmon excluders result in a reduction in bycatch mortality of non target species of concern.

Thank you.

Kent Barkhau

PC33

Submitted by: Filimon Basargin

Community of Residence: Homee

I support proposal sb 161 I have alongside trawlers most of my fishing career since 1989 I've seen the damage done by trawlers first hand I longlined alongside trawlers in 1993 and those areas are still dead due to the destruction of the ocean bed till this day there's no fish on Gore pt. I also fished alongside trawlers in Shelikoff straight the halibut highway of The Alaskan Gulf I seen first hand how much dead halibut gets dumped overboard and till this day Shelikoff strait is a dead zone as well no fish of any kind. I also fish Tanner crab on east side of Kodiak Ugak bay and Sitkalidak strait and trawlers didn't trawl between dangerous cape and Barnabas cape a little over two years the crab came back in massive numbers from being closed to a 6 million lb quota in 2 short years and when trawlers opened in that area went back to being closed in 2 short years. They admitted to dumping 15,000 crab per trawl set until it was diminished. It was like they planned to destroy our only fishery that we have in the winter. Thank you for the opportunity to submit my experience with trawlers and hopefully you will consider saving the last of Alaska's fisheries, coastline and the ocean floor before it's too late. Thank you!

My name is Patrick Baum, and I am representing myself as an Alaskan resident. I am a lifelong Alaskan living in Juneau with my wife and two kids. I'm a recreational fishing and hunting license holder, a harvester of the land and sea, and I also fish commercially as a salmon troller. I care about maintaining opportunity and abundance for Alaskans while keeping management enforceable, fair, and grounded in conservation.

1) Trawling / Groundfish trawl proposals — SUPPORT (Proposals 11, 163–165)

I support proposals that strengthen conservation safeguards and accountability for trawl operations in state waters. Where regulations prohibit seafloor contact, there must be monitoring and verification systems that can reliably demonstrate compliance. Measures that presume trawl gear in state waters is bottom-contact unless proven otherwise, or that require seafloor contact monitoring, directly address enforceability and protect benthic habitat and sensitive fisheries resources.

I also support practical bycatch-reduction tools such as requiring approved salmon excluders for pelagic trawl gear operated in state waters. This is a reasonable, performance-based approach that allows fishing to continue while reducing salmon interactions and improving public trust in management.

I further support protecting high-value habitat by limiting trawl effort where it threatens key stocks, including crab habitat concerns raised in Proposal 11.

2) Hatchery proposals — OPPOSE (Proposals 170–172)

I oppose the hatchery proposals (statewide egg-take reduction and moratorium concepts). Proposals reducing permitted egg take for pink and chum by 25% statewide are overly broad and risk unintended consequences for Alaska communities and fisheries that depend on hatchery returns for economic stability and support services.

If changes are needed, they should be targeted, region-specific, and phased, with realistic timelines, and a focus on minimizing harm to working waterfront communities while addressing any demonstrated biological risk.

3) Sport bag/possession & annual-limit proposals - OPPOSE (Proposals 176–180)

I oppose proposals that allow anglers on the same vessel to pool bag and possession limits. Pooling shifts regulations away from individual accountability, creates practical enforcement confusion (who "owns" fish onboard, and when seasonal limits are reached), and risks increasing total retention behavior in ways that are hard to track.

I also oppose a statewide annual Chinook limit approach as proposed. Chinook management is already highly complex across Alaska, and the proposal materials themselves acknowledge concerns about how statewide limits could affect allocations in regions tied to the Pacific Salmon Treaty framework.

A statewide annual cap may sound simple, and it could create inequities and unintended outcomes across the different regions and fisheries.

Submitted by: Aaron Bean

Community of Residence: Craig

Re: Proposals 163–165 – Types of Legal Gear (Bottom Trawling Restrictions in State Waters), Statewide Finfish and Supplemental Issues Meeting

Dear Board Members,

I strongly support a complete shutdown of bottom trawling within Alaska state waters, as proposed. No one is denying the destructive nature of bottom trawling in many parts of the world, nor claiming it is the sole cause of any fishery decline. In fact, numerous trawl fisheries have been shut down or severely restricted precisely because of their documented damage to seafloor habitats, biodiversity, and unsustainable bycatch. Prominent examples include:

- The U.S. West Coast, where more than 140,000 square miles of seafloor habitat are now closed to bottom trawling to protect essential fish habitat, corals, and sponges.
- The European Union’s 2023 action plan to end bottom trawling in all Marine Protected Areas by 2030, with leading nations like Greece (full ban by 2030, starting in national parks by 2026) and Sweden (ban adopted 2025) already acting.
- International high-seas efforts, including the 2025 IUCN resolution calling for a phase-out of bottom trawling on seamounts (now headed to the UN General Assembly).
- Ghana’s 2025 commitment at the UN Ocean Conference and new fisheries law banning bottom trawling and industrial fishing practices in expanded inshore exclusion zones.

Many other nations have taken similar steps for the same reasons. These actions show that where the science and impacts warranted it, closures happened—and one would think Alaska state waters deserve the same basic protection.

The push for blanket closures doesn’t fall short. It’s the solution.

The crashing Yukon and Kuskokwim salmon runs have zero trawling inside the rivers themselves. Yet those fish must migrate straight through the Bering Sea pollock grounds where the fleet operates. Genetic testing and observer data confirm that Western Alaska Chinook and chum salmon are taken as bycatch—thousands of fish in some years—even if that represents only about 1-2% of total mortality on average. When runs are already at historic lows (with Yukon chum subsistence fisheries closed for years), even that small, human-controlled fraction removes fish that rural communities desperately need for food security. It is not the main driver—climate is far bigger—but it is one we can actually manage and tighten.

Yet the North Pacific Fishery Management Council recognized this reality just last month (February 2026) when it voted to establish new Western Alaska chum salmon bycatch limits and partial corridor closures in the Bering Sea pollock fishery specifically to protect subsistence users. (I personally believe the measures as adopted will not meaningfully change outcomes, but the Council’s action itself proves the data justified addressing it.) Past effort reductions have not rebuilt stocks because climate change is the dominant factor—that is correct.

And we’re presupposing that climate factor. Presuming it is; which there’s much evidence to show that the government has failed to acknowledge natural cycles in the climate over millennia, as documented in traditional ecological knowledge that is ignored by the state of Alaska and the federal government.

We have no control over the climate; but we do have control over our behavior, and fisheries management is charged with preserving the resource for all Alaskans—not just commercial trawlers. The trawlers need to bear the burden of conservation along with the rest of the user groups. If subsistence is zero, bycatch should be zero. Hard stop.

No one is “picking a political villain.” (Though it is curious how quickly that label gets applied whenever anyone suggests the fleet should share the pain.) Alaskans are simply asking for the same consistent, science-based approach we already apply across every other stressor: climate, hatcheries, international interception, predation, freshwater habitat loss, and the bycatch/habitat effects of trawling.

Yes, the issue feels emotional when entire villages cannot put salmon on the table while the fleet continues to haul pollock. But the science is clear: we must manage all stressors, not just the ones that do not affect one particular fleet.

Supporting a full shutdown in state waters is the right first step. Let’s not pretend otherwise.

Thank you for considering this comment and for your service on the Board.

Sincerely,

/s/ Aaron D. Bean

Craig, Alaska

PC36

Submitted by: Matthew Beck

Community of Residence: Palmer

I am a longtime valley resident and have watched our Coho stocks dwindle. Coho season used to be great and the previous safety corridor in Cook Inlet made a huge difference in the size of the returns. We would fish through August and September and our freezer was filled with local-caught cohos. Our friends from out of state would come visit and return home with full fish boxes. About 10 years ago, all that changed when the fish numbers dwindled. There are very few fish to be caught. Fishing guides and visitors have moved elsewhere. Our friends fish in Kodiak instead of the Mat-Su because the fish numbers aren’t that good. It’s hurting Alaska and the Mat-Su. I am in support of Proposal 186.

PC37

Submitted by: Ben Behan

Community of Residence: Trempealeau, Wisconsin

Members of the Board,

My name is Ben Behan and I currently reside in Trempealeau, Wisconsin. This upcoming summer will mark my seventh season being a part of the commercial set gillnet fishery located in the Eshamy District of Prince William Sound. Additionally, I have participated in the commercial shrimp and drift gillnet fisheries in the sound as well as the various sport fisheries that the sound has to offer. I currently sit as the setnet seat on the PWSAC board of directors and am a member of both CDFU and the Prince William Sound Setnetters’ Association.

Proposal 164: SUPPORT

Proposal 165: SUPPORT

Proposals 170, 171 & 172: OPPOSE

I strongly oppose proposals 170-172 that seek to make overly aggressive cuts towards common property hatchery fish. Chum and Pink salmon are much more than just commercially harvested fish. While these species are part of the commercial fishery, they are also integral to sport and subsistence users, research, and monitoring.

Hatcheries play a vital role in coastal communities statewide for sport, subsistence and personal use harvesters alike. Proposals 170-172 would hinder all user groups by destabilizing the current infrastructure that hatcheries offer throughout many parts of rural Alaska.

Proposals 170-172 are impactful when taken away from fishing as a whole. These proposals attack the world class systems that the Alaska Department and Fish and Game has built and honored for decades. Consequently, these proposals inflict not regional but statewide restrictions that exclude the science based model that for years Alaska has relied on to manage its pristine fisheries that we all know and love.

It is without question that we as harvesters are always concerned about the abundance of salmon and our ability to participate in whichever user group we fall into. I believe that it is equally important to be concerned about, and adhere to, the public process that the state of Alaska's fisheries rely on to function, so that we as harvesters get the opportunity to participate in a fishery we love and care so much about.

Proposal 175: SUPPORT

Proposal 180: SUPPORT

Proposal 187: OPPOSE

Proposal 187 aims to close traditional fishing grounds for the sole benefit of one user group. There is neither a conservation nor an accessibility concern at play with this proposal. Commercial and sport users are able to harvest salmon at a rate that does not warrant a complete discontinuation of a historical fishing area for one user group.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Clay Bezenek, and I am a commercial fisherman, conservationist, and concerned citizen in Ketchikan, Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. If these proposals were implemented, they would directly harm the whole town, as every business would feel the economic impact, from the hatcheries to the fuel docks. All facets of our economic ladder would be negatively impacted.

As a harvester who cares greatly about our environment, I would support these proposals if someone could show me good scientific evidence that hatcheries are harming our salmon or ocean system. All I have seen so far are some potential causations that are unproven, while the hatcheries have made great efforts toward understanding issues associated with enhanced fish. I grew up in the Midwest where walleye enhancement was the norm. I am definitely on the side of solid science when making decisions concerning programs such as these.

Enhancement facilities are held to strict rules concerning releases, and if science proves them unworthy, then let us do something about it. But complaints about fish in people's backyards are not scientific grounds for these proposals — you would have to ask the eagles and bears if they want the hatcheries gone as well. I am also concerned about PNP hatcheries losing staff and historical knowledge if production is reduced.

This issue was brought up more in Southeast when king salmon numbers started falling in the 2010s. The king salmon numbers in our two biggest Southeast rivers have since increased to normal levels. I believe our general ocean conditions were the cause. The earth is always changing, and ebbs and flows are a normal result.

The best example of hatchery value is how wild fish are no longer pressured nearly as much as in the pre-hatchery days when that was all there was to catch. Our southern Southeast fisheries used to hit the local and northern British Columbia fish hard. Now people target enhanced fish primarily and leave the wild fish pretty much alone. The wild fish down here are doing really well.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed

continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Clay Bezenek
Ketchikan, Alaska



Submitted by: Keith Billi

Community of Residence: Petersburg

I am opposed to 170, 171, and 172.

Submitted by: David Blake

Community of Residence: St. Maries, ID and Cordova AK

My name is David Blake. I have been an Area E drift gillnet permit holder and have fished Area E for the past 42 years. I have been in Cordova AK usually from early May to Mid September for most of the 42 years while participating in this fishery. During that time I also owned and ran a Tax Preparation practice in WA State for 26 of those 42 years in the fishery. I worked in a boat shop building Bristol Bay commercial fishing vessels for 10 years prior to the change to tax preparation. I have participated in person at multiple Board of Fish and via written comment in most Board of Fish for PWS. I have been on the board of Prince William Sound Aquaculture for multiple terms and have participated in the Prince William Marketing Association.

Proposal 170: Oppose this proposal

If this proposal is passed it will affect not only Commercial fishers but also Sport, Personal Users, as well as all other resource users in the State of Alaska. It also affects processors and communities, flowing down to all Alaska Residents that work in the Seafood, Tourist and Hospitality industries in all of AK.

Proposal 171: Oppose this proposal

Without using Science this would affect my ability to make a living and also all those AK residents (Fishermen of all types Sport, Personal Use, Subsistence, Commercial) that depend upon the resource in many ways including employment by processors, and communities. It would also affect all those far reaching families that are connected in any way not just directly connected to employment by the Seafood industry but those that rely on that industry to purchase supplies and services. Very far reaching into the economy of AK in many ways.

Proposal 172: Oppose this proposal

This would close the door to future innovation that could and most likely will benefit many Alaska residents whether directly connected or not, as it will affect State and Community income and viability.

Proposal 187: Oppose this proposal

This is a reallocation of a resource without having a science based reason, only a shift of resource to another user group driven by want not science.

Thank you for your time,

David Blake

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Ronald Blake, and I am a commercial fisherman based in Cordova, Alaska. I operate the F/V Ace.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals would be extremely harmful to my fishing business, possibly making it no longer viable.

Just the lost fish tax revenue for our town would have a huge effect on local services, and of course there would be a loss of jobs. This approach seems far too drastic when it would have such a devastating effect on rural Alaska communities.

Hatchery production in Alaska is a small portion of the total fry that go into the ocean each year, yet it is such a tremendous benefit to so many people and communities. It makes no sense to take drastic measures without being absolutely certain of the benefits.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Ronald Blake
Cordova, Alaska



Submitted by: Nick Blanco

Community of Residence: Kodiak Larsen Bay

I am here to support proposal 11 banning bottom trawl in the waters specified. Bottom trawling is a shameful way to fish, leaving permanent and irreparable damage to countless species of fish habitat, not to mention the significant halibut bycatch. The resulting massive silt clouds from running such gear are also very worrisome, blocking out sunlight, stifling plant/habitat growth and earths natural ability to sequester carbon. Is bottom trawling efficient? Yes. Does it cause damage to entire ecosystems and the population inhabiting them? Yes. Do us all a favor and ban it.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is David Blount. I am a commercial fisherman from Cordova and fish aboard the F/V Salmon Shark.

These proposals would create additional economic hardship for my fishing business and negatively affect the economic well-being of Alaskans—especially communities like Cordova, Whittier, Valdez, and the Mat-Su Valley. The hatchery system also supports sport fishing opportunities in Prince William Sound.

A reduction in production would reduce returns for user groups and place additional strain on hatchery operations. My major concern is the lack of scientific basis for these reductions. I do not believe these broad actions will strengthen wild runs; instead, they will create hardship across user groups.

As a former Fish and Game technician, I recognize how limited our understanding is of what happens in the salmon life cycle offshore. There is no evidence of direct conflict between hatchery and wild fish sufficient to justify blanket reductions. The hatchery system has stabilized economic conditions in commercial fishing and benefits multiple user groups. Those benefits support management and research through landing taxes and related revenue that fund fisheries work.

Approved testimonial:

“In my 35 years of direct experience with fisheries research management and commercial fisheries I have found the hatchery system to be a stabilizing force for the state of Alaska. Hatchery production benefits all user groups. Lack of science and uneducated perspectives are no reason to dismantle a proven system that is beneficial to so many different user groups. Please don't allow a sunset on one of the most viable components of Alaska fisheries.”

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,
David Blount
Cordova, Alaska



March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Curtis Bollinger, and I am a commercial salmon fisherman based in Kodiak. I fish aboard the F/V SEA WALKER. These proposals would have significant negative impacts on Kodiak's salmon fishery. They would take away enough opportunity in areas near the hatchery that it would condense the fleet, adding more pressure to the west side of the island. Especially in our lean years, it would drastically reduce access to fish and overall income to the fleet.

On average, about half of my catch comes from hatchery fish. A 25% reduction could mean that some years we may not even get access to the hatchery at all, which would be devastating to my family's livelihood and could possibly make salmon fishing a nonviable source of income for many.

These proposals would affect the community as well through reduced fish tax for a city whose budget deficit has already forced school closures. They would also reduce work in the processing sector and decrease money circulation throughout Kodiak small businesses.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Curtis Bollinger

Kodiak, Alaska



Submitted by: Robin Bond

Community of Residence: Talkeetna

Please stop trawling. Trawling within a minimum of 200miles from the shoreline should be the minimum if it must stay. Our fish and other sealife are almost gone. Please stop the trawling now. Also how are we suppose to keep up with all the proposals. I think there is so many so we can not. You all know how 74 % of alaska feels. Btw more don't like what trawling has done to alaska and the people who live here however , they don't weight inAnd the 74% who do you all are not acting like you hear them. Also please stop making it so hard to understand things. Alaska is tired and it it your job to do what is right and follow the Alaska constitution also. Also it is super hard to get reference to what these proposals 11 & proposals 162 thru 187.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Dylan Borden-Deal, and I am a commercial salmon seine fisherman in Prince William Sound, Alaska. I operate the F/V Defiance under Deal Fisheries LLC.

I am writing to urge the Board to reject Proposals 170, 171, and 172. A reduction of salmon hatchery production would negatively impact my fishing business by reducing the time and area allowed for common property fishing opportunity throughout the pink salmon season. Hatcheries already take a large percentage of the salmon run through their cost recovery program. A reduction in hatchery production would result in cost recovery taking a much greater percentage of the overall run, leaving practically nothing left for the commercial fishing fleet.

Reduced hatchery production would be devastating to the economy of Cordova. Cordova does not enjoy the luxury of a large-scale tourism economy. This leaves Cordova's economy solely reliant on the fishing industry, to which hatchery production plays a vital and irreplaceable role.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Dylan Borden-Deal
Alaska



Submitted by: Rowan Borden-Deal
Community of Residence: Cordova

170, 171 and 172.

I don't support these proposals

I am a life long pws fisherman I have been a stake holder since before I can remember. These proposals are based on bogus science and I am strongly opposed to any changes they may affect. To be more clear this is a high jacking of this platform to serve special interest. The KRSA ..KENAI RIVER SPORTFISHING ASSOCIATION takes money from the big oil and the industrial mine lobby! The fisherman are the people that have spent their lives fishing these waters and are committed to sustainability like they are committed to breathing. The hatcheries allow all of the coastal communities to thrive and remain viable providing salmon to America. Please do not allow KRSA to dismember another thriving Alaska salmon fishery

March 2, 2026

Dear Members of the Board of Fisheries:

My name is Tim Botz. I am a commercial salmon fisherman in Kodiak and owner of the F/V Janie Lou.

Salmon fishing income naturally varies year to year. Reduced hatchery production would significantly reduce my crew's and my income even further. During low wild run years, hatchery fishing allows the fleet to remain financially viable while wild stocks recover and escapement goals are met.

If adopted, these proposals would result in job loss and decreased income across Kodiak, affecting local businesses, schools, and tax revenue for local government.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Tim Botz
Kodiak, Alaska



Submitted by: Chris Bourgeois

Community of Residence: Cordova

I am adamantly opposed to Proposals 170, 171 and 172 because they lack any scientific evidence to support their claims. I am opposed to Proposal 187 because of it's re-allocative nature.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Blake Bousley, and I am a commercial salmon fisherman, tribal member, subsistence user, and community member in Ketchikan, Alaska. I operate the fishing vessel Prime-Time and am a member of the Metlakatla Indian Community.

I am writing to urge the Board to reject Proposals 170, 171, and 172. The adoption of these proposals would greatly reduce my income stability and business viability because I depend on hatchery production for success. I take pride in not putting fishing pressure on wild salmon runs by focusing on hatchery fish in specific isolated areas. Reducing hatchery production would create serious problems in operational planning because 80 percent of my fishing efforts are focused on hatchery fish.

These proposals would have huge adverse effects on our community because the revenue generated from chum salmon production helps pay for the production of king salmon and coho salmon that many of our sport, charter, and subsistence users focus on. People can catch salmon right close to town, and without these options, they would not be able to fish from shore or small boats. Without these salmon, all of these gear groups would then put pressure on wild salmon runs that have had trouble meeting escapement in recent years.

The risk of revenue loss for commercial fishermen threatens the economic viability of our businesses. In turn, that loss of revenue would create large deficits for the hatcheries, which would no longer be able to operate because they depend on the ex-vessel tax generated from commercial fishing boats.

The implementation of a reduction in hatchery production without the science or evidence to back up the reasoning is concerning because it puts so much at stake and so many people in a difficult position without the guarantee of a fix to any problem.

I think the amount of waste from the trawl fleet is a huge factor in why king salmon runs have been depressed for so long. I am curious about the ocean's carrying capacity for hatchery production, but it needs to be examined through thorough research, not by throwing something against the wall in the hopes that it sticks and fixes the problem.

The large percentage of all salmon gear groups that focus on hatchery-produced fish is great for sustainability because those fish being caught to sustain families relieves pressures that would otherwise be put on already depressed wild salmon runs.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Blake Bousley
Ketchikan, Alaska



Submitted by: Angela Bowers

Community of Residence: SITKA

I respectfully ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system already operates under a science-based, permit-driven, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not arbitrary — they are established through a rigorous permitting process, continuously monitored, and adjusted when data show it is necessary. These proposals do not address a demonstrated failure in that system. Instead, they call for broad reductions or freezes based on generalized concern and unresolved scientific questions. This approach departs from Alaska's long-standing fisheries management model, which is built on responding to observed impacts rather than acting on speculative harm.

I worked in salmon hatcheries for nearly 15 years, from large commercial operations to a small facility at our local science center. Today, I teach university students about the important role aquaculture plays in our food systems, economy, and culture. I am also a subsistence and sport user who feeds my family with local salmon — many of which originate from hatcheries.

Singling out hatchery salmon releases as the primary cause of salmon declines in certain regions oversimplifies a complex issue. It may seem like an easy target, but the reality is far more complicated — especially for the many people whose livelihoods depend on these fish. Our marine and freshwater ecosystems are undergoing significant change due to warming waters, shifting ocean currents, altered predator-prey dynamics, and changing species distributions. Reducing hatchery releases will not address these broader environmental changes, nor is there evidence that doing so will increase wild salmon abundance or size.

Hatchery fish are essential to the stability of many coastal communities. Local processors rely on them. Organizations such as the Northern Southeast Regional Aquaculture Association (NSRAA) depend on them to operate. Many small-boat fishermen are able to remain economically viable because of hatchery returns. These fishermen support their families, pay mortgages, and cover vessel and harbor costs with income from these fisheries. Charter operators, sport anglers, subsistence users, and personal-use fishermen also depend on these fish, many without even knowing where those fish originated.

Reducing hatchery production would have ripple effects throughout the local economy. It would mean fewer fish for families and fewer opportunities for future workforce development. As someone involved in educating the next generation of aquaculture professionals, I am concerned that these proposals could reduce career pathways for my students.

Proposals 170, 171, and 172 would impose broad, preemptive reductions or moratoria on Alaska's private nonprofit salmon hatchery program without demonstrating a clear causal link between hatchery production and the conservation concerns they seek to address. In doing so, they would abandon Alaska's science-based, adaptive management approach in favor of sweeping regulatory action. This risks undermining fisheries stability, harming coastal communities, and setting a precedent for decision-making without demonstrated necessity.

For these reasons, I urge the Board to reject Proposals 170, 171, and 172.

Submitted by: Rob Boyer

Community of Residence: Amchorage

Supporting proposals 163, 164, and 165. Please do something to reign in the excessive bycatch numbers. This indiscriminate method of killing all fish is literally wiping out fish stocks. As a lifelong Alaskan, I'm deeply concerned and saddened to see the disappearance of king salmon to our streams. Sport fishing for halibut has changed dramatically for the worse as well. Both species are being decimated by trawler bycatch. Please help end this so there are fish for the Alaskan people again.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Bret Bradford. I am a commercial fisherman from Cordova and fish aboard the F/V Nerka.

A reduction in hatchery production would have severely negative impacts on my fishing operation and on the region as a whole. The hatchery program is self-funded. The revenue stream to operate hatcheries comes from returning salmon. If hatcheries reduce production, fewer salmon will return, which reduces revenue for hatcheries, reduces revenue for fishermen, reduces opportunity for sport and subsistence users, and reduces raw fish tax revenue for the State and local municipalities.

The impact would be immediate and extremely negative. I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Bret Bradford
Cordova, Alaska



PC54

Submitted by: Joshua Brandenburg
Community of Residence: Sitka

I oppose proposals 170 171 172. Southeast Alaska communities rely heavily on the returning hatchery salmon.

PC55

Submitted by: David Branshaw
Community of Residence: Cordova

I oppose proposals 170 and 171. As a PWS fisherman these proposals will adversely affect my ability to make a living as a commercial fisherman. Science based management should rule the day. Thank you for your consideration.

PC56

Submitted by: Matthew Brazil
Community of Residence: Kodiak

I've been running a jog boat in Kodiak for 4 years now and it has been a substantial part of my livelihood. Last year it felt like we were cheated out of a lot of the quota by out of towners coming in and making illegal landings. It is very obvious what is going on, even today I saw a Russian guy from Homer taking a whole pallet of bait. He has only one jig machine and his longline reel set up. Very obviously was not going to be using that jig machine to harvest cod but was sure going to say this jig caught. Something needs to happen here, pretty unacceptable that rules are not being followed and no one is being punished.

Submitted by: Luke Brockmann

Community of Residence: Juneau, AK

i am writing in to show support for this proposition. requiring bottom contact monitoring equipment for pelagic trawl gear operated inside state waters will help better manage the fishery by showing the number of incidents that occur during fishing. it will help hold commercial fishing vessels responsible for violation regulations, and hopefully discourage vessel operators from fishing in areas with high potential for bottom contact. i predict the result these regulations being implemented will be a reduction in bycatch.

Submitted by: Luke Brockmann

Community of Residence: Juneau, AK

i am writing in support of this proposal. Establishing salmon excluder requirements for all pelagic trawl gear operated inside state waters should help reduce the amount of salmon bycatch in these fisheries. with several salmon populations crashing across the state, i believe we should take every step possible to curb this trend. this proposal might help prevent that trend from continuing. i feel if the trawl fleet wishes to continue operating in our state waters, they need to do everything possible to reduce the amount of bycatch.

Submitted by: Luke Brockmann

Community of Residence: Juneau, AK

i am writing in to show support for this proposal. the author has highlighted instances where the lack of exact definitions have resulted in what most would call "illegal harvesting". better defining allowable gear would help fishermen by clarifying what does and does not constitute a jigging machine. it would also help law enforcement by providing precise definitions pertaining to allowable gear. i feel this will also help keep our small boat fisheries more sustainable.

Submitted by: Luke Brockmann

Community of Residence: Juneau, AK

i am writing in support of this proposition. as a Alaska resident, I've watched our king salmon populations crash over the past two decades. i feel this proposal will help regulate sport harvest of our dwindling stocks. i feel limiting annual sport harvest is a great first step to rebuilding our king salmon populations. this will help prevent a smaller portion of users from taking more than others. leaving more fish in the water i feel will help stocks rebound.

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

My name is Zeke Brown. I am a lifelong resident of Cordova, AK where I sport, subsistence and commercial fish. My family and I participate in commercial fisheries for PWS salmon seine, Tanner crab, Shrimp, Black Cod, Halibut and tender for the Copper River Gillnet fleet.

Proposal 162: Support *Prohibit commercial transport services in subsistence fisheries*

We must protect subsistence users from highly competitive transporter services. Allowing the commercialization of subsistence fisheries through Transportors does not increase access; it actually reduces it by incentivizing highly efficient large commercial boats and gear to participate in subsistence fisheries where they easily outcompete traditional users.

Proposal 168: Oppose *Prohibit vessels from having more than one groundfish gear type*

I participate in sablefish and halibut hook and pot fishery and often have multiple types of groundfish gear aboard which this proposal would not allow. Fishermen need to be able to prosecute multiple fisheries in a single trip in order to maintain profitability and mix gear regulations like this make that impossible and unnecessarily driving up costs.

Proposal 169: OPPOSE *Create a definition of groundfish coil spring or 'slinky pot'*

This proposal creates regulation that is unnecessary and misguided and will only hamper innovation as fishermen attempt to create more efficient pots with less bycatch. Slinky pots were only able to be invented due to the very broad definition in regulation of a groundfish pot. There is no reason to define a slinky pot because there are no fisheries that are open only to slinky pots but closed to other types of pots. The slinky pot is by no means in its final form, fishermen continue to experiment with slinky pots, coffin pots, stackers, conventional hard pots etc. to find the most selective efficient design for their fishery and vessel. Attempting to define every style of pot is akin to trying to define every lure in a sport fishery.

I ask the board to use this opportunity to rescind 5 AAC 39.145. [5] slinky pots Escape mechanisms. The board passed this regulation at the 2023 statewide finfish meeting through proposal 153 substitute language in RC51. This substitute language was not available before the meeting and was passed with little or no stakeholder support or input. It requires two 18" rotten cotton openings in slinky pots vs the one opening required in every other style pot. My slinky pots are only 27" x 50", cutting two 18" holes in them severely compromises their web and is extremely burdensome as it requires twice the amount of rotten cotton replacement every year which is time consuming on 200 pots. There is no such requirement in federal fisheries where the majority of slinky pot fishing occurs. I am supportive of escape panels in pots to prevent ghost fishing and this regulation was passed with good intentions but a misunderstanding of the gear. I have no doubt that fish will easily escape a slinky pot with only one escape panel as the pots are light and roll around on the seafloor.

Proposal 170,171,172: OPPOSE

In my lifetime of fishing in PWS, I have seen extreme volatility in our wild salmon runs. While some of this is due to the ocean environment, our freshwater environments are becoming increasingly unstable as well. Many streams in Alaska are getting so hot that salmon are struggling to spawn, and the list of potential devastating changes to the spawning grounds is endless including low snowpack, melting glaciers, landslides, and earthquakes. Hatcheries are the only reliable tool we have to mitigate these shifts. In 2019, I saw streams across the Sound dry up completely while filled with fish that never had the chance to spawn. Hatcheries act as a vital safety net, providing a controlled environment that protects eggs from the lethal temperatures and droughts that are becoming our new reality.

While proponents of these proposals theorize about carrying capacity and straying impacts, they offer no solutions for the real-world havoc that climate change causes to our freshwater systems. These proposals represent an attempt to force a "time out" on our economy while we are already struggling with environmental shifts. If these supporters are so confident in their theories, will they be the ones to provide financial relief to the fishermen and coastal communities of Prince William Sound when their "precautionary approach" leads to a collapse of our salmon returns? Until they can offer a better tool than the hatchery system to combat the hot streams and drying riverbeds we face, they have no business trying to dismantle some of the only infrastructure that keeps our fisheries alive.

For fishermen like me, this isn't a theoretical exercise. Anyone advocating for closing or limiting hatcheries is advocating for taking away my livelihood, my daughter's college fund, my town's ability to fund its schools, and dooming wild salmon to the effects of climate change on our rivers and streams.

Proposal 174 support *Allow the engine of a purse seine vessel or skiff to be shut off*

Did the oil companies write this regulation?

Proposal 175 support *Modify dipnet mesh-size and configuration*

Dipnets are being used in catch and release fisheries all over the state as king salmon retention is not allowed. What information is available about catch and release survivability in dipnets is damning and points to using small mesh large diameter knotless web as necessary to avoid injury to the fish. Reducing mesh size is a minimum of what should be required. Knotless rubber mesh is used by sport fishermen all over the country to reduce handling injury in catch and release fisheries.

Proposal 176, 177, 178 oppose *Allow anglers fishing from the same vessel to pool limits*

Party limits are not allowed for the very reason the proposer asks for them because they will increase harvest rates in sport fisheries. One skilled angler will be able to catch the limit of everyone on board even if they don't bother putting a line in the water. Sport fisheries do not exist as the proposer states for "food security of Alaska residents and nonresidents" that is what subsistence, and commercial fisheries are for.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Reuben Brown. I live full-time in Cordova, Alaska and work in the trades serving fishermen in Prince William Sound and the Copper River Delta, including refrigeration, machining, and fabrication work.

Less opportunity for fish to be caught and processed through Cordova directly reduces the amount of work available throughout the year as a tradesman. These proposals would reduce opportunity and therefore reduce income and economic benefit across the community.

Focusing on hatchery systems that have supported prosperity in the region for the past half century is not a sound approach without demonstrated cause. I would like to see more science on how both wild and hatchery fish around Prince William Sound recovered after the Exxon Valdez oil spill, and how those systems have coexisted long-term.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Reuben Brown
Cordova, Alaska



March 2, 2026

Alaska Board of Fisheries

P.O. Box 115526

Juneau, AK 99811-5526

RE: Opposition to Proposal 186

Chairwoman Carlson-Van Dort and Members of the Board:

I respectfully urge the Board to reject Proposal 186.

Proposal 186 would permanently reduce, and in late July eliminate, drift gillnet fishing opportunity in Area 1. Although framed as a conservation measure, there is no stock of concern designation for coho. There is incomplete or missing escapement monitoring to justify this action, and no condition that existing management tools cannot address. It did not meet the standard, in the view of most, for out-of-cycle action, including the opinion of the Alaska Dept. of Fish and Game.

The proposal imposes fixed calendar restrictions regardless of run strength. That is not adaptive conservation management—it is a permanent reallocation of fishing opportunities. True conservation measures are tied to biological performance and escapement needs. Proposal 186 does not.

Allocative actions belong in the regular Upper Cook Inlet cycle, where impacts can be fully evaluated and competing interests weighed transparently. Advancing permanent allocation changes through the ACR process circumvents that framework and undermines predictability in fisheries management.

It is also unreasonable to require the public to bear the cost of participating in two Cook Inlet regulatory meetings in consecutive years to address what is plainly an allocative issue. Many stakeholders who may be impacted by decisions on this proposal will not be able to attend this meeting in Anchorage. Fishermen, crew, processors, and small business owners must leave their businesses, forgo income, and incur significant travel expenses to attend and testify. There is no emergency justifying that burden. This issue should be taken up at the regularly scheduled March 2027 Upper Cook Inlet meeting, and there will also be an additional season of escapement data to further inform the Board's decision making.

The Cook Inlet drift gillnet fishery is a cornerstone of the Kenai Peninsula economy. It supports permit holders, crew members, processors, marine trades, fuel docks, gear suppliers, lenders, and small businesses from Kenai and Soldotna to Homer.

Income earned during a short summer season sustains families and circulates locally year-round. Permanently removing peak July opportunity will directly reduce economic activity and stability in Peninsula communities already facing regulatory uncertainty.

Both the Homer Advisory Committee and the Kenai/Soldotna Advisory Committee voted unanimously in opposition to Proposal 186, reflecting clear regional concern that this proposal is neither biologically necessary nor procedurally appropriate.

For these reasons, Proposal 186 should be rejected. At minimum, it should be deferred to the March 2027 Upper Cook Inlet meeting for full consideration within the regular cycle and with opportunity for full public participation.

Respectfully,

A handwritten signature in black ink that reads "Steve Brown". The signature is written in a cursive, flowing style.

Steve Brown

Homer, Alaska

Submitted by: John Burchfield
Lucky Strike 2 charters
Community of Residence: Juneau

To the Alaska Board of Fisheries,

On behalf of Lost in Alaska Adventures and the Juneau Charter Boat Operators Association (JCBOA), we respectfully submit the following comments regarding proposals scheduled for consideration at the March Board of Fisheries meeting.

Opposition to Proposal 170

We strongly oppose Proposal 170. This proposal would negatively impact Southeast Alaska residents and visitors who rely on salmon resources for commercial, sport, personal use, subsistence, education, and community benefit. The Douglas Island Pink and Chum (DIPAC) programs are integral to Southeast Alaska fisheries and community access, supporting commercial fisheries in Lynn Canal and Taku Inlet, sport fisheries for Chinook and coho near Juneau, personal use fisheries at Sweetheart Creek, and education programs at the Ladd Macaulay Visitor Center.

DIPAC has no intention of increasing chum production and is already maxed out on available water and land use. There is no evidence that Proposal 170 would provide a measurable benefit to wild salmon stocks, while it would clearly cause harm to existing fisheries, community programs, and access for Alaskans and visitors alike. DIPAC has worked collaboratively with ADF&G, NMFS, NOAA, UAF, USFS, and UAS for decades to study hatchery-wild interactions, including participation in the Alaska Hatchery Research Project. Existing research does not justify the restrictions proposed in Proposal 170.

Opposition to Proposal 172

We also oppose Proposal 172. A statewide moratorium on any increase in pink and chum hatchery egg take unnecessarily restricts future flexibility and adaptive management. Even where no increases are currently planned, such a moratorium removes important tools that may be needed to respond to changing environmental conditions, stock performance, or management needs. Alaska's hatchery programs already operate under a rigorous permitting and oversight framework, making this additional restriction unwarranted.

Support for Proposals 176 and 177

We support Proposals 176 and 177, which clarify and allow for pooling of bag and possession limits on a vessel. These proposals better reflect how fishing actually occurs in group and charter settings, reduce unintentional violations, and improve clarity for both anglers and enforcement. They are practical, common-sense adjustments that benefit lawful participation without increasing harvest.

Support for Proposal 178

We support Proposal 178. Clarifying bag limit attribution when assisting another angler helps prevent accidental violations and reduces unnecessary release mortality. This proposal is especially important in guided and charter fisheries, where crew assistance is common and intended to ensure safe, ethical, and successful fishing experiences.

Opposition to Proposals 179 and 180

We oppose Proposals 179 and 180, which would impose statewide annual limits on Chinook salmon. These proposals fail to adequately recognize the unique management structure of Southeast Alaska salmon fisheries, including the role of the Pacific Salmon Treaty. A statewide cap risks reducing opportunity for Southeast Alaska residents, visitors, and charter businesses without demonstrable conservation benefit, while creating unnecessary complexity and inequity across regions.

Closing

Taken together, Proposals 170, 172, 179, and 180 introduce unnecessary risk to Southeast Alaska's balanced fisheries management system and threaten economic stability, community food security, and access for both residents and visitors. In contrast, Proposals 176, 177, and 178 represent thoughtful, practical improvements that enhance compliance and reduce unintended harm.

For these reasons, Lost in Alaska Adventures and the Juneau Charter Boat Operators Association respectfully urge the Board to OPPOSE Proposals 170, 172, 179, and 180, and to SUPPORT Proposals 176, 177, and 178.

Thank you for your time, consideration, and continued commitment to science-based, inclusive fisheries management.

Respectfully submitted,

Capt. Kevin Burchfield

Lost in Alaska Adventures

Juneau, Alaska

On behalf of the

Juneau Charter Boat Operators Association (JCBOA)

PC62

Submitted by: Ashlynn Burgess

Community of Residence: Wasilla

I support Proposal 186.

Please help to protect the Silver Salmon run in the valley. As a fisherwoman, I want to be able to teach my young niece and future daughters to fish for salmon at a local valley river. However, with the recent runs I am concerned that silver salmon are quickly going the direction of the King Salmon. Fishing in the Matsu valley is part of our way of life, and I hope that this proposal can help sustain that way of life for future generations. I hope there are still salmon around for our children and our children's children. Thank you for your attention to this matter.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Reece Burnett, and I am an avid sport fisherman as well as a community member of local sport-fishing-focused industries in Southcentral Alaska.

These proposals affect me directly because they affect all of us in the industry, reducing harvests in quantity, quality, and efficiency. They would significantly reduce harvest opportunities and affect the ability of friends and family businesses to continue working as they have for decades, restricting their ability to provide for their community and their families, while degrading the fishery as a whole.

I believe these proposals would further degrade our fisheries as we have seen over the last 30 to 50 years, at an accelerated rate. It could also result in an inability for us and our community members to effectively contribute to the healing and development of the fisheries we rely on.

The evidence that is clear and should be focused on is the damage caused by ocean trawling and accepted waste limits that are harming the quality and sustainability of our fisheries, especially Chinook salmon. Hatcheries are one of the only effective ways we can add to fisheries quantity and quality without directly restricting commercial practices.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Reece Burnett
Southcentral, Alaska



James R. Burton
F/V Aurelia
[REDACTED]
Cordova, Alaska 99574

March 2nd, 2026

Marit Carlson-Van Dort
Alaska Board of Fisheries
PO Box 115826
Juneau, AK 99811-5526

RE: Opposition to Proposals 170, 171, and 172

Dear Madam Chair and Members of the Board,

I am a third generation fisherman from Cordova, Alaska. I have fished for herring, salmon, crab and groundfish from Southeast Alaska to the Bering Sea for the majority of my life. I have been a sport and subsistence user of Alaska's fish and game resources my entire life. I have served as a Fish and Wildlife Aide and as an Alaska State Trooper in the Division of Fish and Wildlife Protection with duty stations in Kodiak, Fairbanks, Sitka and Anchorage. I have served the community of Cordova on City Council and in other roles.

I am married and the father of five children. My oldest daughter has fished with me for 9 years as a full time crewman participating in multiple fisheries. She is a 4th generation fisherman, and a permit holder and owner of her own vessel. Commercial fishing is not simply income for my family - it is a trade, a tradition, and a responsibility. I fully intend to pass this life to the next generation. That depends on sound decisions grounded in science, not regulation driven by speculation.

Some of you are new faces, some of you have read a version of this letter and others like it multiple times - because here we are, *again*.

I am writing in full opposition to Proposals 170, 171, and 172.

Taken together, these proposals:

- Mandate a 25% statewide egg take reduction
- Force Prince William Sound pink reductions tied to speculative stray thresholds
- Impose a statewide moratorium on future increases

All without demonstrating a quantified biological benefit to any specific wild stock.

That is not adaptive management.

Proposal 170 selects a 25% reduction.

Why 25%? Where is the modeling showing that 25% produces X measurable improvement in Y stock over Z timeframe? Where is the analysis showing that 24% is insufficient but 25% is effective?

There isn't one, because this is not a number tied to a biological benchmark. It is not tied to a demonstrated management failure. It is simply an arbitrary percentage.

If that standard is acceptable, then any percentage is acceptable.

That is policy by round number - not policy by science.

Proposal 171 presumes that Prince William Sound production must be reduced based on stray thresholds, even though straying is already monitored and managed under existing permit conditions. If ADF&G identifies a problem, they have tools to address it. A regulatory amendment should follow demonstrated management failure, not precede it. If the Department believes permit conditions are insufficient, it has the authority to amend them. That process should occur before the Board imposes a production mandate.

Proposal 172 imposes a moratorium on increases - regardless of region, performance, or scientific findings.

The Regional Planning Team process exists for a reason. 5 AAC 40 lays out a permit structure designed for scientific review and compatibility with comprehensive salmon plans. A blanket moratorium replaces case-by-case science with regulatory paralysis.

Precaution does not justify preemption.

Proposals 170 and 172, and other similarly worded proposals we've seen before, share the same underlying arguments behind them - ocean carrying capacity and competition.

If that theory is correct, then we must reconcile it with observable reality.

In the past decade, we have seen some of the largest sockeye returns in Bristol Bay history - occurring simultaneously with high North Pacific pink abundance. Better yet, let's talk about last year's Cook Inlet sockeye return shall we? The Kenai River saw one of its strongest sockeye returns in recent history, with over eight million fish returning to the system. The Kenai blew past its SEG and liberalized bag limits across the river system. That happened in the same ocean, under the same alleged carrying capacity crisis, with the same hatchery production levels these proposals claim are suppressing wild stocks. The irony here is hard to ignore - a principal author of these proposals represents the Kenai River. If hatchery pinks are overwhelming the North Pacific and suppressing wild sockeye, how exactly did the Kenai produce a return like that? Which is it - ocean competition is collapsing wild stocks, or the Kenai just disproved the premise?

Here's a snippet from the 2026 Cook Inlet salmon forecast: (spoiler - this forecast is larger than the one ADF&G issued in 2025)

*The Upper Cook Inlet (UCI) sockeye salmon total run forecast of 7.60 million fish (Table 1) is predicted to be **excellent**.*

So again, if the ocean is at or beyond carrying capacity due to hatchery pinks and chum, how do we explain record wild sockeye returns happening at the same time?

You cannot claim the ocean is full - except when it isn't.

Further, Alaska does not operate in isolation. So, before you impose statewide reductions, understand the scale of what you are regulating.

Russia produces pink salmon at a rate greater than Alaska - more than two to one in some years. Japan operates long-standing enhancement programs.

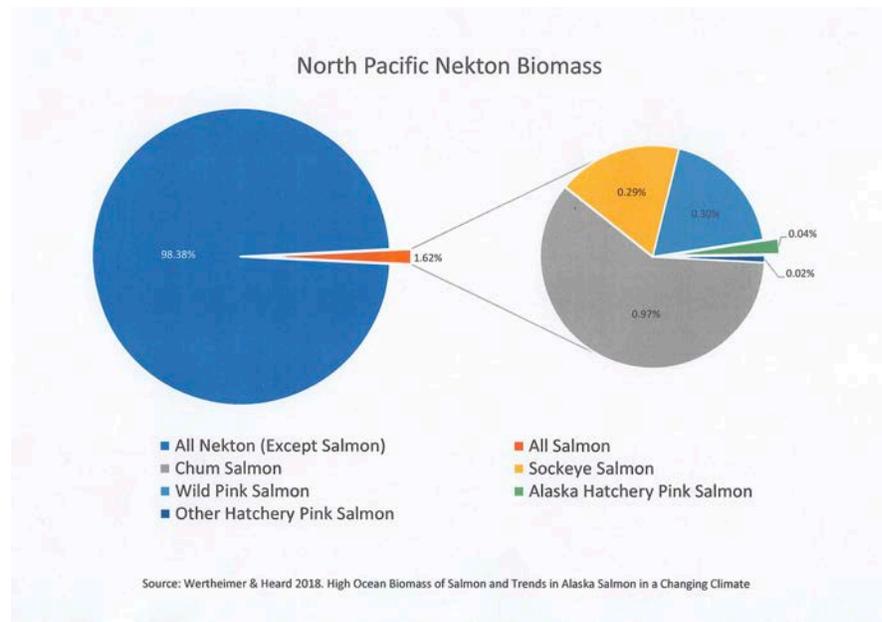
Why then, is the onus placed on Alaska hatcheries to bear the entire burden of the North Pacific? Salmon fry released into the ocean are in the *billions* yet Proposals 170 and 172 take zero consideration into the fact that this is a multinational industry, of which the State of Alaska is honestly *at least* a very distant second - to other countries over which the BOF has no control or jurisdiction. The Board may have jurisdiction over Alaska permits - not the North Pacific ecosystem as a whole.

Reducing Alaska production does not change Russian production. It does not change Asian production. It does not materially alter basin-wide biomass.

ADF&G's very own chief fisheries scientist Dr. Bill Templin is quoted in an 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."*

<https://www.nationalfisherman.com/scientists-warn-pink-salmon-boom-threatens-other-species>

Nekton Biomass - Scale Matters



Salmon - all salmon - represent approximately 1.62% of total North Pacific nekton biomass.

Pink salmon represent roughly 0.29–0.30%.

Alaska hatchery pink salmon represent approximately 0.04%.

Other hatchery pink salmon represent approximately 0.02%.

We are debating sweeping regulatory reductions over a fraction of a fraction of total ocean biomass.

If salmon comprise roughly 1-2% of total zooplanktivore biomass, and hatchery pink salmon represent well under one half of one percent of total nekton biomass, then the evidentiary bar for drastic regulatory action should be extraordinarily high.

It has not been met, not even close.

The idea that this small proportion of total biomass is singularly responsible for basin-scale ecological shifts requires far stronger proof than has been presented.

Correlation is not causation.

And speculation is not sufficient basis for a statewide 25% reduction, regional production cuts, and a permanent moratorium.

Regarding Proposal 171, research is ongoing. The Alaska Hatchery Research Project is active and ongoing. Genetic studies, marine survival work, stray analysis - all are underway.

Why would we impose permanent regulatory changes before the science is complete?

Proposal 171 attempts to convert a planning criterion into a mandatory production cut, as if a number printed in a comprehensive plan is the same thing as a demonstrated management

failure. The Alaska Hatchery Research Project is designed around Prince William Sound and Southeast Alaska interactions, and even ADF&G materials acknowledge Lower Cook Inlet was not included in that study framework. **“...the Alaska Hatchery Research Project (AHRP)... includes focused studies on hatchery-wild interactions of pink salmon in PWS and chum salmon in southeast Alaska (SEAK). Lower Cook Inlet was not included in the AHRP study.”** If the concern is straying into specific LCI systems, then address it with targeted monitoring, clear multi-year thresholds, and permit-condition tools that already exist - don't hardwire a permanent egg-take reduction mechanism into regulation before the science is complete.

This proposal hangs its hat on a “<2% over the long term” criterion and then treats it like a regulatory hammer. “Long term” does not mean one bad year, a small sample, or a handful of streams - especially when straying observations can vary wildly by stream and year depending on how and where sampling is done. If the Board wants a real solution, require standardized monitoring and a transparent multi-year trigger. Then let ADF&G adjust permit conditions and operations accordingly. A permanent production-cut mandate is the lazy option.

If uncertainty alone justifies contraction, then every fishery in Alaska is perpetually vulnerable to preemptive reduction.

That is not how this system was designed.

ECONOMIC AND COMMUNITY IMPACTS

While science must lead, we cannot ignore the real-world consequences. Hatchery production supports commercial, sport, personal use, and subsistence fisheries. In Prince William Sound and Southeast Alaska, hatchery contribution to harvest value is substantial. Processors, tenders, fuel docks, welders, and small businesses depend on those fish.

We are already watching processor withdrawals, bankruptcies, and consolidation across Alaska.

Artificially reducing production without demonstrated conservation gain adds instability to an already strained industry.

The burden of proof should rest on those proposing disruption, not on fishing families to absorb harm while science remains unsettled.

In closing, the commercial fishing industry is not interested in sacrificing wild salmon for short-term gain. My five children's future depends on healthy wild stocks. But, these proposals do not provide quantified biological outcomes tied to their mandated reductions.

They replace adaptive management with arbitrary percentages.

They replace permit-based science with policy freezes.

They assume causation without demonstration.

That is not Alaska's management model.

I respectfully urge the Board to reject Proposals 170, 171, and 172 and allow the existing science-based framework to function as intended.

Thank you for your time and dedication to this process.

Sincerely,

James R. Burton

Submitted by: Wade Buscher

Community of Residence: Cordova

I'm a PWS/Area E commercial salmon fisherman (gillnet), and reside in Cordova, Ak.

Our Area E fisheries rely heavily on hatchery produced salmon to minimize the economic impact of low wild stock salmon returns that may occur in any given multi year cycle. I would say that at least half or more of my income comes from hatchery produced fish so any decrease in egg take would certainly affect my bottom line.

If any of these proposals (170, 171, 172) were to be implemented, not only would my income be affected, but the small service industries that support our local fishery would also be impacted. Cordova, not being on the road system and void of the economic benefits of large scale tourism seen in other parts of the State, relies heavily on the PWS fisheries as its main tax base. Any decline in hatchery production would have a significant impact on the local economy, disrupting what is already a marginal means of support of the town's coffers.

These three proposals (170, 171, 172) make the argument that a decrease or limitation in hatchery egg take will POSSIBLY enhance wild salmon stocks, and POSSIBLY reduce straying by hatchery salmon. The possibility that anything beneficial to wild stock salmon may be attained by reducing hatchery raised salmon is entirely unknown. What is known is that the specified 25% reduction in pink/chum egg take will certainly have a negative economic impact on the fishermen, the communities of PWS, and the State of Alaska.

Inherent in these proposals is the premise that Alaska PNP hatcheries have been detrimental to wild stock salmon populations. Referencing material to back their case, the Fairbanks Fish & Game Advisory Committee and Kenai River Sportfishing Association claim, "there is over-whelming evidence of negative impacts with very little corresponding, evidence to the opposite."

Whenever there is a supposed biased claim by an organization, we should be skeptical of where these claims are referenced from, for what purpose, and with what merit. If hatchery produced salmon are indeed having the detrimental effect on wild stocks that these proposals proclaim, then in all fairness there should be nothing less than the most thorough long term scientific study which is credible and without bias, a study that has not yet been concluded.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Ronn Buschmann, and I am a retired commercial fisherman and a board member of the Port Armstrong Hatchery. I live in Petersburg, Southeast Alaska.

I would be directly affected by reductions in personal use coho returns to Crystal Lake hatchery. There would also be a decline in local economic activity as fishing and processing incomes decline. Petersburg is a rural community that depends on commercial fishing, and local harvest of returning fish to provide family food would decline.

Hatcheries provide a controlled environment during the part of the salmon growth cycle when fry are most susceptible to climate factors, including stream scouring from increasingly intense fall storms. Hatcheries help even out the effects of natural extremes.

These potential hatchery reductions appear to be a political statement rather than a science-based solution. Canadian fishery research has indicated hatchery releases have very little impact on natural fish populations. In some cases, hatcheries have become a repository for the genetics of threatened salmon river systems.

Fortunately, Alaska has not experienced the level of habitat degradation seen in the lower 48. Climate changes such as the "blob" that heated parts of the North Pacific a decade ago, general ocean warming, and increasingly intense fall "atmospheric rivers" reduce ocean fertility and destroy spawning beds, impacting survival. Ocean trawling has immeasurable impacts on wide-ranging salmon species.

ADF&G has a rigorous process for protecting natural systems from potential impacts from hatchery production, and some fisheries would cease to be economically viable without hatchery production.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts

Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Ronn Buschmann
Petersburg, Southeast Alaska



March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Kade Butler, and I am a commercial fisherman in Alaska. I fish aboard the F/V Anna Lee and operate through Alta Pearl Fisheries.

A reduction in hatchery production would affect my income stability, business viability, and my family's livelihood. These proposals would reduce harvest opportunity and have ripple effects on local businesses that depend on commercial fishing activity.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Kade Butler
Alaska



PC68

Submitted by: Jennifer Cabana

Community of Residence: Homer

I am opposed to any hatchery egg permit reduction for salmon.

PC69

Submitted by: Larry Cabana

Community of Residence: Homer

I am opposed to any hatchery egg permit reduction for salmon.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Leroy Cabana, and I am a commercial fisherman and sport fisherman in Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals threaten my family's livelihood and would result in the loss of common property harvesting opportunities and economic stability.

It takes a semi-fixed cost to operate a hatchery. Reducing fry numbers will directly affect returning adult hatchery numbers, and any reduction will directly impact the available surplus of hatchery salmon. There is no general consensus that hatchery-raised salmon are detrimental to wild salmon stocks. In Prince William Sound, there are 45 years of history with hatchery salmon, and the natural wild runs lately are as strong or stronger for pinks, chums, and sockeye. It is ridiculous to confirm that wild salmon stocks are as large or larger than before hatchery salmon were introduced and then conclude that hatchery salmon are harming wild salmon returns.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Leroy Cabana
Alaska



Submitted by: Joanne Cabe

Joanne & Richard Cabe

Community of Residence: Thorne Bay

My husband is a commercial power troller in SE AK [specifically Thorne Bay] he also does some subsistence harvesting in the off season. I am disabled, so my husband's fishing income is crucial to our livelihood. Alaska's fisheries board includes members with experience & knowledge, they aren't allowed to vote if they have any ties to the industry, to prevent conflicts of interest. If they aren't allowed to advise the other members & political board members, their vast experience is being wasted.

Alaska's hatchery system is governed by a science-led, permit-based, adaptive management framework administered

by ADF&G. Production levels are established through permits, reviewed continuously, and adjusted when data demonstrate need. Proposals 170, 171, and 172 do not respond to a demonstrated failure of that system — they impose reductions or freezes based on generalized concern and unresolved scientific questions. If uncertainty alone

justifies mandatory reductions, then no enhancement, harvest, or management program in Alaska could continue to operate

Alaska does not need to abandon its science-based hatchery management system to address unsubstantiated concerns and uncertainty. The Board of Fisheries should reject Proposals 170, 171, and 172 and instead allow ongoing research, adaptive management, and site-specific responses to continue doing what they were designed to do: protect wild salmon while sustaining fisheries and communities.

SUBMIT PUBLIC COMMENT

Submit public comment by 11:59 PM AKST, March 2, 2026. [Click here to s](#)

Submitted by: James Calhoun

Community of Residence: Homer, AK and Port Lions, AK

I'm a fourth generation commercial salmon fisherman in Kodiak and oppose Proposals 170, 171, and 172. I grew up fishing the Kitoi Bay hatchery and have continued to do so for over 30 years. It has been a key part of our harvest, helping to level the ups and downs of our seasons. Cutting hatchery production would directly hurt my family's livelihood, as it would for so many folks who work jobs associated with our industry. Please consider the negative impacts proposals 170-172 would have on families and businesses that rely on hatchery salmon and reject them.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Norman Campbell, and I am a commercial fisherman, subsistence user, and local resident in Alaska. I fish aboard the F/V Gale Force and am affiliated with the Eyak and Chugach Corporation and the Native Village of Eyak.

My concerns center on money and food security for my family and community. Proposals 170 and 171 are wrong, and I strongly oppose them. These proposals would negatively affect my ability to make a living and to provide food.

These proposals are wrong because they would harm fishermen and communities without delivering meaningful benefits. A better approach is needed that protects both livelihoods and fish stocks.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Norman Campbell
Alaska



CANFISCO GROUP USA

A Division of the Jim Pattison Group

March 2, 2026

Ms. Märit Carlson-Van Dort
Alaska Board of Fisheries
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

RE: Canfisco Group comments opposition to Proposals 163-164, 170-172, and 186

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

The Canfisco Group comprises several seafood processing companies united by common ownership and purpose. Our group operates 11 seafood processing plants in Bristol Bay, Kenai, Kodiak, Yakutat, Sitka, and Ketchikan, employing 4,000 workers and supporting 1,750 independent fishermen each year.

Proposals 163-164 would effectively eliminate trawling in the Gulf of Alaska region of state waters by redefining all pelagic trawl gear as bottom trawl gear, which is prohibited in this region. Additionally, proposal 163 creates a requirement for monitoring technology that is not currently viable for commercial fishing conditions. Sensors are being tested in trawl fisheries in federal waters; many give poor data, and none have proven to be able to withstand Alaska's environment or impact with a vessel during gear retrieval long term.

Only a small portion of the Gulf of Alaska state waters is open to trawl fishing. Approximately 7% of the total pelagic trawl caught groundfish in the Central Gulf is caught in state waters in either the state managed PWS pollock fishery or parallel fishery against the federal TAC. While this is a small area and percentage of landings, it is critical for small vessels 58' and under.

The NPFMC revised the pelagic trawl gear definition in June of last year, largely to facilitate the use of salmon excluders, and it is expected to be implemented in 2026 or 2027. As many vessels fish in both federal and state waters, it would be best if gear definitions were consistent across both areas.

Canfisco Group is opposed to Proposals 170-172 seeking to reduce or limit chum and pink salmon hatchery production, with no evidence of Alaska hatcheries causing harm to wild salmon populations, and clear evidence that the proposals would harm all salmon users.

On average from 2018-2023, Alaska's private nonprofit hatcheries provide 4,200 annualized jobs and \$219 million in labor income annually, \$3 million in tax revenue, \$103 million in ex-vessel value to fishermen, and \$346 million in first whole-sale value. In these years, hatchery salmon accounted for 16% of the total value of Alaska's salmon harvest. Alaska's hatcheries also contribute a minimum of 192,000 salmon for sport, personal use, and subsistence users. This count is likely significantly underestimated due to limited sampling by ADF&G and limited tagging of coho salmon¹.

¹ McKinley Research Group LLC, Economic Impact of Alaska Salmon Hatcheries, https://ssraa.org/wp-content/uploads/2024/04/MR_Hatchery_WEB.pdf



CANFISCO GROUP USA

A Division of the Jim Pattison Group

Hatchery pink and chum salmon are important to our Southeast and Kodiak operations by providing volume and stability to keep plants operating, particularly in years of lower wild returns. This production ensures our plants remain viable to offer markets to not only our salmon fishermen, but to all commercial fisheries. Processors and fishermen have made significant investments in their businesses and need long-term stability, and depend on the economic activity provided by hatchery programs.

Chum production sustains revenue for additional hatchery programs. At DIPAC, NSRAA, and SSRAA in southeast Alaska, this is the only species that generates a profit. Sockeye, coho, chinook, and educational programs all operate on a deficit covered by the income from chum rearing programs. These additional programs benefit all user groups, including personal use and subsistence fishermen.

Canfisco Group supports hatchery production management through the Regional Planning Team (RPT) process, which is led by ADF&G and open to the public. The RPT facilitates a rigorous permitting process for egg take and release sites. These meetings include representatives from private nonprofit hatcheries, ADF&G staff, and industry groups. Additionally, there is rearing site permitting oversight by the Department of Natural Resources and the Department of Environmental Conservation. If a permit is deemed worthy after this extensive review process, it becomes subject to the ADF&G commissioner's approval, amendment, or disapproval. In the last year, Commissioner Vincent-Lang used his authority to amend hatchery production at NSRAA in southeast, and directed the RPT to review all release sites and develop a report.

ACR5 should not have been accepted as a proposal. ADF&G comments found that it did not meet any of the criteria to be accepted². Criteria to 'address an effect of a regulation on a fishery that was unforeseen when that regulation was adopted,' was misused by the Board in regard to management in the EEZ, the size of the sockeye run in 2025, and the use of the 1% rule (which was not even mentioned in the ACR).

This October, during the Work Session, the Board will see Cook Inlet escapement goals and 'stock of concern' recommendations, prior to the 2027 Cook Inlet regulatory meetings. The Work Session meeting would be the appropriate time to review escapement, designate any 'stocks of concern', and begin creating action plans, if necessary. This is the process used for every other region of the state and would be the most predictable way to ensure the public is aware and participating. **Proposal 186 should be rejected, and coho escapement should be addressed in cycle.**

The ACR was submitted as an effort to conserve coho returning to the Deshka River and Little Susitna Rivers in Northern Cook Inlet, however, the management plan is not tied in any way to coho abundance. It creates a permanent closure without the ability to adjust time or area in response to actual coho harvests.

The Deshka and Little Susitna Rivers have failed to make escapement in recent years, however, we have several years of incomplete counts. ADF&G comments state they have concerns for escapement to these rivers and that

² ADF&G (Alaska Department of Fish and Game). 2025. Alaska Department of Fish and Game staff comments on Agenda Change Requests, Alaska Board of Fisheries meeting, Anchorage, Alaska, October 28–29. Alaska Department of Fish and Game, Regional Information Report No. 5J25-03, Anchorage.



CANFISCO GROUP USA

A Division of the Jim Pattison Group

they have ‘managed all fisheries conservatively to allow for passage of coho salmon to these and other Northern Cook Inlet drainages.’

The Deshka River coho salmon weir counts have been incomplete since 2020 and represent a partial count of the actual coho salmon escapement. In 2025, flooding conditions ended the Deshka River weir operations for only the last 2% of the run (based on historical run timing) but 38% of the run was counted on the last day of operation.

The Little Susitna coho salmon weir counts were incomplete from 2021–2024. In 2025, the Little Susitna weir was moved from its original location at river mile 32.5 to river mile 39.5. Low water conditions slowed the coho salmon passage through August, followed by high water, which prevented counting from August 30 until September 1 due to safety concerns.

The only coho index streams in Northern Cook Inlet that were able to be fully counted in recent years, Fish Creek and Jim Creek, have made or exceeded escapement³.

Last year, the Joint Legislative Task Force Evaluating Alaska’s Seafood Industry held 10 meetings and heard testimony from 74 participants who contributed 38 presentations on how the state can support the seafood industry⁴. They repeatedly heard Alaska’s commercial fishermen, processors, and fishing dependent coastal communities need stability. Passing any of these proposals to eliminate trawl fishing in state waters, reduce hatchery production, or close the largest state waters district in Upper Cook Inlet in July undermines efforts to provide stability.

Thank you for the opportunity to comment,

Megan O’Neil

Megan O’Neil
Director of Government Affairs
Petersburg, Alaska

³ ADF&G (Alaska Department of Fish and Game). 2026. Alaska Department of Fish and Game staff comments on commercial, personal use, sport, and subsistence regulatory proposals for statewide finfish and supplemental issues, Alaska Board of Fisheries meeting Anchorage, Alaska, March 17–21, 2026. Alaska Department of Fish and Game, Regional Information Report No. 5J26-03, Anchorage.

⁴ https://www.akleg.gov/basis/get_documents.asp?session=34&docid=397



TO: Chair Marit Carlson-Von Dort
Alaska Board of Fisheries

February 26, 2026

FROM: David J G Capri
[REDACTED]
Newport, OR 97365

RE: Proposal #11

Madam Chair and Members of the Board:

My name is David Capri and I am writing in support of Proposal #11 which would close ground fish trawling inside state waters west of 170 W. longitude in the Aleutian Islands.

I fished for 28 years in Alaska in the crab fisheries from Kodiak, the Bering Sea, St. Matthew, Norton Sound and in the Western Aleutians.

I invested into the F/V Alaska Trojan in 1989 and have since been partners with Ted Painter. I will speak in plural going forward as this letter represents the opinion of both Ted Painter and myself.

Our vessel has been actively involved in the golden king crab fishery since 1991. Much of the areas we are fishing today are still the same areas that I began fishing in 1981 on the F/V Rondys.

Closures were in effect from 1991 through 2013 in order to protect the Steller Sea Lion population. These regulations have been modified throughout the years. Since the closures were relaxed in 2014, we have witnessed factory trawlers moving inside state waters, which are critical habitat areas for golden king crab.

Over the years we have witnessed a large amount of sub-legal crab and females in these areas as they are used for breeding grounds. We attempt to actually avoid these areas with sub-legal males and females and focus in on areas where we see legal male populations flourish. This results in less sorting, but most importantly not lifting pots that won't produce legal males.

Over the past 5 years we have seen a huge increase in the amount of time the trawlers are spending working in these crucial areas. In the past, they were in and out within a few months. Now they are present throughout the year.

We have been forced off some of our most productive fishing grounds to prevent loss of gear to trawlers. This year we were sent emails from trawlers asking our captain to move crab gear, currently fishing, that had been in the water for two months.

Over the most recent 5-year period, our vessel lost an average of 22 pots per year due to trawler activity. It is important to state that this is after the “Line File Sharing Agreement” made with the trawlers, 5-6 years ago, sharing all line files of our gear being fished.

The cost to replace one 40 pot string is as follows:

Item:	Cost/Unit:	Total Cost:
5½ X 5½ Pot	\$1,750.00	\$70,000.00
Groundline	40 units	\$14,470.00
Buoys/Hard	\$137.00	\$822.00
Buoys/Polyforms/A4	\$87.00	\$348.00
Triggers	\$65.00	\$2,600.00
C-Links	\$29.00	\$1,160.00
Bait Jugs	\$6.50 X2	\$520.00
Bait Bags	\$5.99	\$239.60
Bridles	\$20.00	\$400.00
Lid Hooks	\$20.00	\$800.00
TOTAL Replacement cost for a string of 40 pots:		\$91,359.60

At an average of 22 pots per year, at \$2,283.99 per pot, that is \$50,247.78 loss each year. This doesn't include all of the crab that cannot be harvested throughout the season in that lost gear.

We see a dramatic drop-off of our Catch Per Unit of Effort (CPUE) as soon as the trawlers appear working in these areas. Due to the roller/hopper gear system that they use, it creates a thoroughfare of destruction on the bottom. This

doesn't just affect the golden king crab fishery, but all other fisheries that rely on this fertile, fragile habitat.

In recent years, we have witnessed our Total Allowable Catch (TAC) in the Western Aleutian Golden Crab (WAG) continue to decrease. We believe that this is a direct correlation with the fact that intensive trawling is occurring in areas where 88% of the golden king crab are being caught. The trawl activity affects our CPUE, which in turn affects the TAC that is set for each season.

The TAC for the WAG in recent years are as follows:

2019-20	2.9 Million Lbs.	Starting Point
2020-21	2.66 Million Lbs	-240,000 lbs
2021-22	2.088 Million Lbs	-572,000 lbs
2022-23	1.73 Million Lbs	-358,000 lbs
2023-24	1.81 Million Lbs	+80,000 lbs
2024-25	1.12 Million Lbs	-690,000 lbs

Since the 2019-20 season the TAC for the WAG has been cut 1,780,000 lbs.

In conclusion, we are asking for your consideration to protect the state waters in this area, as they are protected in other areas of Alaskan State Waters. This is not just for the health of the golden king crab stock, but for all fisheries impacted and for future generations to come.

Respectfully,

David JG Capri

Submitted by: Rex Capri

Community of Residence: Newport, Oregon

I'm writing to comment on Proposal 11. I was a rotating captain on the F/V Alaska Trojan fishing the Western Aleutian Golden King crab for a lengthy period of years. At times we would have factory trawlers working close to our fixed crab strings. We would always try to give them the readings of our strings so they would stay off of them. But there were times hauling gear, we'd come across missing pots or a missing section of a string. Occasionally a Black Cod or Halibut boat would come out to fish by us but, these boats were too small to strip pots off our strings or tear a section out of one. We shared string location info with them also. There were times we could see the factory trawlers on Radar and AIS working close to our gear. To hook our gear, trawlers would have to be dragging their nets on the bottom because that's where our gear is and groundline between pots is stretched tight and not floating up. Because of the damage to another fisheries gear, this is one reason to eliminate trawling in Western Aleutian state waters.

Another reason is because these crab have evolved over time to feed on living and dead members of the fish stocks that the trawlers are targeting. These crab live in fairly narrow depth bands because of the steep drop off of most of these islands. If significant amounts of the fish stocks that the crab have evolved to depend on are removed from these areas, it will MOST likely have a detrimental effect on the crab stocks. This is a very significant reason for eliminating trawling in these state waters.

My hope is that you will strongly consider the reasons I've stated above and pass Proposal 11. We should not let one fishery damage or destroy another fishery.

Thank you!

Sincerely,

Rex Capri

Submitted by: Herbert Carino

Community of Residence: Cordova

Oppose to 170,171,172

Submitted by: Mary Cris Carino

Community of Residence: Cordova

171,172

Submitted by: Anita Carpenter

Community of Residence: Kodiak

I am in support of proposals 166 and 167 as amended by the KRC.

Jigging machines need to be clearly defined and the only allowable gear type on board vessels participating in the pacific cod jig fishery.

This will prevent vessels from fishing illegally with other gear types.

March 1, 2026

To the Alaska Board of Fisheries

My name is Leonard Carpenter and my family and I have participated in Kodiak Area Jig fisheries for over 25 years.

As long term participants we rely on this fishery to provide for our family and it represents a considerable portion of our yearly income.

We fully support Proposal 166 and Proposal 167.

Proposal 166 clearly defines a mechanical jigging machine and differentiates it from other gear types that could be loosely interpreted as being used as a mechanical jigging machine. The language in Proposal 166 is well written and clearly describes the size and form of jigging machines in use for the last two decades.

It should be adopted without any amendments.

Proposal 167 is also well written and will allow fisheries enforcement the tools to ensure our jig fishery is conducted in a legal, fair manner. To ensure all vessel operators participating in the Kodiak Area Jig Fishery play by the rules, only jig machines as defined in Proposal 166 should be allowed onboard while transiting to and from the fishing grounds, while engaged in fishing and while offloading their catch.

Any other equipment, implements or gear used to harvest fishery resources should not be allowed onboard while participating in the Kodiak Jig Fishery.

This will prohibit pot gear, slinky pot gear, fixed longline gear (tub gear), snap-on longline reels, seines, gillnets and trawls to be onboard vessels participating in the jig fishery and remove the temptation to cheat at the expense of other jig fishery participants.

It should be adopted as amended by the KAC.

Thank you for your consideration.

Leonard Carpenter
F/V Fish Tale F/V Emerald Isle
Email: [REDACTED]

PC81

Submitted by: Matthew Carpenter
Community of Residence: Kodiak

I've been a longtime fisherman in Kodiak, Alaska. I grew up jigging on our 35' boat. Together with my parents and my brother, we rely heavily on the jig fishery. I fully support p166 and p167 with amendments.

We have heard about and been suspicious of cheaters taking advantage of the jig quota, using other gear types to get a leg up and steal the opportunity from others. These proposals will help keep the playing field fair and equal for everyone.

PC82

Submitted by: Tristen Carpenter
Community of Residence: Kodiak

My name is Tristen Carpenter, I've been jigging with my dad and brother for nearly a decade. I fully support proposal 166 without amendments and proposal 167 with amendments because I want everyone to have an opportunity to catch fish on equal footing. When vessels use non-jig gear it results in rapid exhaustion of the jig quota and denies legitimate jiggers a fair chance to catch enough fish to sustain themselves and prosper, so these proposals are needed to clearly define what gear is legal to use and to prevent other types of illegal gear from being used for jigging.

PC83

Submitted by: Marc Carrel
Community of Residence: Cordova

Esteemed members of the Board of Fish,

I am a resident of Cordova and am opposed to proposals 170, 171 and 172 because hatcheries are a critical part of the economy of my small coastal community. The Alaska Department of Fish and Game already successfully regulates the hatchery program in Alaska to ensure limited environmental impact. Proposals 170-172 restrict hatchery operations in ways that the Department has deemed unnecessary in its staff comments, while causing immediate economic harm to small coastal communities throughout Alaska.

Furthermore, 78% of hatchery Chum in the North Pacific are from Asian hatcheries. Hatchery production in Alaska is modest in comparison to the hatchery programs in Russia, Japan and South Korea (See attached Figure 1). Reducing hatchery production in Alaska will not change the makeup of salmon populations in the North Pacific, while having a devastating effect on Alaska's rural economy.

Therefore, I urge you to vote No on proposals 170-172.

Sincerely,

Marc Carrel

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Doug Carroll, and I am a commercial fisherman, subsistence user, sport fisherman, and community member in Prince William Sound, Cordova. I fish aboard the F/V Miss Carroll and the Deja Vu.

I have been commercial fishing in Prince William Sound all of my life, and it is part of my life and my way of life. A decrease in hatchery production would be devastating to my family, the towns of Prince William Sound, and the majority of the infrastructure in the region. Commercial fishermen have already been struggling in recent years due to market conditions. While markets appear to be improving, a significant decrease in fish volume would be crippling.

Cordova is already struggling to maintain services. Silver Bay Seafoods has decided not to process fish in Cordova this year due to a low forecast, which is already a blow to the city. This results in fewer summer jobs and significant loss of fish tax. A reduction in hatchery production may encourage permanent closure of processing facilities, which would be a severe blow to the community.

Hatcheries have been producing fish in Prince William Sound since the 1970s. There have been good and bad seasons since then. We do not always know why survival rates fluctuate, as natural cycles play a role. Making cuts in hatchery production without evidence supporting those cuts is not consistent with Alaska's proven management policies.

If runs recover after reductions are made, it may be a coincidence rather than causation, leading to false conclusions about the effectiveness of the cuts. The ocean is complex, and there are factors we simply cannot control. Reducing hatchery production without clear evidence of benefit is a dangerous course.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Doug Carroll
Prince William Sound - Cordova, Alaska



Submitted by: Janet Carroll

Community of Residence: Homer

To the chair and members of the Alaska State Board of Fish. I would urge the board to take no action on proposal 186 and address this proposal in cycle at the 2027 Upper Cook Inlet Finfish regulatory meeting. Taking up proposal 186 out of cycle and out of context will not allow for the informed decision making process that we expect from the Board of Fish. The content of proposal 186 needs to be part of the group of proposals addressing the Upper Cook Inlet Salmon Management plan at the in cycle, 2027 Upper Cook Inlet Finfish meeting. By addressing the proposals regarding Upper Cook Inlet salmon as a whole, it allows ADF&G to make fully informed science based conservation decisions regarding every species of Upper Cook Inlet Salmon.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Stephanie Carroll, and I live in Homer, Alaska. I am a commercial fisherman in Prince William Sound. The salmon seine fishery is the main source of income for our family, and we own the F/V Amber Dawn.

Fishing has been our livelihood for more than 30 years. The hatcheries in Prince William Sound have been a key component of the resources available for harvest. A reduction in hatchery production would mean less income for our family.

Reduced production would lead to less opportunity for fishermen and would also impact processing jobs and local businesses, particularly those in the marine trades. Valdez would feel the impacts in the sport sector as well. Many in the community also rely on hatchery fish for subsistence needs, and Alaskans statewide could feel the effects of these reductions.

A reduced egg take would create hardship for those who rely on salmon for their income, including young Alaskans with boat and permit payments. Reducing hatchery production makes it even harder to make a living in a fishery already facing rising costs.

I am concerned these proposals are another attempt to find a simple explanation for why chinook salmon in particular have been struggling. Alaska hatcheries are well managed, and there are many ocean factors that need research before making rash decisions. The ocean is constantly changing. To suggest hatcheries are the cause without research to support that claim is irresponsible and could have catastrophic effects on our state. We should be studying other factors that may be negatively affecting our oceans.

If hatcheries were driving declines in wild runs, I believe we would see that in Prince William Sound; instead, we have had multiple years with record returns of wild fish. Hatchery and wild fish coexist in our region. Hatcheries help us feed Alaskans without putting excessive stress on existing wild runs. Strong salmon equals a strong Alaska.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Stephanie Carroll
Homer, Alaska



March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Weston Carroll, and I am a commercial fisherman based in Homer, Alaska. I operate the F/V Amber Dawn, a salmon seine vessel in Prince William Sound.

I am writing to urge the Board to reject Proposals 170, 171, and 172. I grew up fishing salmon in Prince William Sound with my father and eventually got my own seine boat in the late 1990s. I have seined for salmon in Alaska ever since. In the last two years, my son now also runs a boat seining in Prince William Sound. The salmon fishery is our primary source of income, and hatchery production is a major component of our fishery. Reductions to hatcheries would be devastating to our family's livelihood.

All types of fishing benefit from the hatcheries — commercial, sport, and subsistence. In several towns near hatcheries, they have fish derbies that bring tourists to town. When the hatcheries are successful and fishermen have a good season, it has significant impacts on the entire community.

Reducing hatchery production without science-based conclusive evidence sets a bad precedent and could potentially have significant negative financial impacts on many Alaskan fishermen with no conclusive evidence showing it would have any statewide benefits.

These decisions should be left to Fish and Game and the existing process, not left up to special interest groups pushing their agenda. The primary areas of concern are in Western Alaska, a long way from where the hatcheries are located. It seems like it would make more sense to look for potential impacts closer to their region instead.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link

between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Weston Carroll
Homer, Alaska



March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Maia Carter, and I am a community member in Sitka, Alaska. Living in Sitka, everyone has ties to someone who works in a fishery or a hatchery. I currently serve as an educator at the Sitka Sound Science Center, which hosts a very small, educational hatchery. Our hatchery teaches aquaculture classes to high school and college students in Sitka, along with visiting groups from across the state.

These guidelines have no significant research-driven backing, and the reduction would make it nearly impossible to provide these educational courses to the community. These changes would mean fewer jobs and ripple effects that impact harvesting and the broader community.

We should be considering research-driven, Alaska-specific policy changes. It scares me to think that this policy is being considered without the proper preparation.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

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Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Maia Carter
Sitka, Alaska



Submitted by: Robert Carter

Community of Residence: Kodiak

Dear BOF, Chair and board members,

My Name is Robert Carter, i'm the owner operator of the F/V Faith.

I've lived in Kodiak since 1984 and have fished Kodiak waters since 1987 and i am in FAVOR of proposal 167 and proposal 166.

Jigging cod is a valuable resource for Alaska and our small coastal communities, not just in terms of product landed at the dock, but in terms of opportunity for young and aspiring fishermen, as an affordable entry level fishery.

Jigging was once my only fishery, but jigging has allowed me to expand my operation into crabbing and salmon.

Without a viable jig fishery i would still be forced to crew on other vessels.

During the winter months of January, February and early March, cod are typically deeper and more dispersed.

Jigging during these months can be difficult. Most vessels have 4 jig machines, but fishing in 40 fathoms or deeper means frequent tangles and few fish. Lot of guys will only use two, or even just one machine if going this deep or deeper.

Cod also typically don't bite jigs once it's dark.

Landings of jig caught cod during these months typically reflect that fact.

As cod shallow up in spring and days grow longer, landings increase.

Longlining on the other hand can be fished 100s of fathoms deep and is laid out over several miles of bottom and be fished day or night in any weather.

During the 2025 cod jig season, this pattern of smaller deliveries in these months held true for a majority of the jig fleet, but for a handful of vessels recently done with the longline fishery and still carrying all their longline gear as well as slinky pots onboard, this pattern didn't seem to apply.

These few boats were delivering deckloads of cod.

I myself, personally witnessed handfuls of longline snaps and hooks that the offloaders at our cannery had pulled out of fish after one of these unusually large "jig" deliveries.

I was not only person to notice these things and it caused a LOT of anger in the fleet.

One vessel coming in deckloaded was witnessed with several longline snaps still hanging out of the fish's mouths. The person witnessing this called the Alaska State Troopers.

AST boarded this vessel and witnessed longline gear on board the vessel, as well as slinky pots laying about the deck.

I had a discussion with troopers about the issue and was told that despite suspicions, it was not illegal to carry multiple gear types on board and unfortunately AST could not do anything further unless they were caught in the act hauling, which is extremely difficult.

2025 ended up as one of my worst years, as well as everyone else i talked to.

It was over before it began. It was over before Cod began to shallow up where jig fishermen are really able to target them.

While those fishing illegally will find many ways to do so, short of 24/7 surveillance of thousands of miles of ocean, passing proposal 167 is the most cost effective and common sense way to help rein in illegal activities in the jig fishery.

Proposal 167 at least gives enforcement agencies tools they can use to help curb and prosecute illegal fishing.

Proposal 166 defines what is a jig machine and excludes longline reels from legally defined gear.

As an Alaskan resident and fisherman of over 40 years who relies on the jig fishery to earn a living for myself and my crew, i ask that you please pass these resolutions.

Thank you,

Robert Carter - F/V Faith

PC90

Submitted by: Carmel Carty

Community of Residence: Kodiak

Alaska Board of Fisheries

Alaska Department of Fish & Game

PO. Box 115526

Anchorage, Ak 99811-5526

March 2nd 2026

Ref: Oppose Proposals:11,163,164,165,170, 171,172

Dear Chairwomen Carlson-Van Dort, and members of the board

My name is Carmel Carty McCarthy; I live in Kodiak and am a mom to 7 kids ranging in age from 16 to 35. 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, Kodiak to Akutan to Port Moller, from his arrival to Kodak 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. Due to her new size and our newfound confidence in her safety and abilities we have been able to participate in various trawl fisheries around the State that in years prior we were unable to do.

My vessel crew are all Kodiak family fishermen, some born and raised and others that have come to call this beautiful place home, same as myself. My business generates income to other local business, their employees, and families by way of processors, welding, diving, marine supplies, net repairs, hydraulics, electrical, refrigeration and countless others that in one way or another have a mutual benefit in our fishing business.

We harvest a third of our annual fish revenue inside of 3 miles with pelagic gear in the Western Gulf Pollock fishery. In Kodiak and the central gulf, we harvest a large portion of our fish with pelagic gear inside of 3 miles and weather permitting (we are still a 58ft vessel) in PWS – state waters we harvest pollock with pelagic trawl gear.

I am writing to oppose proposals 163,164 and 165.

In the 10 years since I have taken over our fishing business, it seems to me that I am constantly having to defend my trawl operations against uninformed groups and individuals. I listen to countless hours of scientific research offered at the NPFMC meeting to educate myself. I listen to the people who know nothing about trawling and fishing, tell me "How it's done".

What I do know is that I have spent thousands of dollars on nets, trawl doors, main wire and have no intentions of putting my gear on the rocky bottom.

While I oppose proposal 165, I use a salmon excluder while fishing by my own choice even in the absence of the States lack of a mechanism for monitoring and enforcing excluder use.

I strongly oppose proposals 170,171,172

We as a fishing business have come to depend on the salmon fisheries to supplement our income through tendering, while providing an invaluable service to both the salmon fleet and to the canneries. Alaska's hatchery program supplements pink and chum stock around the state based on science. I don't believe that the States hatchery program in anyway has any negative impacts, quite the opposite. The program benefits all Alaskans, our coastal communities, and its respective economies.

I strongly oppose Proposals 11

I don't believe it is enough to be "concerned" in requesting the board close state waters to groundfish trawl with pelagic and nonpelagic fishing gear, as stated in proposal 11. Where is the science? Again, I ask that the Board listen to those who come to the table with science

based knowledge and take no action on this proposal.

I would respectfully request that the board of fish not advance proposals 11, nor proposals 163-165 nor proposals 170-172 and respectfully suggest that you implore the help and guidance of the appropriate body that lends itself to fisheries regulatory process, supported by science and which we as fishermen and women have come to depend upon.

Thank you for the opportunity to comment

Sincerely

Carmel Carty McCarthy

PC91

Submitted by: James Castle

Community of Residence: KETCHIKAN

I am a commercial fisherman from Ketchikan and I oppose proposal 170. I do not agree that proposal 170 will achieve the results intended. Instead, the economic impact to sport, commercial, and charter fisheries would be extensive. Our hatchery programs for King and Coho salmon support our charter fleet and our Chum programs are a vital component of our commercial fishing revenues. A 25% reduction would cause widespread economic harm to every community in Southeast Alaska. Proposal 170 will cause far more harm than benefit.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Richard Catrett, and I am a commercial fisherman based in Juneau, Alaska. I fish aboard the Myrna Rose.

If hatchery production is reduced, I would lose income. I need that income to pay for my boat. Without that income, I would have to get a second job to cover the boat's expenses. If there is not enough income, there is no reason to have the boat, and I would have to sell it or try to sell it. Commercial fishing is not the money maker it used to be.

Commercial fishing also provides an opportunity for my son, who is 15, to work on the boat and learn about earning his own money.

A reduction in harvest opportunity would be a disaster. Between low fish prices and the costs to store, maintain, and operate the boat, reduced harvest opportunity would be devastating. People fish to feed themselves, and people need fish for food.

These proposals are reckless. It is akin to swinging at a baseball with a blindfold on. The impact is on the people fishermen support, not just fishermen themselves. There is an entire ecosystem, from marine biologists to companies that offer services and supplies to run the facilities.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Richard Catrett
Juneau, Alaska



March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Annie Causey, and I live in Sitka, Alaska. I am a hatchery worker.

Adopting Proposals 170, 171, and 172 would affect my income stability and job security. These proposals would also reduce harvest opportunity for the commercial fishery. Beyond the immediate effects, they would affect future returns and stock availability. We will not see an immediate impact, but one that will affect my work stability and the local commercial fleets three to five years down the line. Reduced production now would mean rebuilding stocks from smaller returns, with impacts extending nearly a decade into the future.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Annie Causey
Sitka, Alaska





Central Council of the Tlingit & Haida Indian Tribes of Alaska

March 2, 2026

Märit Carlson-Van Dort, Chair
Alaska Board of Fisheries
P.O. Box 115526
Juneau, AK 99811-5526

RE: Central Council of the Tlingit & Haida Indian Tribes of Alaska Written Comments for March 2026 Statewide Alaska Board of Fisheries Meeting

Chair Carlson-Van Dort and Members of the Alaska Board of Fisheries:

Central Council of the Tlingit & Haida Indian Tribes of Alaska (Tlingit & Haida) submits the following comments for your consideration at the March 2026 Statewide Alaska Board of Fisheries Meeting. Tlingit & Haida represents more than 38,000 Tribal Citizens whose cultural, spiritual, nutritional, and economic wellbeing is directly tied to healthy marine ecosystems, access to fisheries resources, and responsible state fishery management. Indigenous stewardship systems promote long-term sustainability through localized monitoring, social enforcement, and cultural transmission of Traditional Ecological Knowledge. Our comments focus on the following proposals:

- Proposal 162 (Oppose) - Prohibiting commercial transport services in subsistence fisheries
- Proposals 163-165 (Support) – Proposals related to state managed trawl fisheries
- Proposals 170-172 (Oppose) - Proposals related to reducing salmon hatchery production
- Proposals 176-177 (Oppose) – Proposals related to the pooling of bag limits in sport fisheries
- Proposals 179-180 (Oppose) – Proposals related to annual limits of king salmon for residents

Proposal 162

Tlingit & Haida opposes Proposal 162. This proposal seeks to prohibit the use of any commercial transportation services for the purposes of commercially transporting individuals to and from subsistence harvesting locations. Tlingit & Haida opposes this proposal for the following reasons:

1. The proposal does not define “commercial transportation services” and provides no exceptions. As written, it could unintentionally restrict subsistence access in Southeast Alaska. Our region is comprised of island communities connected by coastal waterways, not road systems. Many Tribal Citizens rely on commercial ferry services—such as the Alaska Marine Highway System and the Inter-Island Ferry Authority—as well as commercial floatplanes to reach customary and traditional use areas. In our region, these services are essential access infrastructure, not discretionary conveniences. A blanket restriction on “commercial transportation” would disproportionately impact our Tribal Citizens’ ability to engage in subsistence harvesting.
2. Tlingit & Haida is committed to removing barriers that impede our Tribal Citizens’ ability to engage in subsistence activities. Alaska Native peoples are already among the most heavily regulated populations in the country with respect to harvesting from our traditional lands and waters. In Southeast Alaska, where communities are remote and access to affordable store-bought foods is limited, subsistence harvesting is not supplemental—it is essential to food security, cultural continuity, and community wellbeing. Any proposal that restricts access to the sea or reduces Tribal capacity to support subsistence efforts directly undermines our way of life and the practices our ancestors have sustained for thousands of years.
3. Federal (and state) recognized Tribes must retain the ability to exercise sovereignty by supporting their Tribal Citizens through self-determination. Southeast Alaska is a marine-dependent region with a high cost of living and limited infrastructure. As the costs of vessels, fuel, and equipment continue to rise, it is increasingly difficult for families to independently access marine resources. The combination of these factors puts our coastal communities at a high risk of food insecurity. Tribes play a critical role in filling that gap. For years, tribes in Southeast Alaska have utilized NOAA’s Community Harvest Permit program to strengthen food security and build community capacity. Through these efforts, tribes provide access to Pacific halibut, teach harvesting and processing skills, and help families develop the experience needed to fish independently. While this is a federally managed program, it demonstrates successful collaboration between nations that promotes Tribal Sovereignty to responsibly support their communities. Tribes are not merely “commercial entities,” and any ambiguity in this proposal that could subject Tribal food security programs to enforcement action must be clarified to avoid unintended infringement on Tribal sovereignty and community wellbeing.

Proposals 163-165

Tlingit & Haida supports Proposals 163-165. These proposals seek to provide our state management system with structured guidance on definitions and data collection methods within state managed trawl fisheries. Tlingit & Haida supports these proposals for the following reasons (see attached supplemental resolutions):

1. Our relatives along Alaska's western coast have experienced severe and inequitable fishery closures with profound impacts on food security and community wellbeing. Federal law requires a subsistence priority, yet management regimes have repeatedly failed to prevent bycatch levels that undermine that mandate. Although trawling is prohibited in Southeast Alaska, trawl activity in adjacent federal waters affects shared marine ecosystems, including salmon and other migratory species central to our subsistence lifeways.
2. Under 5 AAC 39.105, pelagic trawl gear is defined as gear that does not contact the seabed or use protective devices that make it suitable for bottom fishing. However, pelagic trawl gear currently make contact with the bottom based on rigging, vessel speed, and benthic topography. Chronic disturbance of benthic habitat reduces structural complexity, which is essential for rockfish, crab, and forage species. In the Gulf of Alaska and adjacent waters, salmon marine survival is linked to forage fish availability, plankton productivity, and climate conditions. Trawl bycatch and ecosystem disturbance can affect trophic dynamics beyond target species. Proposals 163 and 164 would better align Board regulations with state statute and strengthen accountability in how trawl vessels operate in this region. Protecting benthic habitat is essential to sustaining the marine species that depend on these environments.
3. The Alaska Board of Fisheries recently modified its management of Area M to help reduce chum salmon bycatch bound for Western and Interior Alaska. While this is a constructive step toward recovery and sustainability, additional measures are necessary. Reducing trawl bycatch remains critical to protecting Alaska's salmon, the ecosystems that sustain them, and the communities that depend upon them. Those communities are ecologically and culturally linked to statewide salmon sustainability. Salmon are migratory beings that cross management boundaries. Political boundaries do not define ecological relationships. Tribal stewardship perspective requires statewide solidarity in reducing avoidable mortality. Adoption of these proposals would demonstrate a continued commitment to safeguarding both the resource and the people it supports through combined support from Traditional Ecological Knowledge and Western Science.

Proposals 170-172

Tlingit & Haida opposes Proposals 170-172. These proposals reduce the hatchery production of salmon in the state of Alaska by as low as 0% of its current output statewide. Tlingit & Haida opposes this proposal for the following reasons:

1. Southeast Alaska has operated salmon hatcheries for decades, and these programs are deeply integrated into our regional economy and way of life. Hatchery production supports personal use, commercial, sport, and subsistence fisheries that many families depend upon for both income and food security. Hatchery returns to Terminal Harvest Areas provide harvest opportunity—especially for king salmon—while reducing pressure on wild stocks and Pacific Salmon Treaty allocations. This structure benefits resident sport fishers, commercial power trollers, and local communities alike.
2. For many Alaska families, access to hatchery salmon directly supports household food needs and helps offset the high cost of groceries in our region. Hatcheries also generate employment, sustain working waterfronts, and contribute to the broader economic stability of Southeast Alaska. Given their longstanding role in supporting both resource sustainability and local economies, the full range of hatchery benefits must be carefully considered before any decision is made to significantly reduce or eliminate these operations.
3. Salmon biomass provides critical marine-derived nutrients to freshwater and nearshore ecosystems. Any sudden, large-scale reductions in hatchery releases could disrupt predator-prey relationships while simultaneously impacting local economies that depend on those returns. Abrupt, non-adaptive, system-wide cuts are inconsistent with principles of precautionary and adaptive management. If reductions are biologically warranted, they should be implemented through a phased, adaptive framework supported by ecosystem monitoring and clear performance metrics. Meaningful Tribal consultation is also necessary, including ecosystem impact modeling, socioeconomic analysis, and community engagement. As currently written, these proposals lack the comprehensive planning and policy review necessary to be considered viable management actions.

Proposals 176-177

Tlingit & Haida opposes Proposals 176 & 177. These proposals seek to allow sport anglers within marine waters that occupy the same vessel to “pool” bag limits of marine species. Tlingit & Haida opposes this proposal for the following reasons:

1. A recurring concern raised during the Board of Fisheries and Board of Game deliberations is ADFG’s and Wildlife Troopers’ limited capacity to enforce complex or ambiguous regulations. These proposals create enforcement scenarios that are unclear and likely unmanageable under current staffing and funding levels. For example, if a charter vessel carries multiple unrelated parties and one group harvests all allowable fish while another harvests none, how would catch attribution be determined? Would fish need to be shared? The proposal provides no clarity.

Additionally, Proposal 177 does not address how annual nonresident limits—such as those for king salmon, rockfish, or lingcod—would be tracked and enforced in these



shared-harvest situations. Without clear guidance, the ADFG and law enforcement would face significant challenges ensuring compliance.

2. Sport fisheries operate within an allocation structure that already places disproportionate conservation burden on subsistence and rural residents during low abundance periods. Increasing efficiency in nonresident fisheries while imposing constraints elsewhere undermines equity principles.

Sportfishing—particularly for nonresidents—is not intended to function as a maximized-efficiency harvest system. The experience is rooted in personal participation, time on the water, and the broader Alaska experience. Allowing others to catch fish on behalf of an individual, or encouraging rapid attainment of vessel limits, shifts sportfishing away from its traditional recreational purpose and toward a more industrialized model inconsistent with its intent.

3. ADFG already faces challenges in collecting and analyzing reliable data due to budget constraints. Significant changes in how harvest occurs would directly affect how logbook and survey data are interpreted. Under current management, when an individual reaches a bag or annual limit, their fishing effort typically ceases. These proposals alter that dynamic and may increase effective fishing pressure. As a result, catch-per-unit-effort data would no longer be comparable to historical datasets, undermining long-term trend analysis and stock assessment modeling.

Maintaining consistent and reliable data is essential to sustainable fisheries management. Tlingit & Haida has serious concerns about introducing regulatory changes that could compromise data integrity and weaken the scientific foundation of future management decisions.

Proposals 179-180

Tlingit & Haida opposes Proposals 179 & 180. These proposals seek to establish an annual limit to the residents for the harvest of Chinook (king) Salmon Statewide. Tlingit & Haida opposes this proposal for the following reasons.

1. Southeast Chinook (king) fisheries operate under treaty-based allocation frameworks, and statewide uniform limits ignore regional complexity. Tlingit & Haida is in support of improved reporting to improve stock assessment quality, and e-reporting (when viable) can modernize data collection. However, imposing an annual limit on a culturally significant species such as king salmon would disproportionately impact Indigenous peoples. For many Tlingit & Haida families, king salmon is a priority harvest tied to seasonal timing, food security, and cultural practice. In Southeast Alaska, king salmon fisheries are already among the most restricted, with area closures and limited opportunity common despite ongoing catch-and-release fisheries. Additional annual limits would further constrain access without clear evidence that such measures are



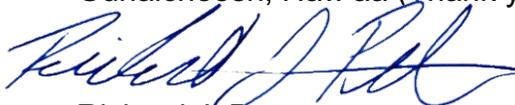
necessary.

2. A statewide annual limit fails to account for regional differences in stock status, management structure, and local knowledge. Tlingit & Haida strongly supports conservation and sustainable management; however, current conditions in Southeast Alaska do not justify additional annual limits on residents, particularly Indigenous harvesters. If conservation measures become biologically necessary, subsistence and customary users should be the last to bear reductions, consistent with longstanding management principles and the importance of these resources to our livelihoods.
3. Under the Southeast Alaska king salmon management framework, sport harvest is managed within a shared allocation. Imposing resident annual limits without broader management changes risks shifting harvest opportunity toward nonresident anglers—both guided and unguided—rather than meaningfully conserving fish. Southeast Alaska residents already face reduced access to local resources. These proposals may unintentionally accelerate growth in the nonresident sport sector at the expense of local communities.

If the proposal is intended to address a localized conflict, it should be resolved at the regional or area level. Statewide measures should not be adopted without clear biological justification and demonstrated need across all affected regions.

Please do not hesitate to reach out to my office with questions. We respectfully request that the Alaska Board of Fisheries evaluate proposals not only through a regulatory lens, but with significant consideration for ecological connectivity, cumulative impacts, regional equity, Indigenous food sovereignty and long-term resilience of Southeast Alaska fisheries and communities.

Gunalchéesh, Háw'aa (Thank you),



Richard J. Peterson
President



March 1, 2026

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

Re: **Oppose** Proposals 11, 163, 164, 165 and 170, 171, 172

Chairwoman Carlson-Van Dort and Board Members

I am writing in opposition to the proposals 11, 163, 164, 165, 170, 171 and 172

I was born in Kodiak, am a lifelong resident and 2nd generation trawl fisherman in the Gulf of Alaska. My family has operated the F/V Topaz in the GOA for more that 45 years. Myself and my crew, along with our families, live in and support the Kodiak community, we deliver our catch to the local processors and tender salmon around the island all summer.

I oppose proposals 11, 163, 164 and 165 The areas affected by these proposals are important fishing grounds for the trawl fleet, and there is no justification to close or further restrict them. Closures would disproportionately affect the smaller boat fleet, as the near shore waters offer protection from the weather. The trawl fleet in the Gulf uses electronic monitoring, cameras recording 100% of our pelagic pollock fishing, including any fishing inside State waters, and use salmon excluders consistently. As local, small boat owners and operators we care about all the fisheries in the Gulf, and are continually working to improve our performance and minimize impact and bycatch.

I also oppose proposals 170, 171 and 172. Strong salmon runs are extremely important to our local fishing fleet, processors and the Gulf communities. The hatchery program has helped supplement these fisheries and support more consistent returns.

Please do not take action on proposals 11, 163, 164, 165, 170, 171 and 172

Thank you

Jason Chandler

F/V Topaz

Kodiak, Alaska



Chickaloon Village Traditional Council

(Nay'dini'aa Na' Kayax)

VIA ONLINE COMMENT SUBMISSION to the Alaska Statewide Board of Fish Meeting

March 2, 2026

Chief Gary Harrison,
Chairman/Elder

Rick Harrison,
Vice-Chair

Lorraine "Rain" Wade,
Secretary/Elder

Cheryl Sherman,
Treasurer

Philip Ling,
Member

Emily Peterson,
Member

Doug Wade,
Member/Elder

Re: Comment on Proposals for Statewide Board of Fish Meeting

Ugheli Dzaen (Good Day) Board of Fish Members,

Chickaloon Native Village (CNV) or Nay'dini'aa Na' Kayax is a federally-recognized sovereign Tribal Nation 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 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 Tribal Nations. 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.

Proposal 164 - Establish bottom contact monitoring for pelagic trawl gear: CVTC SUPPORTS

Current regulations prohibit seafloor contact by pelagic trawl gear, but without mandatory sensors there is no mechanism to verify compliance. Requiring seafloor contact detection technology is a common-sense measure to close this enforcement gap and better protect sensitive benthic habitat.

Lisa Wade,
Executive Officer

Cary Fremin,
Operations Officer

Proposal 165- Require salmon excluders for pelagic trawl gear: CVTC SUPPORTS

Salmon excluder technology has been used in the federally managed Bering Sea/Aleutian Island and Gulf of Alaska pollock fisheries since 2002. At-sea trials show salmon escapement rates averaging 58%. Requiring excluders in state waters would extend this bycatch mitigation approach to state-managed pelagic trawl operations and reduce the negative effects of the fishery.

Proposal 180: Establish sport fishing chinook salmon limit of 5 fish, restrict winter harvests: CVTC SUPPORTS

Chinook salmon are experiencing widespread declines across Alaska with most in-river fisheries already closed by regulation or emergency order. A statewide annual limit of 5 fish would provide a consistent conservation baseline in mixed-stock ocean fisheries.

Proposal 186: Reduce commercial salmon fishing opportunity with drift gillnet gear in the Central District of the Cook Inlet Area: CVTC SUPPORTS

Offshore drift gillnet harvest in the central mixed-stock area of Upper Cook Inlet have increased catches of coho relative to the in-shore harvest corridor. Given the recent low coho escapements to Deshka and Little Susitna Rivers, marine harvest of these salmon in mixed-stock marine fisheries should be avoided. Restricting additional fishing time in the central inlet at high Kenai run strengths will reduce interception of northbound, Upper Cook Inlet coho stocks.

Proposal 172: A moratorium on pink and chum salmon production: CVTC OPPOSES

CVTC is planning to conduct salmon egg incubation for research and restoration of depleted salmon stocks. A board of fish-imposed moratorium for production of these salmon species may close the door to important and justified fish population rehabilitation efforts. There have been no increases in hatchery pink and chum salmon production in Alaska since 2018 and 2019 (respectively). In this instance, the State regulatory process is working, and an added moratorium may unnecessarily close doors to future research and conservation.

CVTC urges the Board to support Proposals 164, 165, 180, and 186 to strengthen habitat protections, reduce salmon bycatch, and address documented declines in Chinook and coho salmon populations across Southcentral Alaska. We oppose Proposal 172 because it may limit important salmon research and restoration opportunities. CVTC remains committed to working collaboratively with the Board, ADF&G, and neighboring Tribes to ensure that salmon management decisions reflect the best available science, honor traditional ecological knowledge, and protect the salmon resources that are central to the health, culture, and sovereignty of Ahtna peoples.

May Nek'eltaeni (Creator) Guide our Footsteps,

~~Chief Gary Harrison~~
Chief Gary Harrison (Mar 2, 2026 15:48:44 HST)

Traditional Chief Gary Harrison
Chairman



Chitina Dipnetters Association
 PO Box 35230
 Ft. Wainwright, AK 99703
 Chuck Derrick, Pres.
 cderrick@chitinadipnetters.com

Fisheries Board Members:

Below are The Chitina Dipnetters Association comments on proposals 162 & 175 to the BOF Statewide Finfish Meeting.

Proposal 162 **Opposed**

This proposal would prohibit commercial transport services in state subsistence fisheries. Many subsistence fishery participants lack the means to access the fishery, this is especially true in the Glennallen Subdistrict on the Copper River where most of the shoreline is privately owned (majority Ahtna native corp. owned) thus making it impossible to legally access the river on foot. A boat is a must and many state subsistence fishery users are more than willing to pay for transportation to a fishing site. This proposal if passed would severely hamper opportunity in state subsistence fisheries.

Proposal 175 **Opposed**

This proposal seeks to reduce dipnet mesh size to 3.5" stretch mesh and also prohibit a rope attachment between the dipnet handle and tied to a boat, supposedly to reduce incidental mortality in catch and release of Chinook salmon. No scientific studies or data are presented by the author to justify this claim. If passed, this proposal would for dipnetters statewide, if their net mesh was over 3.5" stretch, require the purchase new netting costing upwards of \$50 for each owned net. This would be a high cost to dipnetters due to a perceived issue.

As far as a rope tied to the dipnet handle and a boat to extend the reach of the dipnet beyond the length of the rigid handle, I am not sure where the author is going with this. The author makes it sound like some boaters are trolling for salmon with dipnets, which is totally absurd.

March 2, 2026

Alaska Department of Fish and Game
P.O. Box 115526
1255 W. 8th Street
Juneau, AK 99811-5526

Dear Members of the Board of Fisheries:

My name is Jerry Christiansen, and I am a commercial fisherman based in Kodiak, Alaska. I operate Rolling Bay Fisheries LLC and fish aboard the F/V Wendy Anne.

Reducing hatchery production would have a large and direct impact on salmon fishermen's livelihoods. These changes would affect salmon runs, business income, families who rely on salmon for food sustainability, and much more.

These proposals would significantly change the way Kodiak and Alaska have functioned for years. It would create less fish here, less fish being processed, and fewer jobs. It would also mean less salmon for Alaska Native people who have relied on salmon as a main food source for centuries. The ripple effects would be felt across other fisheries and in communities outside Alaska as well.

I am concerned we could face low returns for years to come and impacts to future runs. I am also concerned about the potential loss of our salmon industry, our markets, and the investments we have made to sustain the industry. We do not know why salmon are declining, and these proposals would create serious harm without clear answers.

I ask the Board of Fisheries to reject Proposals 170, 171, and 172.

Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing fisheries management model, which relies on measured response to observed impacts, not speculative harm.

Proposals 170, 171, and 172 seek to impose broad, preemptive reductions or moratoria on Alaska's private nonprofit (PNP) salmon hatchery program without demonstrating a causal link between hatchery production and the specific conservation concerns they claim to address. Collectively, these proposals abandon Alaska's science-based, adaptive management framework in favor of blanket regulatory actions that would undermine fisheries stability, harm coastal communities, and set a dangerous precedent for decision-making absent demonstrated necessity.

Thank you for your consideration. I urge the Board of Fisheries to reject these proposals and uphold the integrity of the Alaska PNP salmon hatchery model.

Sincerely,

Jerry Christiansen

Kodiak, Alaska



Alaska Board of Fisheries
PO Box 115526
Juneau, AK 99811
Email: dfg.bof.comments@alaska.gov

March 2, 2026

RE: Opposition to Proposal 11 (submitted by Linda Kozak/FV Trojan)

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

Thank you for the opportunity to comment on Proposal 11 to ban trawling (pelagic and non-pelagic) in all state waters west of 170° W longitude. The signatories on this letter represent Aleutian Islands golden king crab harvesters as well companies who fish for non-pollock groundfish in the Aleutian Islands. Our companies harvest crab and groundfish on behalf of our companies and the Western Alaska Community Development Program that supports over 30,000 western Alaska residents. Together we **strongly oppose** Proposal 11 for the following reasons:

- Inter-sector conflicts are best avoided by coordination on the fishing grounds, not closures. Our fleets have established effective communication on the grounds to minimize gear conflicts.
- Closing State of Alaska waters to groundfish trawl vessels will concentrate fishing in areas and times where more gear conflict, not less, is likely to occur. It will concentrate groundfish trawl fishing into areas where the majority of golden king crab fishing already occurs.
- The Aleutian Islands has extensive habitat closures already in place. Over 95% of all fishing grounds in this area are closed to trawl gear.

The Proposal Upends Years of Collaboration and Cooperation Between Sectors. First and foremost, it is important for the Board to understand that over the years our sectors have voluntarily worked together to understand when, where, and how each of these two fisheries is executed.¹ Admittedly, this inter-sector collaboration has not always been easy and challenges have been encountered, but fishery participants from both sectors are committed to continuing these efforts.

Most recently we met in May 2025, ahead of the start of the golden king crab season. At this meeting we discussed the storage of golden king crab gear using maps to identify those areas/depths utilized by the golden king crab fleet so that the stored gear would not conflict with fishing locations/depths used by groundfish vessels. We also discussed active fishing by both sectors and the critical need for participants to communicate with each other. To this end,

¹ Despite repeated requests from other participants, the FV Trojan has consistently chosen not to participate in any of these conversations.

participating golden king crab vessels send groundfish captains their intended fishing locations before leaving Dutch Harbor so that trawl vessels know where the golden king crab fleet plans on fishing and can work together to ensure fishing plans aren't disrupted. In turn, groundfish vessels send their fishing information to participating golden king crab captains prior to reaching the grounds and whenever moving locations. Both sectors recognize the importance of this two-way communication for avoiding gear conflicts and cooperatively operate to the greatest extent possible.

It is critical and significantly more impactful to have these two groups continue to voluntarily work together for the benefit of both crab and groundfish resources and their associated fisheries. These joint meetings and the conversations that follow are based on respect and the mutually recognized need to understand each other's fisheries. Recognizing that golden king crab fishing occurs beyond 3 nm, Proposal 11 would create new waterways conflicts as vessels shift effort to remaining open areas.

The Proposal Overrides Previous Comprehensive Regulatory Action to Protect Aleutian Islands Habitat. Over 95% of State of Alaska and federal waters within the Aleutian Islands has already been closed to trawl fishing by the North Pacific Fishery Management Council for the purposes of protecting benthic habitat and populations of Steller sea lions. In these "freeze the trawl footprint" actions, the limited areas remaining open were purposely selected through a transparent public process using extensive analyses and stakeholder input and were based on data that showed high groundfish catch/low bycatch and habitat resiliency to trawl impacts. These previous actions severely limited fishing grounds open to trawl vessels. Since 2019, an average of 3-7 vessels operate in this area. In 2025 only five vessels operated in Aleutian Island State waters. There has not been an increase in trawl activity within golden king crab habitat.

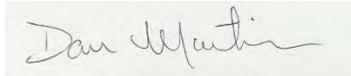
The Anticipated Results of Additional Closures Are Highly Speculative. ADF&G staff comments note that the degree to which prohibiting trawl gear inside state waters would benefit golden king crab stock health or habitat is "difficult to assess and largely unknown". What is known is that targeting Pacific ocean perch (POP) in these limited open areas results in minimal bycatch of crab and provides very high catch per unit effort (CPUE) of target fish. As is also highlighted in the ADF&G staff comments, golden king crab bycatch is incredibly low. On average less than 1% of golden king crab bycatch (66 golden king crab per year) were taken inside state waters between 2020 and 2025. Notably, prohibiting trawling in these waters would further concentrate groundfish fishing into areas where 99% of golden king crab bycatch occurs. Having the ability (opportunity) to fish in the highest CPUE and lowest bycatch areas means that POP quotas are harvested with fewer tows (less time on the water), which in turn reduces potential crab bycatch and habitat impacts. Less time on the water also means less time for potential gear conflicts.

Conclusion. The information available does not demonstrate that Proposal 11 would benefit the golden king crab stock, habitat, or fishery. However, adoption of this proposal would significantly impair the current and continued collaboration between these two fishing sectors and should be given appropriate consideration. Adopting this proposal will most likely increase

gear conflicts in the remaining fishing grounds, not decrease them. Managers should be encouraging and creating environments that foster communication and cooperation amongst differing sectors and not adopting rigid regulations that negatively impact one sector with no quantifiable benefit for another sector.

Thank you for your time and consideration.

Sincerely,



Dan Martin
FV Patricia Lee & FV Aleutian No. 1

Ruth Christiansen

Ruth Christiansen
Ocean Peace, Inc.

Glenn Merrill

Glenn Merrill
Glacier Fish Company



Dave Wood
U.S. Seafoods

Mary Beth Tooley

Mary Beth Tooley
O'Hara Corporation