



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Planning Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7833

www.matsugov.us

To: Alaska Board of Fisheries

From: Matanuska-Susitna Borough Fish and Wildlife Commission

Date: February 26, 2026

Re: Comments on 2026 Statewide Finfish and Supplemental Issues

I. Preamble

The following comments are submitted on behalf of the Matanuska-Susitna Borough (MSB) Fish and Wildlife Commission (FWC). The MSB FWC represents the interests of the Borough in the conservation and allocation of fish, wildlife and habitat. Specifically, the FWC advises borough officials, state or federal agencies and other organizations with interests that may affect conservation of fish, wildlife, and habitat across an area the size of West Virginia. Within this area, residents fish commercially, personal use dip net, sport fish, and four indigenous communities — Chickaloon, Knik, Eklutna Village, and Tyonek – engage in subsistence, educational, and personal use fisheries. The members of the FWC bring decades of experience managing fish and wildlife resources within Alaska.

Positions and actions of the MSB FWC related to fisheries conservation and management are informed by six (6) clearly stated goals:

1. Long-term salmon conservation and protection of salmon habitat.
2. Maintain and enhance the Conservation Corridor in the drift gillnet fishery management plan.
3. Clarify or strengthen conservative management practices which provide protection for current and formerly identified Stocks of Concern.
4. Increase inriver returns of coho and sockeye salmon to Northern Cook Inlet systems.
5. Adjust existing king salmon management plan and strategies to more adequately address conservation concerns for king salmon returning to Northern Cook Inlet drainages.
6. Maintain or extend Personal Use fishing opportunity for Alaskan residents fishing Northern Cook Inlet drainages.

MSB Fish and Wildlife Commission Proposal Positions

For the 2026 Statewide meeting of the Alaska Board of Fisheries, the FWC is focused solely on reviewing and developing a position for proposal 186, which was accepted as an Agenda Change Request (ACR) consistent with guidelines set forth in 5 AAC 39.999, to address a “fishery conservation purpose or reason”. The FWC is pleased that the Board, through its actions in accepting the ACR, recognizes the magnitude and urgency of the issues that Proposal 186 seeks to address.

II. Matanuska-Susitna Borough Fish and Wildlife Commission Comments on Statewide Finfish and Supplemental Proposals

Proposal 186 5 AAC 21.353

Central District Drift Gillnet Fishery Management Plan.

SUPPORT

What problem does Proposal 186 address?

With the inception of the more liberal Federally managed EEZ drift gillnet fishery, and Kenai king salmon conservation changes, the State of Alaska seeks to harvest a greater portion of surplus Kasilof and Kenai River sockeye salmon offshore in the drift gillnet fishery. This strategy is inconsistent with terminal stock fisheries management and has resulted in increasing incidental catches of Northern bound coho salmon, negatively affecting spawning escapements, and reasonable harvest opportunities for subsistence, commercial, sport, and personal use needs in Northern Cook Inlet.

Inriver salmon shortages have resulted in consistent restrictions and closures for Northern District commercial and sport fisheries over the past three years. Sport fishery closures were focused most specifically on the Deshka River and Little Susitna River during this time. In spite of intense inriver restrictions, too few salmon were left to even remotely achieve published Department coho salmon SEGs in either river. Adaptive Management Changes need to be considered and made. A more precautionary management approach as outlined in 5 AAC 39.222 is clearly required.

What does Proposal 186 do?

Proposal 186 seeks to limit incidental catches of coho salmon by effectively reducing the fishing area starting July 9 by limiting commercial fishing to the Expanded Kenai section (Statistical Area 244-52) and Expanded Kasilof Section (Statistical Area 244-62) and Anchor Point Section (Statistical Area 244-63) with removal of additional fishing time outside these sections regardless of sockeye run strength.

Specifically, Proposal 186 does the following:

- 1) from July 9 – July 15 at run strengths greater than 2.3 million Kenai River sockeye, Drift Gillnet Area 1 is removed from the current regulation
- 2) from July 16 – July 31 at run strengths of greater than 2.3 million Kenai sockeye
 - a. removes reference to one regular 12 hr. period
 - b. removes Drift Gillnet Area 1
- 3) Removes reference to remaining weekly 12-hour regular fishing periods that took place in the Expanded Kenai, Kasilof and Anchor Point Sections.
- 4) At run sizes projected to be over 4.6 million, it restricts the district-wide period to the harvest corridor.

Discussion and Rationale

The history of commercial fisheries management priorities in Upper Cook Inlet has been one of placing the harvest of surplus sockeye salmon, particularly those stocks bound for Kenai and Kasilof Rivers, ahead of conservation concerns for weaker Northern bound coho and chinook salmon stocks. Additionally, Upper Cook Inlet has historically been managed as a mixed stock commercial fishery which further impacts the weaker Northern bound stocks.

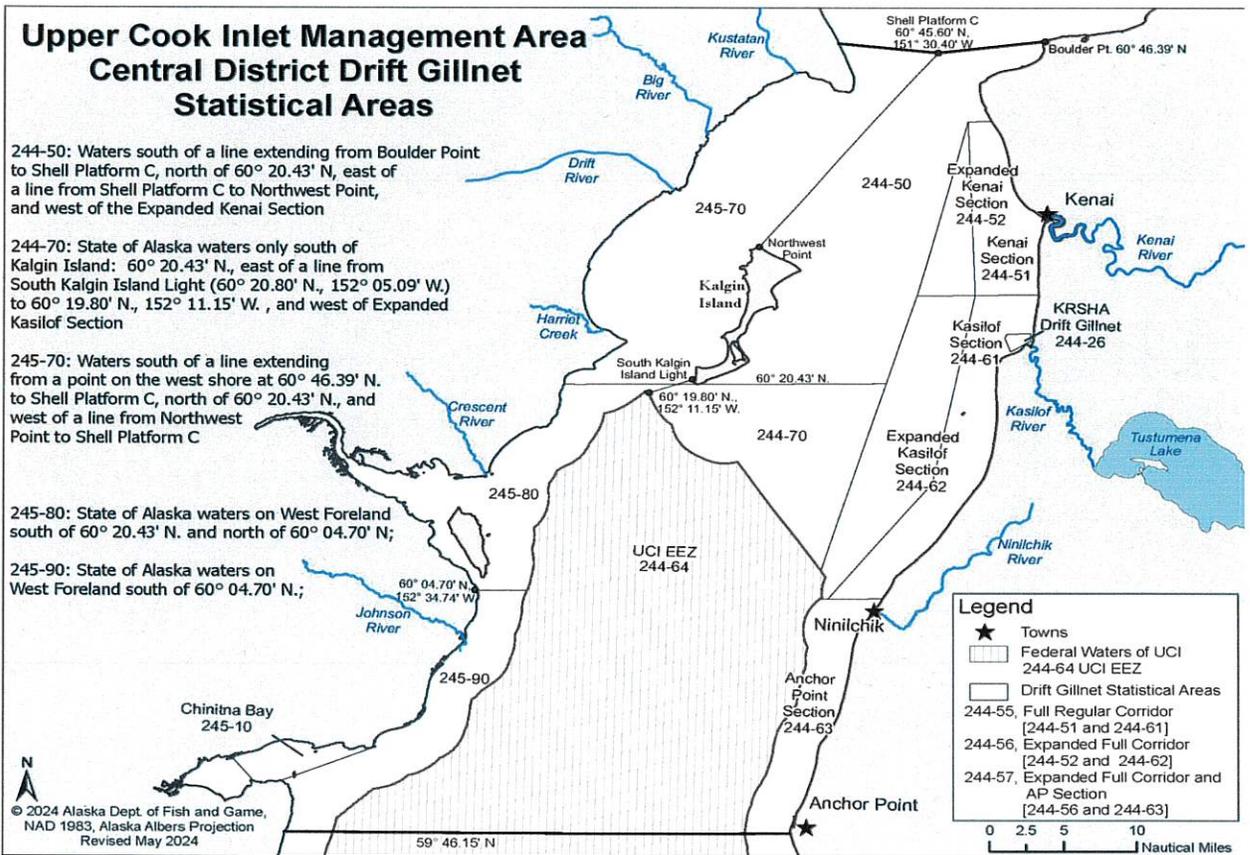
In more recent Board of Fisheries actions, the board has moved incrementally toward regulations favoring Terminal Stock Fisheries management as is employed in Bristol Bay. This was first evidenced in the Board's recognition of the value of a "Conservation Corridor" to pass Northern bound stocks by limiting more commercial drift gillnet fishing to what is now referred to as the Expanded Kenai, Expanded Kasilof and Expanded Anchor Point sections. This enlightened approach had the potential to favorably address stock conservation issues in the Northern District and allow the harvest of surplus sockeye until the creation of the Federally managed EEZ.

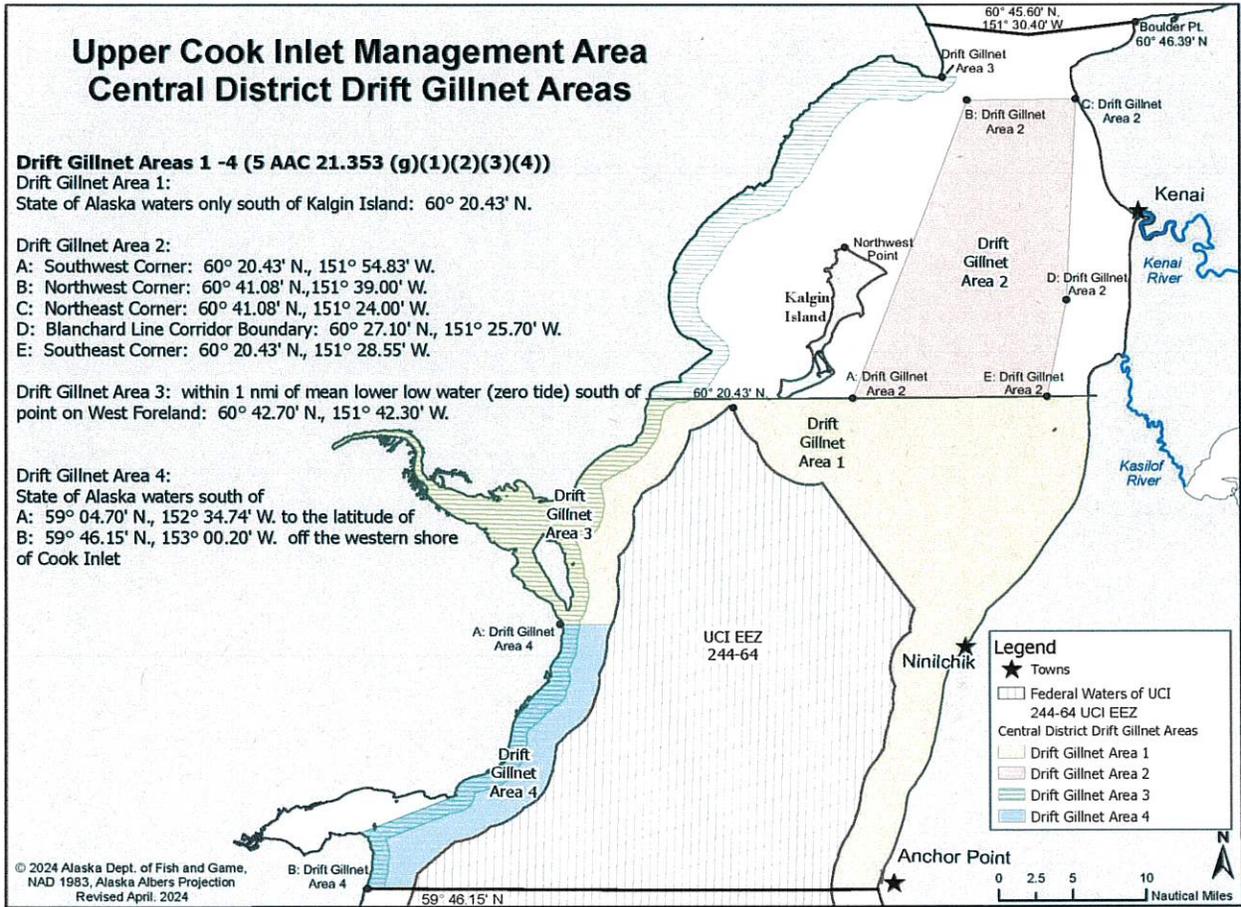
The creation and management of the EEZ creates an incredible amount of uncertainty for the Alaska Department of Fish and Game and the Board of Fisheries. In the face of uncertainty, the Board routinely has applied a precautionary principle to managing salmon harvest in favor of meeting escapement and inriver targets. Proposal 186 calls for restrictions in the drift gillnet fishery to address the consistent failure of the current management system to meet escapement and inriver use needs of the Northern district, while still providing sufficient tools for the Department to effectively manage the important commercial fishery.

The Matanuska Susitna Borough Fish and Wildlife Commission strongly supports Proposal 186 and looks forward to working with the Board of Fisheries and other stakeholders to address the serious and chronic conservation concerns recognized by the Board in accepting Proposal 186 as an Agenda Change Request.



MSB Fish & Wildlife Commission Chair, Pete Probasco







THE STATE OF ALASKA
MIKE DUNLEAVY
GOVERNOR

Boards and Commissions

Office of the Governor

550 W 7th Ave. Suite 1700
 Anchorage, Alaska 99501
 907-269-0006

Open Meetings Act

The State of Alaska's Open Meetings Act (AS 44.62.310-.312) requires that all meetings of a public entity's governing body be open to the public and that the body provide reasonable notice of its meetings. The Open Meetings Act (OMA) is intended to ensure that decisions made and actions taken are public knowledge and represent the will of the public that the governing body serves. In essence, the OMA protects the public's right to know.

To be able to protect the public's right to know, the OMA requires that:

- all deliberations and action taken by a public entity must be done in public view, with limited exceptions;
- the public must be provided prior knowledge of all steps occurring in the decision-making process, with limited exceptions; and that
- individual actions of an official are made known.

In order for these requirements to have full effect, meetings must occur as provided in the notice; and, with few exceptions, the public must be allowed to involve itself in the meeting. The public must also have access to materials being considered during the meeting.

In addition to laying out specific steps required for meetings and allowable exceptions, the statutes addressing open meetings speak about the state's policy regarding what authority the public has delegated to governing bodies. Following is a synopsis.

According to the 'State Policy Regarding Meetings' (AS 44.62.312):

- The government exists to aid in conducting the people's business.
- Government units should act and deliberate openly.
- The people do not yield sovereignty to government agencies that serve them.
- Public servants have not been given the right to decide what is good or not good for the people to know.
- People should remain informed so they may retain control over the government they created.
- The use of teleconferences is for the convenience of the parties, public, and government.
- The Open Meetings Act should be narrowly construed to effectuate these policies and avoid unnecessary exemptions.

What is the Open Meetings Act?

The State of Alaska's Open Meetings Act (AS 44.62.310-.312), is a law that addresses the meetings of public entities; it protects the public's right to know and their opportunity to be heard. Among other things, the Act:

- defines public meetings and public entities;
- lays out specific requirements for public notice;
- requires that all meetings of a governmental body of a public entity are open to the public;
- lays out provisions for attendance at meetings and voting methods;
- lays out provisions for distribution of meeting materials; and
- lists the few exceptions to the Act, as well as matters that may be discussed in executive session.

In order to assure that the public information/participation provisions of the Act are met, the Act requires that the public entity must provide "reasonable" notice that meets the requirements of the Act. To meet these notice requirements, the notice must:

- be provided within a reasonable amount of time prior to the meeting;
- include the date, time, and place of the meeting;
- be posted at the principal office of the public entity, in addition to any other methods and locations stated in local ordinance; and
- be done in the same way each time (consistent).

What is the definition of a meeting that would fall under the provisions of the Open Meetings Act?

AS 44.62.310(h) provides detailed definitions of "governmental body," "meeting," and "public entity" that, when combined, define what constitutes a public meeting. The Act makes a distinction between what constitutes a meeting of a policy/decision-making body and what constitutes a meeting of an advisory-only body.

A meeting of a decision- or policy-making body occurs when more than three members, or a majority of the members, whichever is less, engage collectively in discussion of a *subject that the body is authorized to act and set policy on* and is therefore subject to the Open Meetings Act. Under this definition, it doesn't matter where the meeting occurs, if it was prearranged, or who arranged it and could include unplanned casual or social contact.

A meeting of an advisory-only body is a prearranged gathering to consider a matter on which the entity is *authorized to advise and assist the decision-making body* and is subject to the provisions of the Act. The Act doesn't specify a number, so two or more members, if the gathering is prearranged for the purpose of conducting any business of the entity, could constitute a meeting.

What types of meetings might be conducted that would require notice under the Open Meetings Act?

Following are the most common types of meetings that would be subject to the Open Meetings Act:

Regular Meetings: State law requires that the governing body conduct its business at regularly scheduled meetings that are open to the public. Regular meetings must be held at least once a month and may be held more often, as required or established in local ordinance. The local code of ordinances should provide the date, time, and place of regular meetings so that everyone knows when regular meetings will take place. The public shouldn't have to wonder about the meeting time, date, and place always changing. If at times it is necessary to reschedule the regular meeting, notice must be posted informing the public that the regular meeting has been rescheduled and when it will be held.

Special Meetings: Special meetings have the same requirements as regular meetings, except that they are called for a different time than that fixed for regular meetings. For example, local ordinance may require that the governing body hold its regular meeting on the third Tuesday of each month at 7:00 PM at the municipal offices. If the governing body must meet earlier, it can call a special meeting for a different date. The special meeting does not take place instead of the regular meeting, it is in addition to the regular meeting. Special meetings should be held rarely and only to address time sensitive issues. A special meeting may be held with less than 24-hour's notice if all members are present or if absent members have waived in writing the required notice. Waiver of notice can be made before or after the special meeting is held.

Emergency Meetings: Emergency meetings are held to address situations that are so urgent that the governing body must meet right away. An emergency meeting may be held if a majority of the members are given at least 24 hours oral or written notice and reasonable efforts are made to notify all members.

Committee Meetings: Permanent ("standing") committees and temporary ("ad hoc") committees of the governing body may be formed to study particular issues in more detail. Standing committees may include the finance committee, public works committee, and/or a facilities committee. Ad hoc committees are formed to address a specific situation and are disbanded once the situation has been dealt with. Committees may be composed of all members of the governing body (referred to as a committee of the whole), or of fewer members, usually three. A committee cannot take action on behalf of the full governing body but instead makes a recommendation to the governing body for the governing body's action. Usually the committee of the whole meets to discuss items that are not ready for action but need further discussion in an informal setting. For example, the annual budget usually requires a work session before it is formally adopted.

Board of Equalization: The governing body, or its appointees, sits as the Board of Equalization in municipalities that levy a property tax. AS 29.45.200(a) states, "the governing body sits as a board of equalization for the purpose of hearing an appeal from a determination of the assessor." A property owner who believes the assessor has made a mistake in the yearly valuation of their property may appeal the assessor's decision to the board of adjustment, which meets once a year.

How much notice is required to meet the "reasonable" public notice provision of the Open Meetings Act?

How much notice is required depends on the complexity of the issue and the potential effect it will have. Proper public notice must be provided in advance of the proposed action and local ordinances should state the minimum number of days that notice is required. This number should be adjusted up if the situation warrants additional notice. Special and emergency meetings require only 24-hour notice or less. If less notice is given, absent members must waive the notice requirement. Notice requirements for work sessions and committee meetings should follow the same guidelines as those established in local ordinance for regular meetings.

There are minimum mandatory notice requirements for certain actions, such as notice of a public hearing on a proposed ordinance, or election notice. There is, however, no specific number of days spelled out in statute that defines "reasonable." The general tone of case law on the subject has essentially found that reasonable notice provides enough notice that a concerned party will have notice of a proposed action within enough time to be involved in the deliberations. This could vary anywhere from three months to three days. The notice also has to provide enough information to let the public know what subjects will be covered in the meeting. If a complete agenda isn't available at the time of posting, a summary will work until the complete agenda is available.

Local ordinances should contain all of the requirements for public notice of meetings including what to include in the notice, where the notices are posted, and how soon before the meeting the notices are posted.

Where and how does notice have to occur?

State law, AS 44.62.310(e), requires that reasonable notice include the date, time, and place of the meeting; and, if by teleconference, the location of any teleconferencing facilities. It also provides that notice may be given in print or broadcast media; that it be posted at the principal office of the public entity or, if no principle office, at a location designated by the governing body; and that it be done in the same way each time "consistent."

In addition to the locations required in statute, notice should be posted at well-used locations in the community like the post office, the store, government offices, and the community bulletin board. It may also be published in a newspaper of general circulation in the community or broadcast over a local radio station in addition to any other means and locations stated in local ordinance.

Are there exceptions to the Open Meetings Act and what subjects may be discussed in executive session?

Exceptions to the OMA are discussed in the Executive Session section of LOGON.

Is secret ballot voting allowed under the act?

Almost always, no. In addition to requiring that deliberations of a governing body be open to the public, the act also requires that the vote shall be conducted in such a manner that the public may know the vote of each person entitled to vote, including meetings conducted by teleconference. The one exception is organizational meetings of a governing body to elect members to various offices, which are exempted from the requirement that the vote of each member be made public (AS 44.62. 310(a)).

Is telephone polling considered a violation of the Open Meetings Act?

Whether a phone poll by a member or agent of the governing body would be considered a violation of the act, depends on the subject matter. If the matter involves an administrative or procedural issue that would not warrant public discussion, a phone poll may be conducted. If, however, the phone poll touches on an issue that should be discussed in an open meeting or can have the effect of swaying opinion on a public issue, it could be considered a violation of the act.

Who enforces the Open Meetings Act?

It is the responsibility of the administration and governing body to assure that the provisions of the Open Meetings Act are enforced. Any individual may contest an action administratively through local channels that they think was done in violation of the Open Meetings Act and ultimately may, within 180 days, file a court action if the issue isn't remedied locally AS 44.62.310(f).

There are several court cases that have ruled in favor of the Open Meetings Act. When deciding these cases, the court doesn't just consider whether a violation has occurred, but also considers whether the action has interfered with the public process that the act was intended to protect.

What is the cure for a violation of the Open Meetings Act?

Actions taken at meetings that are found to be in violation of the Open Meetings Act may be voided. Failing to provide proper notice can cost a great deal of money to defend in addition to the wasted time and effort involved. The governing body can attempt an informal cure by holding another meeting in compliance with the Open Meetings Act and conducting a substantial and public reconsideration of the matters.

If a lawsuit is filed, the court may void any action taken by the governing body if the court finds that, considering all of the circumstances, the public interest in compliance with the law outweighs the harm that would be caused by voiding the action AS 44.62.310(f)).

In deciding whether to void an action, the court must consider:

- (1) the expense that may be incurred if the action is voided;
- (2) the disruption that may be caused if the action is voided;
- (3) the possibility of additional litigation if the action is voided;
- (4) the extent to which the subject has previously been considered in compliance with the act;
- (5) the amount of time that has passed since the action was taken;
- (6) the degree to which the action has come to be relied on;
- (7) whether and to what extent the governmental body has, before or after the lawsuit was filed, engaged in or attempted to engage in public reconsideration of the matter;
- (8) the degree to which the violations were willful, flagrant, or obvious;
- (9) the degree to which the governing body failed to adhere to the policy under AS 44.62.312 (a).

This does not apply to an advisory only body that that has no authority to establish policies and make decisions for the public entity (AS 44.62.310(g)).

What effect does attorney client privilege have in dealings between a public entity and its attorney?

Executive session procedure requires that the reason for calling the executive session is clearly stated. The attorney-client privilege exemption to the Open Meetings Act is limited to matters where public interest may be injured. This might include how to avoid legal liability, litigation strategies and candid discussion of facts, a proposed settlement conference, and a conference on a decision to appeal.

In addition to the rights protected under the Open Meetings Act, what rights can the public expect under state law?

In addition to the rights protected under the Open Meetings Act, Title 29 reiterates the requirement that all meetings be open to the public and provides that the public will have the right to be heard at regular and special meetings AS 29.20.020.

AS 29.20.160 lays out the procedures that a governing body must follow in conducting its meetings. These procedures include:

- Provision for identification of the presiding and deputy-presiding officers;
- The requirement that the governing body hold at least one regular monthly meeting, unless otherwise provided by ordinance;
- The requirement that the governing body shall provide at least 24-hour notice for special meetings or absent members must waive the notice requirement;
- Clarification on how actions of the governing body are adopted and what constitutes a quorum;
- The requirement that all members present shall vote on every question, unless required to abstain; and

The requirement that a governing body maintain a journal of its proceedings that is available to the public.

- AS 29.20.380 assigns certain meeting duties and responsibilities to the municipal clerk. These include:
 - Attendance at public meetings;
 - Keeping the journal;
 - Assuring that notice and other requirements for public meetings are complied with;
 - Assuring that public records are available for public inspection;
 - Managing and maintaining public records; and

- Preparing agendas and agenda packets.
-

Who enforces the local rules under which a municipality conducts its meetings?

Governing bodies must have procedures in place and follow them for their meetings. Some of these procedures are in Title 29 and other statutes. Others are in the local ordinances, which are usually more specific and detailed than Title 29, or in rules of procedure adopted by the governing body.

Essentially, the presiding officer enforces the rules by following them when conducting a meeting and, when there is a question of procedure, the clerk, acting as parliamentary advisor, researches the question and proposes an answer, which the presiding officer then rules on. Members of the public also enforce the rules by questioning whenever something occurs that doesn't seem to follow the rules. The last resort for enforcement is a lawsuit.

Additional Resources

[Alaska's Open Meetings Law](#) by Gordon J Tans

[Open Meetings Act](#) AS 44.62.310-.312

Sec. 44.62.310. Government meetings public.

(a) All meetings of a governmental body of a public entity of the state are open to the public except as otherwise provided by this section or another provision of law. Attendance and participation at meetings by members of the public or by members of a governmental body may be by teleconferencing. Agency materials that are to be considered at the meeting shall be made available at teleconference locations if practicable. Except when voice votes are authorized, the vote shall be conducted in such a manner that the public may know the vote of each person entitled to vote. The vote at a meeting held by teleconference shall be taken by roll call. This section does not apply to any votes required to be taken to organize a governmental body described in this subsection.

(b) If permitted subjects are to be discussed at a meeting in executive session, the meeting must first be convened as a public meeting and the question of holding an executive session to discuss matters that are listed in (c) of this section shall be determined by a majority vote of the governmental body. The motion to convene in executive session must clearly and with specificity describe the subject of the proposed executive session without defeating the purpose of addressing the subject in private. Subjects may not be considered at the executive session except those mentioned in the motion calling for the executive session unless auxiliary to the main question. Action may not be taken at an executive session, except to give direction to an attorney or labor negotiator regarding the handling of a specific legal matter or pending labor negotiations.

(c) The following subjects may be considered in an executive session:

(1) matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the public entity;

(2) subjects that tend to prejudice the reputation and character of any person, provided the person may request a public discussion;

(3) matters which by law, municipal charter, or ordinance are required to be confidential;

(4) matters involving consideration of government records that by law are not subject to public disclosure.

(d) This section does not apply to

(1) a governmental body performing a judicial or quasi-judicial function when holding a meeting solely to make a decision in an adjudicatory proceeding;

(2) juries;

(3) parole or pardon boards;

(4) meetings of a hospital medical staff;

(5) meetings of the governmental body or any committee of a hospital when holding a meeting solely to act upon matters of professional qualifications, privileges, or discipline;

(6) staff meetings or other gatherings of the employees of a public entity, including meetings of an employee group established by policy of the Board of Regents of the University of Alaska or held while acting in an advisory capacity to the Board of Regents;

(7) meetings held for the purpose of participating in or attending a gathering of a national, state, or regional organization of which the public entity, governmental body, or member of the governmental body is a member, but only if no action is taken and no business of the governmental body is conducted at the meetings; or

(8) meetings of municipal service area boards established under AS 29.35.450 — 29.35.490 when meeting solely to act on matters that are administrative or managerial in nature.

(e) Reasonable public notice shall be given for all meetings required to be open under this section. The notice must include the date, time, and place of the meeting and if, the meeting is by teleconference, the location of any teleconferencing facilities that will be used. Subject to posting notice of a meeting on the Alaska Online Public Notice

System as required by AS 44.62.175(a), the notice may be given using print or broadcast media. The notice shall be posted at the principal office of the public entity or, if the public entity has no principal office, at a place designated by the governmental body. The governmental body shall provide notice in a consistent fashion for all its meetings.

(f) Action taken contrary to this section is voidable. A lawsuit to void an action taken in violation of this section must be filed in superior court within 180 days after the date of the action. A member of a governmental body may not be named in an action to enforce this section in the member's personal capacity. A governmental body that violates or is alleged to have violated this section may cure the violation or alleged violation by holding another meeting in compliance with notice and other requirements of this section and conducting a substantial and public reconsideration of the matters considered at the original meeting. If the court finds that an action is void, the governmental body may discuss and act on the matter at another meeting held in compliance with this section. A court may hold that an action taken at a meeting held in violation of this section is void only if the court finds that, considering all of the circumstances, the public interest in compliance with this section outweighs the harm that would be caused to the public interest and to the public entity by voiding the action. In making this determination, the court shall consider at least the following:

(1) the expense that may be incurred by the public entity, other governmental bodies, and individuals if the action is voided;

(2) the disruption that may be caused to the affairs of the public entity, other governmental bodies, and individuals if the action is voided;

(3) the degree to which the public entity, other governmental bodies, and individuals may be exposed to additional litigation if the action is voided;

(4) the extent to which the governing body, in meetings held in compliance with this section, has previously considered the subject;

(5) the amount of time that has passed since the action was taken;

(6) the degree to which the public entity, other governmental bodies, or individuals have come to rely on the action;

(7) whether and to what extent the governmental body has, before or after the lawsuit was filed to void the action, engaged in or attempted to engage in the public reconsideration of matters originally considered in violation of this section;

(8) the degree to which violations of this section were wilful, flagrant, or obvious;

(9) the degree to which the governing body failed to adhere to the policy under AS 44.62.312(a).

(g) Subsection (f) of this section does not apply to a governmental body that has only authority to advise or make recommendations to a public entity and has no authority to establish policies or make decisions for the public entity.

(h) In this section,

(1) "governmental body" means an assembly, council, board, commission, committee, or other similar body of a public entity with the authority to establish policies or make decisions for the public entity or with the authority to advise or make recommendations to the public entity; "governmental body" includes the members of a subcommittee or other subordinate unit of a governmental body if the subordinate unit consists of two or more members;

(2) "meeting" means a gathering of members of a governmental body when

(A) more than three members or a majority of the members, whichever is less, are present, a matter upon which the governmental body is empowered to act is considered by the members collectively, and the governmental body has the authority to establish policies or make decisions for a public entity; or

(B) more than three members or a majority of the members, whichever is less, are present, the gathering is prearranged for the purpose of considering a matter upon which the governmental body is empowered to act, and the governmental body has only authority to advise or make recommendations for a public entity but has no authority to

establish policies or make decisions for the public entity;

(3) “public entity” means an entity of the state or of a political subdivision of the state including an agency, a board or commission, the University of Alaska, a public authority or corporation, a municipality, a school district, and other governmental units of the state or a political subdivision of the state; it does not include the court system or the legislative branch of state government.

Sec. 44.62.312. State policy regarding meetings.

(a) It is the policy of the state that

(1) the governmental units mentioned in AS 44.62.310(a) exist to aid in the conduct of the people’s business;

(2) it is the intent of the law that actions of those units be taken openly and that their deliberations be conducted openly;

(3) the people of this state do not yield their sovereignty to the agencies that serve them;

(4) the people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know;

(5) the people’s right to remain informed shall be protected so that they may retain control over the instruments they have created;

(6) the use of teleconferencing under this chapter is for the convenience of the parties, the public, and the governmental units conducting the meetings.

(b) AS 44.62.310(c) and (d) shall be construed narrowly in order to effectuate the policy stated in (a) of this section and to avoid exemptions from open meeting requirements and unnecessary executive sessions.

Submitted by: Brandon Maxwell

Community of Residence: Cordova, AK

My name is Brandon Maxwell. I'm a commercial fisherman of 25 years in Area E. I'm also a subsistence and sport user. Below are my comments on the following proposals.

Proposal 170: I oppose proposal 170.

This would negatively affect me and my family, along with many other lifelong Alaskans who rely on these fish to make a living. These fish not only produce money to the coastal towns, they also give employment opportunities for many out of state people who need jobs. Coastal towns will suffer from this. Commercial fishing has already been tough these last few years and cutting hatchery production will be the nail in the coffin.

Proposal 171: I oppose proposal 171.

This will negatively affect many Alaskans. Between food security and job security, it seems very irresponsible to cut the numbers of salmon being produced that feed so many people and create so many jobs. There is no real science behind straying pink salmon negatively affecting other salmon. Since these hatcheries were started there has been consistently better wild salmon returns. There is a reason that BOF has time and time again rejected these proposals.

Proposal 172: I oppose proposal 172.

This will negatively impact many Alaskan residents along with non residents. These fish provide many jobs, and food security for people all over the world. It seems very irresponsible to do this. There is no science behind this. Hatcheries have saved many coastal towns. There is a reason BOF has continuously shut these proposals down.

Proposal 187: I oppose proposal 187.

There is no conservation issue here. This is an allocative proposal and seems irresponsible for the board to support this proposal in favor of a single user group. The data shows that there has been no problem with sport fisherman catching limits and there is always plenty of escapement in these rivers.

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 175 – Dipnet mesh and configuration requirements: ,

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

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

Thank you,

Brandon Maxwell

Submitted by: Brandon Maxwell

BDM Fisheries

Community of Residence: Soldotna, Ak

Trawling needs to stop!

Raymond M May, F/V Resilient
[REDACTED]

Kodiak, Alaska 99615

3/1/2026

Board of Fisheries
Statewide salmon hatchery proposals
RE: OPPOSE proposals 170,171, and 172

Dear Chair Carlson Van Dort and Board of Fish Members:

I was born and raised on Kodiak Island. I'm an Alaska Native fisherman that is enrolled in two tribes (Native Village of Port Lions & Native Village of Afognak), along with being a shareholder of three Native corporations (Lesnoi Inc., Afognak Native Corp., & Koniag Inc.). For 46 years, I have participated in commercial fisheries across Alaska as a deckhand and captain. In 2007 I purchased my first boat, and I've been catching salmon ever since.

I've participated in the Board of Fish process for almost two decades, and I was a board member of the Kodiak Regional Aquaculture Association (KRAA), a local private non-profit hatchery that benefits the commercial fishing industry and seafood processing sector, but also tremendously helps local personal use, sport and subsistence fishermen. The Kodiak Road system is famous for it's ease of access to king salmon, sockeye, and coho that are in part produced by KRAA. These fish are easily accessed by local and visiting personal use, sport, and subsistence fishermen who for the most part don't know they are catching hatchery fish. KRAA also produces subsistence sockeye and coho that are released for the villages of Port Lions and Ouzinkie, and hatchery salmon are also available around Kodiak's other villages, helping fill countless freezers and keeping the Alutiiq people fed on their traditional foods.

I OPPOSE proposals 170,171, and 172. These anti-hatchery proposals are yet another attempt to harm Alaskan commercial fishermen, but have the unintended consequence of hurting local personal use, sport and subsistence fishermen. Statewide reductions in hatchery production will only serve to put more pressure on wild stocks by ALL users, as less salmon will be available. Although Alaska's salmon forecasts are a bit of a guessing game, decreased hatchery output will create even less certainty in estimating salmon returns. Alaska's coastal communities are already seeing declines in residency, and having less salmon available for all users will make that problem worse. Reduced salmon runs means fewer commercial fishermen, less processors, less visiting sport fishermen, less charter businesses, less mom-and-pop support businesses, and less people living in communities year-round. Less hatchery fish hurts all of us, not just commercial fishermen.

Sincerely,

Raymond May
Owner and operator, F/V Resilient

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 Connor McCarthy. I am a commercial fisherman fishing on the F/V Quest. I grew up in Homer, Alaska.

Cutting hatchery production by 25% would negatively affect my ability to provide for my family while keeping up with rising boat maintenance costs. Growing up in Homer, I have seen how bad salmon years don't only affect fishermen—they affect the whole community.

I believe the research supporting these cuts is not sound enough. I worry that choosing opinion over science could have serious consequences in the future.

I don't have all the answers, but I do believe upstream habitat is critical for salmon. I live on the Anchor River, and last May while pack rafting I found a gillnet deployed in the river. I reported it to Fish and Game with pictures and coordinates and was directed to the troopers, but I never heard a follow-up. As Alaska's upstream populations grow, so does the threat to critical salmon habitat. This is one example of where attention and enforcement matter.

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,

Submitted by: Patrick McCormick

Community of Residence: Anchorage

Comments on Statewide Proposals.

I am an area E drift gillnet permit holder, kenai river licenced sport fishing guide, lifelong alaskan. I hold a BS in environmental science and have completed the coursework required to earn a master's in fisheries.

Proposal 170.

I encourage the board to reject this proposal.

While it is imperative that pink salmon hatchery production be greatly reduced to protect our fisheries, this proposal is arbitrary and is missing key context and evidence that will occur in the 2026 fishing season.

In 2024 the brood year for the 2026 pink salmon return, brood stock goals went largely unmet in PWS PNP hatcheries between 30-40%, primarily due to sea lion predation of female broodstock. Despite lack of broodstock, in 2026 I believe we will see the total weight of salmon to be similar to other years. We should also see increased reliability of sockeye forecast models, as well as over performance of chinook and coho production due to a decreased number of pink salmon in the north pacific.

Hatchery pink salmon in Prince William Sound are exceedingly small in body size, and are of exceedingly low value. PWSAC and VDA should drastically reduce their production in favor of chum, coho, and sockeye salmon. However doing so will require time to minimize impacts on industry, and for the 2024 experiment to play out.

I think it is prudent for the board to use the hatchery committee to explore options to recommend to PWS and VDA, as well as the strategic planning process to reduce Pink Salmon stocking in the north pacific.

PWSAC pink salmon have not been effectively fished by the fleet for three of the last six years. This has even lead to the fleet losing opportunity to harvest ample wild fish, most notably in 2020 when a formal disaster was declared for the pink season. The 2020 ADF&G management report notes that many streams in 2020 we vastly over escaped.

It is clear that pink salmon production is not a sustainable model for the fleet, or PWSAC, and it is vital that we move away from pink salmon production, especially if sustainable fishing for wild stocks are curtailed, in favor of allowing cost recovery and broodstocks for hatcheries.

Unfortunately this proposal does not address this issue in a scientific or economic based way and should be rejected.

Proposal 171

I urge the board, to set a timeline for the strategic planning team to develop an updated comprehensive plan. The comprehensive plan has not been updated in 30 years, and needs to be updated based on the science and economic realities of the past 30 years. I urge the board to make clear that they will consider unilaterally updating the plan, or some other "stick" type approach during the regular PWS fin fish cycle if the plan rewrite is not complete.

I urge the KRSA and other interested parties to follow the comprehensive planning process.

I will echo the comments I made on proposal 170, we must reject pink salmon hatchery production in favor of more valuable fish, with less ecological risk, however this needs to happen with regard to economics and scale. I urge the board to make that clear to all stakeholders.

Proposal 172

I support this proposal, except removing chum salmon from the moratorium. Hatchery chum salmon have been shown to be exceptionally less risky than pink salmon ecologically. Furthermore, if we are going to reduce pink

salmon stocking in the future, the obvious alternative is chum salmon, as they are similar in cost for hatcheries to produce, while yielding much higher values for fishermen.

PC306

Submitted by: Erica McDaniel

Community of Residence: Wasilla

I am in opposition of proposal #162-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.

Also in opposition of proposal #175-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. Zero biological concern, and would pose a much greater safety risk for dip netters in boats.

PC307

Submitted by: Lloyd Mcdaniels

Community of Residence: WASILLA

I supported proposals (186, 11, 163, 164, 165,170, 171, 172). My reasoning is the importance of healing our eco system and preserving the ability to continue to fish for generations to come. Drastic Changes need to be made for our sustainability and Alaskan way of life. The decline of the fishery is sickening. The amount of fish that use to swim through our waters 20 years ago compared to now is a huge shift in numbers.

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 Brian McWethy, and I am a commercial fisherman based in Kodiak, Alaska. Between 80 and 100 percent of my income comes from seining salmon. I fish aboard the F/V All In.

Proposal 170 could significantly impact Kodiak's salmon fishermen. Reducing egg take and returning salmon to Kodiak's hatchery would lead to less fishing time at the hatchery and push vessels into other areas, increasing pressure elsewhere. It would decrease the available fish we can commercially harvest by more than 25 percent, as a set number of returning salmon are retained for brood stock. I spend a significant portion of June, and often much of August and September, fishing around the hatchery.

Restricting egg take without scientific evidence that hatchery fry negatively affect natural stocks is difficult to understand. Hatchery stocks provide a huge and much-needed financial boost to the local Kodiak fishing community. Fishing at the hatchery is close to town and provides a consistent opportunity for smaller vessels and family operations to make a living.

If fishing time is reduced due to fewer salmon at the hatchery, it will significantly affect the entire fleet, including tenders, processors, fuel docks, and local businesses. There are several days, and sometimes weeks, during the summer when the hatchery is the only area open to fishing. When the fleet ties up, Kodiak goes backward financially.

In recent years, Kodiak fishermen have lost substantial opportunity, including closures in the Ugak Section and reduced time in Ayakulik and Karluk due to king salmon concerns. I seriously worry about my future in this fishery.

Salmon fishing in Alaska has long been a well-regulated and closely studied fishery, and hatcheries that have existed for decades have not negatively affected natural runs. I strongly believe declines in king and chum salmon are driven by other factors, particularly ocean conditions and climate change. Hatcheries provide a safety net in an unpredictable environment and allow fishermen to make a living when natural runs fall short.

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

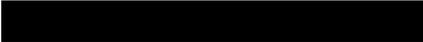
continuously, and adjusted when data demonstrate a need. Proposals 170, 171, and 172 do not respond to a failure of that system. Instead, they impose across-the-board reductions or freezes based on generalized concern and unresolved scientific questions. This approach contradicts Alaska's long-standing 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,

Brian McWethy
Kodiak, Alaska



March 2, 2026

Dear Members of the Board of Fisheries:

My name is Charles McWethy. I am owner and operator of the F/V Shining Sea and have run a salmon seiner in Kodiak for 40 years. I have been a Kodiak salmon seine permit holder since 1985 and have harvested fish from Kitoi Hatchery every year since.

If these proposals were adopted, they would limit my fishing opportunities and decrease salmon harvest in our community. Canneries, crew members, and local businesses would all be affected. Many people in Kodiak depend on summer fishing income for economic stability.

I am concerned about permanent or long-term hatchery reductions without updated, research-based, regional comprehensive Salmon Enhancement Plans. Hatcheries provide stability, predictability, and sustainability in 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.

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,
Charles McWethy
Kodiak, Alaska



Submitted by: Ed Meadows

Community of Residence: USA

no sea floor trawling

there is enough fishing territory in US that allows this method

protect future fish and fishing jobs

prohibit sea floor trawling

thank you

Madame Chair and Members of the Board,

My name is Tom Meiners and I am a purse seiner in Southeast Alaska. I was born and raised in Juneau, and started my fishing career gillnetting with my father in Taku Inlet, and graduated to seining a few years later. I have participated in the Southeast seine fishery since 2006, run a boat in the fishery since 2014, and served as president of the Southeast Alaska Seiners Association (SEAS) since 2023. Additionally, I have served on the board of directors of many of the hatchery organizations in Southeast Alaska; the Northern Southeast Regional Aquaculture Association (NSRAA) board, the Southern Southeast Regional Aquaculture Association (SSRAA) board and have filled in on the Southeast Joint Regional Planning Teams. I currently sit on the DIPAC hatchery board of directors and as an alternate on the Northern Panel of the Pacific Salmon Commission, representing Alaskan interests when negotiating the Pacific Salmon Treaty. Through both fishing and serving on these various boards and groups, I have become very familiar with Southeast Alaska hatchery process and management, which leads me to strongly oppose proposals 170 and 172.

Proposal 170 seeks to cut hatchery production statewide by 25%. One year ago, the board of fisheries voted down a nearly identical proposal aimed specifically at Southeast Alaska. Being most familiar with Southeast Alaska, I think it prudent only for me to make the case about the ramifications and impacts this proposal would have in Southeast, and Southeast hatchery productions potential impacts other places.

If this proposal were to pass, Southeast Alaska would take a major hit both economically and culturally. At the last board meeting in Ketchikan, the board heard testimony from commercial fishermen, hatchery operators, municipalities, resident sport fishermen, charter operators, lodge owners, native organizations and community members all unanimously opposed to the 25% cut in production. The economic hit to fishermen and hatcheries from a 25% cut in chum salmon would be felt immediately and would reverberate. First would be the allocative battles; where to cut, who gets the axe. You, the board, would certainly have more whiny allocative testimony with fishermen at each other throats. In Southeast, we have been effective at working together in recent years to avoid these contentious situations. Next to fold would be the external positive programs that the hatcheries provide. Chum salmon pay the bills for many things, including community outreach and educational opportunities like the elementary school students coming to DIPAC to experience the aquarium and touch tanks to learn about salmon life cycle and local sea creatures, hatchery sponsored college scholarship programs for local residents, as well as yearling production of King and Coho for sport and troll opportunities. Without chum salmon production footing the bill, none of these other vital functions of the hatchery programs would be viable.

But all these arguments you've likely heard already, most of you last year in Ketchikan. If the near unanimous regional opposition to this proposal and its brethren last year aren't enough to convince you of the value of the hatchery programs to the Southeast region, let's explore what the hatchery program is *not* doing. Let me try and convince you of the impact hatchery production isn't having on wild stocks.

There has been plenty of ink spilt and many wild theories thrown out around what is going on with the salmon. "Where have they gone!?" "What happened to the good ol' days?!" "The salmon are in trouble!"

2013, when we shattered the state record for total salmon harvest, was eons ago! And the next highest harvests are 2015, 2023 and 2021. Ancient history!

In all seriousness, there are real problems facing many regions in Alaska. Chinook and chum stocks in the Yukon come to mind, and chinook stocks coast wide have been a source of worry for all salmon users. Sea surface temperatures are warming and size at age in chinook is on the decline. There are less old, large chinook coming back than there used to be, and there is real cause for concern in our changing ocean and world.

I understand much of the scrutiny toward pink and chum hatchery production stems from an idea that increases in hatchery production may have negative impacts on chinook stocks. The marine food web is a vast and incredibly complicated place. I don't think we can know exactly what impact human intervention of all types is having on salmon—whether it be warming of the ocean, the hunting or lack thereof of predators, shipping, commercial fishing, or hatcheries. That said, when it comes to hatchery chum implications on king salmon, we have a pretty good test case for effects with DIPAC and the Taku River.

DIPAC is a hatchery organization in Juneau that releases primarily chum salmon, as well as sockeye, coho and chinook. The hatchery is permitted to release roughly 135 million chum, 1.5 million coho, 1.25 million chinook and is roughly 15 miles from the mouth of Taku Inlet, Southeast Alaska's largest chinook producer. DIPAC's production ramped up and stabilized around 1990. If there's a causal link between chum salmon hatchery production and chinook, we would expect to see it most pronounced by comparing the onset of DIPAC with the production of the neighboring Taku chinook. If we were to do that, we would see the onset of DIPAC chum programs matching up with a period of the highest chinook productivity on record for the Taku. Does that mean that DIPAC chum production are the reason chinook productivity was up in the Taku in the 90's? I doubt it. I think coincidence is more likely. These two systems give no indication of being coupled, even though they are direct neighbors, sharing migration

corridors and inshore habitats. It seems hard to believe that if DIPAC chums don't show causal negative relationships to Taku chinook, how would they impact Yukon fish, which hit the ocean roughly 1,100 miles away from Juneau, as the crow flies?

In recent history, Taku chinook have had a bit of a rough go. Escapements were low, missing escapement for some of the late 2010's and early 2020's. Fortunately though, Taku chinook are on the upswing, making escapement in 2024 and over doubling the lower bound of the escapement range in 2025. Forecasts for 2026 are looking good too. What have DIPAC release numbers done during that time? They have stayed steady.

I am opposed to proposal 172 because it is unnecessary. Southeast Alaska is not attempting to increase production at any of its sights. None of the hatchery organization have any plans to increase production as far as I'm aware.

Submitted by: Michael Mickelson

Community of Residence: Cordova

I support 162, 174. I oppose 170,171,172,174,176,177. I'm a subsistence, sport, and commercial fisherman, and a lifelong resident of the Cordova area.

170-172. These hatchery proposals and variants thereof have been dealt with over and over by previous boards and they have always failed. There is no link between hatchery production and the failure of runs on the Y-K delta. If it was as simple as shutting the hatcheries down to get kings and chums back into the Y-K region we would already have done it. Reducing hatchery production is not going to make the warm water blob in the ocean stop effecting feeding habit of Y-K salmon, nor is it going to make the in river water cooler, but it will have real world and immediate impacts to the areas of the state that depend on hatchery production.

The 25% reduction of pink and chum production will have major impacts to statewide hatcheries. Many of the private non profit hatcheries generate most of their revenue from cost recovery for pink and chum salmon. Many of the hatchery operators use this pink and chum revenue to pay for fish production that is more complicated, time consuming, and expensive; for red, silver, and King salmon. Cutting the pink and chum production for private non profit hatcheries, puts these other species enhancement at risk, for some operators, and others will have to completely shut down programs for red, silver, and king production. The revenue from pink and chums provides opportunity for red, king, and silvers for sport, in some cases personal use, and in several locations, subsistence fisheries, including the Copper River, which is especially beneficial on years where wild stocks are barely meeting their escapement. These programs take pressure off of wild stocks. The Copper River has had the most consistent king run in the state and is located very close to major hatchery releases.

In regard to straying, the hatchery research project is a multi year project on Pink and Chum salmon from Prince William Sound and Southeast AK that has been investigating the effects of hatchery straying and wild interaction. So far this project has generated more questions than it has answered in regard to the fitness of hatchery/wild offspring. Wild fish that spawn in their streams of origin tend to return to the same 3'x3' stretch of gravel. So when hatchery strays arrive they may arrive too late or too early, may not find a partner, or find all the good spots taken. There are a lot of factors at work and there are people much more knowledgeable than me that should be consulted. These are not simple processes and draconian measures are not going to help statewide salmon populations. Thank you for your time.

My name is Rowan Miller. I am a lifelong Alaskan in Valdez and third generation commercial fisherman. I have been fishing my entire life and have just purchased my first boat to seine PWS and longline. My concerns about the Board of Fish proposals have to do with the uncertainty of the future. I cannot continue my livelihood and my community cannot continue to thrive if we do not take stewardship seriously and manage our fisheries with sustainability in mind. However, much of the current uncertainty and instability comes from politicking. Different interest groups debating over the same resource and trying to manage them differently is a recipe for failure. We must work together if we are to make it into the future with our fisheries intact. I support any measures taken for conservation with scientific backing and collaboration with the groups impacted. I do not support measures taken without scientific basis and those that are based on personal interests.

Prop 163: Oppose

This proposal comes from an organization that claims to work with multiple interest groups including sport and commercial fishermen and Native Alaskans. However, there is little transparency about who the group is, when they organized, or any other information. They also do not work with trawlers, according to their website. This proposal would arbitrarily change a definition to make incompatible with reality and put an undue burden on the fishermen to prove they are operating in the manner in which they are already required to. There is also no evidence that this is necessary to help management.

Prop 164: Oppose

I oppose this proposal due to the lack of clarity over how this could be implemented and the lack of collaboration with the trawl fleet. I support more monitoring to reduce bottom impact and bycatch, however I do not think that this proposal is right for that.

Prop 165: Support

Since this proposal is specific and designed to require well defined equipment that is already proven to be effective, I will support it.

Prop 169: Support

I support this proposal to add a definition for gear that is already in use, however my concern is that it will unnecessarily limit the development of that type of gear.

Prop 170: Oppose

Some version of this proposal has been in front of the Board at least seven times in the last five years. It is not and has never been supported by scientific evidence or concern for conservation. It is simply a personal vendetta. It has now also been taken up by sport fishermen who believe that it will personally benefit them by harming commercial fishermen. However, anything done to the unfair detriment of one user group will negatively affect all of us. This proposal in particular will harm the sport fishing industry in the Valdez area and the subsistence users of Tatitlek as the VFDA hatchery uses cost recovery for pink salmon to fund the coho run for the sport fishery and the Village of Tatitlek. VFDA and CDFU have submitted further comments to oppose this proposal so I will not repeat them here.

Prop 171: Oppose

There is no conclusive evidence yet that a proposal of this type is necessary for conservation purposes. Studies on the subject have not demonstrated any harm or provided any specific recommendations on how to prevent harm. Again, please see VFDA's comments for more information. Again, this is a proposal based on personal interests and not the greater good. This proposal was not created in collaboration with ADF&G which is shown by the fact that it is unspecific and misinterprets the studies that it cites. It also attempts to usurp authority from ADF&G and a regulatory process that already allows for public comment.

Prop 172: Oppose

All increases in hatchery production already are approved in a process that involves ADF&G, the RPT, the public, and the commissioner of ADF&G. This proposal calls for an arbitrary bypass of that system. Decisions for conservation and sustainability purposes must be made based on data and community involvement, and this is not. It also attempts to usurp authority from ADF&G and its commissioner.

Prop 174: Support

This a proposal from fishermen on their own fishery. As CDFU states, there should not be negative consequences for safety, conservation, or management. My view is that this will in fact increase the long term health and safety of crew as it will slightly decrease exposure to harmful noise and other consequences of running engines. I also support anything that will decrease the carbon footprint of our fisheries and I believe this will, even if by a little bit.

Prop 175: Support

I support this proposal as it will increase survival of catch and release fish. The Ahtna Intertribal Resource Commission has stated their position on this before and has been able to provide sound reasoning in support of these changes. I believe it is specific enough to avoid any unintended negative consequences on disabled fishermen.

Prop 176/177: Support

I support this proposal because I believe it will reduce catch and release mortality of fin fish.

Prop 178: Oppose

This proposal is too unclear in its language.

Prop 179: Support

This proposal was developed by an individual with conservation concerns with the collaboration of ADF&G staff. Chinook salmon stock concerns have been a major concern state wide for years and the state and federal government have failed to take adequate action to address these concerns. I believe this a major step in the right direction even if it is a but of a sledgehammer approach to something that could use a scalpel. It also addresses my concerns with sport and personal use fisheries of “double dipping”.

Prop 180: Support

I support this proposal for the reasons stated above. I am very much in support of further development and requirement of in season harvest reporting. However, I am concerned that the limit of 5 (or 10 in the case of prop 179) is arbitrary.

February 29, 2026

Alaska Department of Fish and Game

Alaska Board of Fisheries

PO Box 115526

1255 W. 8th st.

Juneau, Ak 99811-5526

RE: State wide fin fish proposals and supplemental issues

Chairman Carlson-Van Dort and Members of the Alaska Board of fisheries:

I am writing to state my vigorous opposition to proposals to **170, 171 and 172.**

I am a second generation commercial and subsistence fishermen, My daughter Rowan is the third generation, having fished 12 years on our family vessel, and has recently purchased her own vessel, made possible in part by the boards actions to allow permit stacking.

I have been active on the PWSAC Board, currently I am a member of the Valdez Fisheries Development Association(VFDA) Board. I am a current a member of and past chair of the Valdez/PWS Advisory committee. I also served for many years on the Prince William Sound Regional Citizens Advisory Council.

Stability and sustainability is of paramount importance to the long term health and fiscal viability of Alaska's coastal communities and hatcheries have played a huge role in that stability since their creation in 1974 by the State of Alaska.

Hatcheries create jobs, contribute taxes, pay for research(\$4.25 million into the Alaska Hatchery Research Project alone), reduce pressure on wild stocks, Fund and provide for sport and subsistence fisheries, fund habitat restoration efforts and help sustain the biologic and economic engine that keeps our communities viable.

VFDA Coho production supports one of the largest sport fisheries in the state with \$1,500,000.00 sport fish economic impact annually, in addition to an annual release of 20,000 SGH coho smolt in Boulder Bay at no cost in cooperative partnership with the Native Village of Tatitlek to provide local subsistence harvest opportunities. There is a similar program near the Native Village of Chenega supported by PWSAC. As well as in Whittier. These programs are paid for almost entirely by pink salmon produced by hatcheries in Prince William Sound.

Proposals **170, 171, and 172** if passed **WILL** destroy all of that.

Proposals 170 and 171

First proposed in 2018 and rejected repeatedly by the BOF is Capricious and Arbitrary and unsubstantiated. The Authors have not provided any evidence to support their claims of harm to wild stocks. They have ignored valid and current scientific research showing the effects of climate, predation, water flow, temperature fresh water environmental conditions on stocks in western Alaska. They have ignored the results of the Alaska Hatchery Research Project.

Proposal 171 does not provide any specific actions for the board to consider, rendering any action taken by the board in support of the proposal as arbitrary and liable to be over turned by the Judiciary. It ignores the findings of the Alaska Hatchery Research Project and maliciously and deliberately misrepresents the 2018 pilot study; *Observations of Pink Salmon hatchery proportions in selected Lower Cook Inlet escapements.*(Otis et al)

Hatchery pink salmon production accounts for just 15% of all pink salmon in the North Pacific Ocean. Alaska hatchery production accounts for just 4% of the total hatchery production in the North Pacific Ocean. A statistically insignificant amount, not capable of the large scale trophic disruptions attributed to them.

Adoption of **proposals 170 and 171** would have an immediate deleterious affect on the Hatchery programs ability to fund; subsistence and sport fish programs, commercial programs, research, debt retirement, habitat restoration, infrastructure maintenance and replacement. It would force immediate layoffs of staff, bankruptcies and social upheaval with out addressing the real issues threatening western Alaska stocks.

Proposal 172

A Board generated proposal to place a moratorium on hatchery production exceeds the boards authority and preempts the Commissioner's Statutory role and authority and that of the Regional Planning Teams as outlined in 5AAC 40.340.

Taking positive action on this proposal will violate State of Alaska conflict of interest rules, exceeds the Board's authority and will be subject to overturning by the Judiciary branch of the State of Alaska.

The Commissioner alone has the authority to take this action and the hatchery programs have honored an understanding Commissioner Vicent-Lang outlined in RC240.

I urge you to reject **Proposals 170, 171 and 172.**

I also urge the Board to reject **Proposals 11, 163, 166, 176 ,177, 178, 181, 182,183 and 184.**

I support **Proposals 174 and 175**

Thank you for your time and consideration of these comments.

Thane Miller,

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 Trevor Miller, and I am a commercial fisherman and subsistence user based in Wrangell, Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. A 25 percent reduction in hatchery eggs would significantly hurt our commercial fleet and sport and subsistence fishermen in Southeast Alaska. The majority of our gillnet fleet relies on hatchery chums to make their money, along with a large portion of our seine fleet. Without these successful chum returns, the commercial fishermen in Southeast would not be able to keep their businesses running. For the commercial trollers here in Southeast, the hatcheries also provide steady income. In early season, they are able to target hatchery kings, and in late season, the hatchery chums, giving them more opportunity to turn a better profit. For us in Wrangell and Petersburg, we use the hatchery king salmon returns in Anita Bay and Blind Slough to get our subsistence fish.

Where I live in Wrangell, we have three seafood plants. In a town of only 2,000 people, we would take a significant hit economically, as we rely heavily on the fishing industry, especially our hatchery chum salmon. This would take money away from all of us fishermen, the processors, and our community in general.

I think the real problems are marine mammals and heavy sport pressure in the rivers that are seeing declined king returns. The marine mammals in Alaska have gone unchecked for more than 50 years. We have no way to manage them due to the Marine Mammal Protection Act, and they are able to gather in massive numbers in front of river mouths, putting heavy pressure on salmon when they are almost to their spawning grounds. For example, the Stikine River has multiple sandbars with 400 to 500 seals apiece, and then at the mouth of the river on a small island there are normally 300 to 500 sea lions. That to me seems like a real issue affecting wild salmon stocks, along with heavy sport pressure in prior years in places up north in Alaska like the Kenai Peninsula and Cook Inlet areas.

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,

Trevor Miller
Wrangell, Alaska



March 2, 2026

Dear Members of the Board of Fisheries:

My name is Isaac Milligan. I have been a crew member on Kodiak salmon seine boats for 20 years. I own a home in Kodiak and support my family through fishing.

Kodiak's hatchery allows wild runs to share the burden of supporting the fleet. It spreads fishermen across areas and reduces concentrated pressure. Restricting hatchery production would increase competition in wild stock areas and significantly reduce income for the fleet.

Reduced revenue would impact ADF&G funding, processors, city fish taxes, marine trades, and local businesses.

Kodiak appears to maintain a balanced hatchery system that works. I do not believe reductions should occur without solid scientific backing from ADF&G.

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,

Isaac Milligan
Kodiak, Alaska



Submitted by: David Million

Community of Residence: Mat su

Proposal 186 written by Andy Couch.

I support this proposal. My wife have been fishing the Little Su for 31 years. We have seen a slow year once in awhile, but nothing as bad as the last few years. In my opinion the fish just are not getting into the river systems. I don't know if the problem is on the high seas or in the cook inlet. I along with everyone I know who fish in the valley know there is something drastically wrong. Something needs to be done,so family's can put a fish or two on the table. Please take this proposal into consideration.

Thank you .

March 1, 2026

Alaska Board of Fisheries
Statewide March 2026 meeting

Re: Opposing Proposal 170

Submitted by Ian Bering Moller

Chairman Carlson-Van Dort and Board Members:

I am a 20-year-old commercial fisherman, born in Juneau and raised on the F/V Mikiah Bay and I oppose Proposal 170. I have fished aboard the Mikiah Bay every season since I was 3 years old. At 16, I bought a Dungeness crab permit with a loan through the State of Alaska commercial fishing loan program. At 17, I became the skipper of the Mikiah Bay (a commercial fishing business built by my dad). At 18, I bought my dad's SE gillnet permit and 40% of the F/V Mikiah Bay, including crab pots, shrimp pots, nets, gear trailers and trucks.

Last year, the Alaska Legislative Seafood Task Force released its final report on the state of Alaskan Fisheries. Three key quotes highlight the crisis:

- 1). "The seafood industry, which includes fishermen, processors, and communities, is in a state of crisis. *It has been called a perfect storm by many. This is not an exaggeration, the report further states.* "Fishermen have reduced seasons, processors face costly production expenses, labor expenses and environmental obligations. Communities will face reduced raw fish taxes and increased costs providing support to the fishing industry."
- 2). "While Alaska's fisheries remain the "Gold Standard" for responsible, science-based management, the economic model that supports the industry is buckling under immense strain."
- 3). "Salmon hatchery programs in particular contribute significantly to the production of salmon vital to the recovery of the seafood industry."

According to ADF&G staff comments on this proposal, a 25% reduction in hatchery production could cost local economies and processors \$23 million annually. These losses in hatchery production could destabilize their operations and negatively impact their ability to process wild fish. Additionally, a 25% cut in hatchery production is uncertain and may or may not result in any positive effects on wild salmon stocks.

I still owe the state of Alaska, Division of Investments \$28,000 for my Dungeness crab permit and tens of thousands to my dad for 40% share of the Mikiah Bay commercial fishing operation. This is a heavy debt load for a 20-year-old trying to make it as a commercial fisherman. Hatchery chum salmon make up over 65% of my overall fishing portfolio (85% of my salmon fishery) and a 25% reduction in hatchery production could be the difference for me making my loan payments or not. My other fisheries include Dungeness crab and spot prawns, and it is critical that I have a processor to deliver to. I am concerned a reduction in hatchery production could jeopardize this given there are only a few processors left in southeast Alaska. This is not a time to reduce hatchery production and to my knowledge, there is no science to support reductions. If hatchery chum production is reduced, I will be forced to target wild salmon, including reds, silvers and kings to make my loan payments and if I'm really fortunate, maybe earn enough to pay my electric bill.

For decades there's been talk about the 'greying of the fleet' and who that next generation of Alaskan fishermen will be. I am that next generation of Alaskan fisherman. All I ask is you give me a chance to survive as a commercial fisherman. I ask you don't crush my investments nor my dreams.

My future as a commercial fisherman depends on the Alaska Board of Fisheries making sound, science-based decisions. Proposal 170 falls short of sound science and is speculation at best. I hope my future as a commercial fisherman doesn't teeter on someone's feelings and speculations.

Now is not the time to make wholesale changes to Alaska's Hatchery Programs.

Please make the right science-based decision and vote down Proposal 170.

Sincerely,



Ian Bering Moller
F/V Mikiah Bay
Juneau, Alaska



Submitted by: Tollef Monson

Community of Residence: Kodiak

I strongly support prop 167. Restricting boats from cheating by using their reels to longline jig cod at night is out of control. Immediate measures need to be implemented to protect the quota and honest fishermens efforts and investments. This is apparent to many many jig fishermen is difficult for enforcement to catch the illegal and unmarked longlines that we have seen. Thank you

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 James Moore, and I am a commercial troller with 55 years of experience in Southeast Alaska. I am a former president of the Alaska Trollers Association, a board member of the Northern Southeast Regional Aquaculture Association, and Secretary-Treasurer of Armstrong Keta Inc. I own and operate the fishing vessel Aljac and submit this comment on my own behalf.

Reduced hatchery production would directly and negatively affect the viability of my business and those of my two sons, who also depend on fishing for their livelihood. Reductions in hatchery egg takes would disrupt the business plans of private nonprofit hatchery associations, reduce their ability to repay loans to the State of Alaska, and could lead to bankruptcy and loss of significant contributions to common property fisheries.

Much of Southeast Alaska hatchery production was founded as mitigation for the fishing community after Alaska gave up harvest share of Chinook salmon under the International Pacific Salmon Treaty. These programs provide life support for an iconic industry and way of life under threat from unstable markets and rapidly changing ocean conditions. Without this stability, many fisheries and communities may not survive.

Fishermen have contributed three percent of gross income for decades to build what I believe is the best salmon aquaculture program in the world. These are fisherman-directed, community-based hatcheries guided by scientists and biologists, not corporate ventures. Hatcheries function as living laboratories that advance salmon science and sustainability.

Significant scientific contributions have already come from these programs, including research on straying, long-term predator studies, otolith data collection across the Pacific, and maintenance of research facilities such as Little Port Walter. These programs are proven, self-supporting, and essential.

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,

James Moore
Southeast Alaska



March 2, 2026

Dear Members of the Board of Fisheries:

My name is Whitney Moore. My parents own fishery operations in Alaska. My husband and I own a fishery operation in Alaska, and I own Alaska Maritime Documentation Company. Our family operates vessels including Cape Karluk and Vicki K through Outlaw INC and Rhoda Je-Anne INC.

These proposals would have serious financial consequences for my family. The fishery operations alone could face catastrophic impacts, and my documentation service business would also experience significant decline. When fishermen earn less income, they delay vessel transactions and capital improvements, which directly impacts the broader marine service sector.

Alaska's salmon fisheries are foundational to our communities. Thousands of commercial, sport, and charter families rely on this industry. Reduced harvest opportunity means reduced spending across coastal economies and long-term instability for rural communities.

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,

Whitney Moore

Submitted by: Rod Morrison

Community of Residence: Thorne Bay

My name is Rod Morrison. I come before you today as an Alaskan who believes deeply in our way of life and in protecting the resources that sustain our families and communities.

Trawlers are taking fish away from the people of Alaska — the very people who depend on those fish to feed their families. In many of our rural and coastal communities, fish are not simply a commodity. They are food security. They are winter meals in the freezer. They are shared with elders. They are put up for our children. When large-scale trawling operations remove massive volumes of fish — along with significant bycatch and habitat damage — it directly impacts the availability of those resources for Alaskans.

For many of us, subsistence is not a hobby. It is a necessity. It reduces our cost of living in a state where food prices are already among the highest in the nation. When fish runs decline or access becomes restricted, it is not an inconvenience — it is a hardship.

Beyond economics, this is about our Alaska lifestyle. Many of us choose to live here because of the ability to live close to the land and water — to provide for our families, to teach our children how to fish, and to pass down traditions that have existed for generations. The freedom to live this way is part of why Alaska is special. Industrial trawling threatens that balance.

I respectfully ask this Legislature to take clear and decisive action by prohibiting trawlers from operating within five miles of Alaska's coastlines. Nearshore waters are critical habitat for salmon, crab, halibut, and other species that our communities rely upon. These areas are also where small boat fishermen, subsistence users, and families harvest their food. Establishing a five-mile coastal buffer would protect essential habitat, reduce gear conflicts, and ensure that local Alaskans have priority access to the resources closest to their communities.

We are not asking to eliminate opportunity. We are asking for responsible management that puts Alaskans first — our food security, our coastal economies, our subsistence users, and the long-term sustainability of our fisheries. The resource belongs to the people of Alaska. It should first serve the people of Alaska.

Please stand with the families who depend on these fish not for profit, but for sustenance, culture, and the preservation of our way of life.

Thank you for your time and your leadership.

Submitted by: Jeb Morrow

Community of Residence: Petersburg

Hi,

20 years ago when I was on the advisory panel for the NPFMC, the issue around "non bottom" trawlers was where they should be allowed to fish in the Bering Sea federally. John Govin got up there and educated us all on how great these new salmon excluders would truly...ahem...exclude many of the concerns around leaving these 350' draggers to do business where the fish were thickest; surprise, where the salmon are thickest also. Now there's no salmon. Hmm. Now it's about getting as close to the bottom as possible. So close in fact they're catching a ████████ of sablefish. I know. I've fished around them for years in the Aleutians. As state board members I would assume you have fewer dragger hats amongst you than does the council. Hold your ground.

thanks,

Jeb Morrow

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 Robert Mosher, and I am a commercial fisherman based in Juneau, Alaska, and the owner and operator of the F/V Persistence.

I am writing to urge the Board to reject Proposals 170, 171, and 172. As a commercial fisherman whose livelihood depends directly on hatchery production in southeast Alaska, I have urgent concerns about these proposals and their impact on my business, my community, and the future of Alaska's fisheries.

If Proposals 170, 171, and 172 were to pass, it would destroy the drift gillnet fishery in southeast Alaska. The wild stocks could not sustain the commercial fleet as we know it now. The wild stocks could not support the charter, sport, or subsistence needs at the levels that now exist. The commercial drift gillnet fishery is the cornerstone of my operation. Without hatchery fish, my business would be precarious at best.

Salmon fishing is a big deal in northern southeast. Without the support of hatcheries, commercial fishermen, processors, and support businesses would struggle at best to survive on wild production. I believe the needs of subsistence, personal use, sport, charter, and wildlife would severely strain the wild runs if not for our fantastic hatchery programs. Every business sector in southeast would be affected by cuts to hatchery production.

I feel our whole regional economy is at risk if egg takes or production is cut at our hatcheries.

We have spent 40 to 50 years and millions of dollars building the infrastructure and knowledge to operate these hatcheries. It terrifies me that these uninformed proposals could bring it all crashing down for no good reason.

Alaska is a big place. Punishing one region for problems in another is not fixing anything. It is worth noting that Alaska hatcheries are not the only ones putting hatchery fish into the North Pacific. I do not believe sabotaging our successful hatchery programs is going to accomplish anything. I also feel that what would help salmon in Alaska would be amending the Marine Mammal Protection Act to allow us to manage seals, sea lions, and whales. Marine mammals are having a huge negative impact on Alaskan salmon.

Anyone who loves wild salmon should love hatcheries more. Hatcheries help to lessen the pressure on wild stock, particularly those experiencing troubles.

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,

Robert Mosher
Juneau, Alaska



Submitted by: Ashley Mullen

Community of Residence: Shoreline, WA

I am writing to oppose Proposal 186. I was born and raised in Soldotna and most of my family still resides there. I grew up commercial fishing with my father in Cook Inlet, and have continued to do so for the past almost 30 years. My young adult children now participate in the fishery as well. During the summers we live in Soldotna with family, and contribute to the local economy and community. My children have come to think of Soldotna and Cook Inlet as a piece of home.

Proposal 186 continues to unfairly degrade the commercial sockeye fishery in Cook Inlet. It does not meet Agenda Change Request emergency requirements and is opposed by ADF&G in Staff Comments on ACR 5.

This proposal denies the drift fleet further opportunities to harvest sockeye during the short weeks the fishery is active and risks continually and detrimentally over-escaping the Kasilof and Kenai Rivers with sockeye. It also risks further alienating and pushing out commercial fishermen in Cook Inlet. Without a setnet fishery and without drift fisherman willing and able to harvest surplus sockeye, these rivers would be in great jeopardy.

This proposal is highly allocative, out of cycle, and not biologically sound... no UCI Coho are listed as stocks of concern.

Please deny Proposal 186.

Sincerely, Ashley Mullen

Submitted by: John Murray

Community of Residence: sitka

Proposal 163 SUPPORT I believe a definition of mid-water trawling is needed and appropriate. The Boards action should apply to intent and definition. The State will be leading the way on this issue. My observations from actions by the NPFMC are they are mired in process and cannot get off the dime on what mid-water trawl really is. The State should step up .

Proposal 164 SUPPORT I think this is the right direction but not certain of the cost , effectiveness or if it is practical to use gear -mounted sensors. Overall we need to curtail bottom trawl with mid-water gear.

Proposal 170 Support (with amendment to take out "chum salmon" in this proposals.My reasons for support. Please see ADFG report on FEEDING ECOLOGY OF PACIFIC SALMON.

Backround - Coho and King salmon have had reductions in OVERALL SIZE AND OVERALL NUMBERS in my experience commercial fishing for 40 season.Pink salmon are a direct competitor for forage food in the Northern Gulf of Alaska. This is particularly true with one of the main forage fish Berryteuthis anonychus, coho are very reliant those fish. Kings are also to some extent. I'd say krill is another forage fish that faces upward pressure from pink salmon at the expense of coho and king salmon.

I feel it is prudent to take a more precautionary stance on pink salmon releases. Is there a smoking gun? No, but the writing is on the wall other ways.

Proposal 176 OPPOSE My reasons for opposing:

1) The so called " money fish" King salmon , halibut , yellow eye rockfish are already under too much pressure. As far as king salmon and halibut in many areas are having escapement concerns as you know. Add in the allocation aspects BOOM .This proposal will add to problems managing these fish by ADFG via EO's in - season which no one really cares for.

2) " Sleaze factor" for two reason this will happen if this proposal passes. 1) crew can harvest and give to clients fish they catch. 2) Pooling fish will lead to maximizing harvest.

3) Enforcement issues - while currently pooling and crew harvest takes place that doesn't make it right or ethical. This proposal seeks to legitimize a practice that is currently illegal in most cases . In SE AK some species with little conservation or allocation issues crew can retain and then give fish to clients.

In SE , South Central, Kodiak king salmon are under escapement and or under Stocks of Concern management . This is a time to " tighten our belts" not add to harvest. Halibut while not managed by State is very low abundance levels.

I am am roundly opposed to this proposal and see Proposal 178 being a better vehicle.

Proposal 177 OPPOSE Basically the same proposal as 176 but this takes the crew out of the picture. I oppose this " convenient" change . It will legitimize pooling .

An example of the issue in SE AK. there is the king salmon season before the other salmon arrive . When the client has caught their king for the day or annual harvest . The clients should not be allowed or it be condoned to keep fishing to help out a party member that hasn't got their limit. Yes it happens but that doesn't make it right or legal.

While this currently happens it is illegal to pool fish. In the clients want to pool fish do it after the trip.

" its fishing not catching" you go out you aren't guaranteed your catch. This makes it more likely you will get your limits.

Again I'll point out king salmon, halibut ,yellow eye rockfish harvest are already maxed out.

See proposal 178

Proposal 178 SUPPORT (with amended language) .

The intent of this proposal has merit it needs work language wise . I hope the Board can make this proposal work via amendment.

Here again this is a "common practice" . It doesn't rely on pooling catch I HOPE? It could lead to that. The intent is to help anglers that need a hand youth and people who need assistance. So the intent is in the right place the language needs work.

Proposal 183 OPPOSE(as written) This proposals needs a pile of work . It would be a totally unneeded as written. As well as a imposition on anglers as written. Some species need this regulation in place not all finfish.



MARCH 2, 2026

ALASKA BOARD OF FISHERIES
P.O. BOX 115526
JUNEAU, AK 99811-5526

RE: STATEWIDE FINFISH & SUPPLEMENTAL ISSUES

PROPOSALS 162, 163, 164, 165

DEAR CHAIR CARLSON-VAN DORT & MEMBERS OF THE BOARD,

I am writing on behalf of Native Peoples Action and Native Peoples Action Community Fund (NPA/CF). We are a statewide bipartisan organization dedicated to uplifting Alaska Native voices. Our mission is to protect our ways of life by working together and ensuring Alaska Natives are heard in all levels of policy making. We are submitting our position on the following:

PROPOSAL 162: NPA/CF supports this proposal to prohibit commercial transport services for compensation in subsistence fisheries, in addition to the existing prohibition of fishing guide services in state subsistence fisheries. We support protecting subsistence fisheries as completely noncommercial. "Subsistence use" is defined by statute (AS 16.05.940) as "the noncommercial, customary and traditional uses of wild, renewable resources by a resident... for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation..." Commercializing a noncommercial fishery goes against the very definition of subsistence, and we request the Board deem receiving compensation for transportation services in subsistence fisheries in violation of the statute.

PROPOSAL 163: NPA/CF supports this proposal to define all trawl gear operated inside state waters as non-pelagic and develop new performance and monitoring standards to allow pelagic trawling in state waters to occur on a case-by-case basis.

With the increased evidence and testimony of midwater trawls coming in contact with the seafloor, we believe increased monitoring is necessary to improve the enforcement of current regulations and accountability of the trawl fleet. Ensuring this gear is not coming in contact with the seafloor is crucial to the sustainability of all fisheries.

PROPOSAL 164: NPA/CF supports this proposal to establish bottom contact monitoring requirements for pelagic trawl gear operated inside state waters. For the same reasons listed previously, we support increased monitoring for these fisheries. The addition of sensors would verify compliance and guarantee less contact with the bottom.

PROPOSAL 165: NPA/CF supports this proposal to establish salmon excluder requirements for all pelagic trawl gear operated inside state waters. True midwater trawl fishes multi-species zones, and bycatch is not mitigated under 5 AAC 39.105. Salmon excluders have been proved to release up to 30% of salmon caught in trawl nets. Alaska state law directs this Board to provide a reasonable opportunity for subsistence before other uses of any harvestable surplus of a population [AS 16.05.258 (b)]. By requiring salmon excluders, it would help these salmon get to their spawning grounds, and therefore, give the people of Alaska more subsistence opportunity.

PROPOSAL 175: NPA/CF supports this proposal to modify dipnet mesh size and configuration. With the decline in Chinook stocks statewide, we support any effort to decrease Chinook mortality when being released from dip nets.

In closing, NPA/CF would like to uplift the traditional knowledge being provided and applauds the Board for making space specifically for Traditional Knowledge Reports. Thank you for taking the time to hear our concerns and for your service on the Board.

Respectfully,



KELSI IVANOFF | KASAŃNAALUK
NATIVE PEOPLES ACTION/NPA COMMUNITY FUND



Chenega IRA Council

3000 C Street, Suite 301
Anchorage, Alaska 99503-3975

February 10, 2026

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

Re: Opposition to Proposals 170, 171, and 172 (Pink and Chum Hatchery Cuts)

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

On behalf of the Chenega IRA Council, we respectfully submit this comment in opposition to Proposals 170, 171, and 172, which would reduce or freeze pink and chum hatchery production statewide.

The Chenega IRA Council is the federally recognized tribe serving the Alutiiq people of Chenega. Chenega is located in Western Prince William Sound on Evans Island. The Chenega people have historically subsisted on fish and other natural resources throughout Prince William Sound for thousands of years. We are strongly dependent on subsistence fishing and harvesting to support food security for our community, as well as to retain our ties to our culture and heritage.

The Chenega people are also active in local commercial fisheries, in particular as it relates to salmon fisheries. We have a number of tribal members who participate in commercial fishing as well as a number who maintain set-net sites in PWS. A healthy and thriving fishery is essential to all of our community members whether it relates to subsistence harvest or commercial fisheries which create economic opportunities in our region.

Hatcheries also play an important role in supporting subsistence and sport fishing opportunity in many regions of Alaska, and in Prince William Sound particularly. Hatchery production helps stabilize access to salmon for food security, cultural continuity, and local harvesting traditions, while also supporting sport fisheries that contribute to local economies and community vitality. Sudden blanket reductions in hatchery production risk reducing fishing opportunity and shifting pressure back onto already vulnerable wild stocks. It also undermines the role of communities, including remote Indigenous communities like Chenega, in the stewardship of their own resources and access rights.

Our communities have worked hard through significant adversity to maintain access to salmon. The 1964 earthquake and Exxon Valdez oil spill imposed catastrophic loss of opportunity and cultural access for many years. Hatcheries have been a part of our recovery and renewed access to salmon for food, education and priceless traditional practice. Main Bay hatchery sockeye are the primary source of subsistence salmon for our community members, but once again they are worried about losing access. It is critical that another generation does not lose this salmon relationship and the food security it provides, and critical that the Board of Fisheries respect the needs of and leadership from the place-based people of Prince William Sound in the management and stewardship of our local resources.

In many regions, hatcheries operate in close partnership with local and independent organizations, supporting community-based enhancement, local stewardship, and shared infrastructure. These partnerships strengthen local capacity and allow communities to participate directly in sustaining nearby salmon resources. Policies that weaken hatchery systems risk undermining these long-standing collaborative relationships.

Hatcheries are also essential scientific institutions. They provide long-term data, technical expertise, broodstock management, disease monitoring, and applied research capacity that support salmon recovery and adaptive management. At a time of rapid environmental change, Alaska should be strengthening this scientific infrastructure rather than constraining it through blunt production mandates.

Most importantly, these proposals raise concerns about regional self-determination and local authority. Decisions about how salmon resources are managed and enhanced should remain grounded in regional and Indigenous knowledge, local partnerships, and established permitting and scientific processes. Statewide production mandates, or overreaching directives coming from outside the region, risk overriding locally informed management approaches and diminishing the ability of communities to shape the future of their fisheries.

For these reasons, Chenega respectfully urges the Board of Fisheries to take **no action** on Proposals 170, 171, and 172 and to continue supporting regionally grounded, science-based hatchery management that protects subsistence access, community partnerships, and long-term salmon resilience.

In addition, we support proposals 163, 164 and 165, which offer improvements to Alaska's pelagic trawl operations. It addresses several of our concerns around groundfish management, including reductions in salmon bycatch, impacts to ocean habitats, and accountability tools for groundfish fleets. 163 and 164 are necessary to bring the pelagic fleet into compliance with existing regulations around bottom contact in state water. Strict compliance with gear definitions and operating standards must be strongly enforced in all of our commercial, sport and subsistence fisheries, and this gap in operational monitoring and enforcement for Alaska's largest fleet must be addressed as it would in any other fishery. 165 is a common sense step, requiring salmon excluder regulations for the Gulf trawl fleet. These are nearly universal practices as those that are used in the Bering Sea, and are a proven tool to reduce salmon bycatch. As a representative of Indigenous people heavily dependent upon salmon, we support these practical tools to keep more salmon in the water.

Finally, we oppose Proposal 187 and urge the Board to take no action. This proposal would eliminate a long-standing, small-scale commercial fishery that has supported Indigenous and local families from Yakutat and Cordova for generations, effectively reallocating the resource to nonresident sport users who already achieve daily limits with minimal effort. That outcome undermines equitable access and conflicts with the principle that local communities should retain meaningful authority over the stewardship and use of their traditional resources. The proposal also rests on inaccurate claims about habitat change and conservation risk: the natural confluence of these river systems has been a gradual process observed over many years, not a sudden storm event, and since full connection occurred in 2024 the Tsiu River has met or exceeded escapement goals through two commercial seasons without incident. The only legitimate conservation concern in this system is chronic over-escapement, not harvest pressure. With participation typically limited to only a handful of permits and openings often constrained by weather, commercial harvest has been modest and functions as an important management tool for maintaining long-term system health. Removing this tool would weaken, not strengthen, responsible stewardship and could create the very conservation risks this proposal claims to address.

Thank you for the opportunity to comment.

Respectfully,



Charles W. Totemoff
Chairman

CC:
Chenega IRA Council
Josie Hickel, Chenega Regional Development Group

Native Village of Eyak

110 Nicholoff Way

P.O. Box 1388

Cordova, Alaska 99574-1388

P (907) 424-7738 * F (907) 424-7739

www.eyak-nsn.gov



PC329

10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, and the Gulf of Alaska

Board of Fish, Statewide Finfish and Supplemental Issues
Native Village of Eyak Proposal Comments

Proposal 162: **SUPPORT.** The Native Village of Eyak is extremely sensitive to subsistence users having issues accessing fishing sites because they do not have access to boats. However, we have also seen firsthand, that the line blurs between transporter and guide services, and abuse of that system. Subsistence is meant to be a noncommercial activity, as the proponent indicates in their proposal. Compensating a boat owner who provides a subsistence user access to a subsistence fishery is limited to the cost of any bait and fuel used. The cost associated with boat maintenance and the owner/operators time are not eligible for reimbursement. Transporters must charge for all of these costs, or operate at a loss, and so should not be eligible to provide services in a subsistence fishery.

Proposals 163-165: **SUPPORT CONDITIONALLY.** While we do not insist on the exact remedies found in Proposals 163-165, we strongly support 100% observer coverage; bycatch limits based upon the abundance, vulnerability, and impact on bycatch species, NOT as a percentage of target fish harvest; unconditional fishery closure after bycatch limits are reached; and the total prohibition of trawl gear making contact with the bottom. The State of Alaska must either lead the way in reforming trawl fisheries in Alaskan waters, or lead the way in prohibiting the practice entirely in both State and Federal waters; we prefer the former. Sound practices in State fisheries will support and demonstrate the effectiveness of these reforms in Federal trawl fisheries.

If the State cannot deliver a truly sustainable trawl fishery that does not adversely impact vulnerable, valuable, and declining bycatch species such as salmon and halibut, whether it be directly through bycatch of these species, or indirectly through reduction in prey base these species rely upon (i.e. trawlers must not undermine the base of the food web), we must abolish the practice and treat trawl fisheries the same way that we treat fish traps.

Proposal 170: **OPPOSE.** We have seen this proposal at every opportunity for over a decade, and its merit is no greater now than it has been in the past. Its repeated failure through numerous iterations of the Board of Fish is telling. The proposal takes a slightly different form this time, trading stories of backroom deals struck but not honored for “overwhelming evidence.” This overwhelming evidence is a purported literature search of peer reviewed articles. Understanding how such a review is conducted is very important to evaluating the usefulness of that review. However, even if we will give the proponent the benefit of doubt that the review was conducted in a manner to produce an objective and unbiased result, it is intrinsically questionable to lump “adverse” and “minimally adverse” into a group as a single outcome, suggesting an attempt at padding the “adverse” score to create the desired narrative. Furthermore, a literature review is not a poll, and one cannot interpret more scientific literature showing an adverse/minimally adverse impact as greater evidence of a causal impact. This is confusing correlation with causation of a secondary measurement that does not demonstrate what the proponent hopes it will. There is a high level of bias simply in which articles scientific journals accept for publication, skewed heavily towards studies that show

Native Village of Eyak

110 Nicholoff Way

P.O. Box 1388

Cordova, Alaska 99574-1388

P (907) 424-7738 * F (907) 424-7739

www.eyak-nsn.gov



PC329

10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, and the Gulf of Alaska

a significant outcome. This bias in publication does not provide extra evidence for the significant outcomes published. In other words, one would expect the body of literature to be skewed towards articles showing impacts in any discipline. Moreover, the literature review is worldwide, and our focus here is strictly Prince William Sound hatcheries. The Hatchery/Wild Interaction study undertaken by ADFG is well underway and will provide us the insight we need to optimize hatchery production. We understand there have been straying events, and support work to minimize straying based upon sound, focused research, not polemic narrative.

Proposal 171: **OPPOSE.** We understand a straying event was observed, but object to the notion that the studies cited are indicative of Cook Inlet streams as a whole, as these studies focused on those streams where straying was observed. Thus, they are only indicative of stray rates in those “selected” streams. We are in support of hatchery best practices, and numerous studies are underway and being completed. We need to understand whether these are isolated events or happening consistently, we need to understand whether these events are isolated to the “selected” streams, or whether they are widespread. We also need to evaluate techniques to reduce straying without reducing egg take. Finally, were the proponent’s concerns validated, their concerns would not necessarily be addressed by reducing egg take, and a more effective remedy should be used if a negative impact is confirmed.

Proposal 172 **OPPOSE.** We oppose a blanket moratorium here, not because we are supporting of increased egg take numbers, but because we are supportive of the Regional Planning Team (RPT) process, which is open and inclusive. As participants in the RPT process we have not seen these concerns brought up there, in the appropriate setting, in good faith. We fully support wild salmon, and are aligned with the idea that Hatcheries should not adversely impact wild runs. However the data support hatcheries improving both wild salmon production and overall salmon production and harvest. We believe the hatchery system in Prince William Sound, and the management of the salmon fisheries therein have benefitted these runs, leading to the largest wild runs we have seen. We are partners in limiting the impacts caused by straying, but we insist that the onslaught of proposed remedies that have no basis in sound research are not the path forward. The proposal itself shows that the system in place is achieving with the board indicating it would not increase egg take goals. However we should rely on the existing system to forego egg take expansion when appropriate, and expand egg take when necessary, rather than remove the opportunity to evaluate and assess things on a case-by-case basis. There is no need to “codif[y] an informal policy decision” and remove the ability to make good choices in the future based upon one statement made in 2024 when there were no proposals to increase egg take goals in the first place. This is a solution looking for a problem.

Proposal 187 **OPPOSE.** This proposal is overreaching and seeks a one-sided remedy based upon an imaginary problem that is not substantiated by any data. This area is remote, and is characterized by a high energy surf break and a sand bar. This type of system shifts naturally and that should be the expectation. As the substrate shifts the mixed-stock fisheries must adapt their management. But to say that because the outflows of the rivers shifted that one user group on one river must completely alter their use to keep things

Native Village of Eyak

110 Nicholoff Way

P.O. Box 1388

Cordova, Alaska 99574-1388

P (907) 424-7738 * F (907) 424-7739

www.eyak-nsn.gov



PC329

10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, and the Gulf of Alaska

unchanged in a different fishery on the other river is not consistent with the concept of a shared conservation burden.

It cannot be assumed that because the mouth of the Tsiu opens to the Kaliakh that Tsiu fish will be exploited proportionally more than they had been. It is more likely that Tsiu fish will be exploited at a lower rate because the mixed-stock schools will consist of a much higher proportion of Tsiu fish, and that harvests would be reflective of these proportions.

The existing management structure can accommodate a precautionary approach by acknowledging the re-alignment and limiting opportunity within the Tsiu. The manager will understand that Tsiu fish are more likely to be intercepted, but already has the necessary authority to limit both fisheries in such a way that both systems meet their escapement needs.



**A LETTER DEMANDING FAIR AND EQUITABLE SUBSISTENCE FISHING
OPPORTUNITIES IN THE TYONEK SUBDISTRICT DURING THE 2026 FISHING
SEASON**

Dear Board of Fish,

The Tyonek Tribal IRA Council is the governing body of the Native Village of Tyonek, a Federally Recognized Tribe. Our Village is located on the west side of Cook Inlet approximately twenty miles north of the Kustatan River and approximately seven miles south of the Beluga River. Residents of our community are designated rural under Title VIII of ANILCA, and we are actively engaged in the state managed subsistence king salmon fishery for our subdistrict.

Our people are known as Tebughna, “the beach people” since time immemorial we have fished in the Cook Inlet directly below the site of our Village. Prior to state hood we utilized traditional fish traps, when state hood came about, our traditional methods of fishing were outlawed. In an effort to follow the law we switched from fish traps to nets. To this day we use these nets to harvest king salmon, in the same place we always have - on the beach directly below our Village.

The food security of the residents of our Village and our Tribal Members are directly dependent on the harvest of these king salmon. These fish feed our families and children throughout the winter and are a mainstay in our diet. Reducing the opportunity to harvest or reductions in the number of fish harvested will result in direct, tangible, and legally significant negative impact to our Village.

In years past we were afforded three days a week during which we could set our nets to fill our freezer and smoke houses. During the 2025 fishing season we were only allowed one day a week to fish. This year we are being told by Alaska Department of Fish and Game that our fishing will be cut back from five total twelve-hour periods to only three twelve-hour periods for the 2026 season.

We are curious how the Department plans to make this regulatory change as no proposal nor proposed change has been submitted to the Board of Fish for review. Emergency Orders are for in season management not actions that are planned months in advance of the fishing season. We understand that king salmon run estimates are low, however, AS 16.05.258(b)(4) provides that if:

“[T]he harvestable portion of the stock or population is not sufficient to provide a reasonable opportunity for subsistence uses, the appropriate board shall

(A) adopt regulations eliminating consumptive uses, other than subsistence uses;

(B) distinguish among subsistence users, through limitations based on

(i) the customary and direct dependence on the fish stock or game population by the subsistence user for human consumption as a mainstay of livelihood;

(ii) the proximity of the domicile of the subsistence user to the stock or population; and

(iii) the ability of the subsistence user to obtain food if subsistence use is restricted or eliminated.”

AS 16.05.258(b)(4) (*emphasis added*). Thus, any decision regarding limitations on subsistence king salmon fishing by Tyonek Subdistrict permit holders must be brought before the board of fish. Furthermore, our community is, and has been directly dependent on king salmon harvests from the Cook Inlet for over 10,000 years. This harvest has occurred consistently in the area



directly below the current site of the village which is the area from which we currently engage in the state managed subsistence fishery. The Native Village of Tyonek lacks a grocery store, while the Village maintains a small shop that sells frozen pizzas, chips, and soda, this store is unable to provide for the nutritional needs of the community in the event that king salmon harvests are limited. Accordingly, per AS 16.05.258(b)(4) if any cuts to the fishery are made, fair and equitable opportunity for the residents of the Native Village of Tyonek to fulfill the household quota set in 5 AAC 01.595 must be provided for.

Under state subsistence regulations found at 5 AAC 01.595, each household is allowed to take king salmon up to the allowed quota. How are we supposed to fulfill our quotas and feed our families if we are only allowed a total of three openers? These continued cutbacks on fishing periods do not provide an adequate opportunity to harvest what we are entitled to under the regulations, nor does it provide a fair opportunity to harvest what is required for our food security.

To be clear, the majority of the fish we catch in the Tyonek Subdistrict are not from the Deshka or other river systems. Instead, the king salmon we catch are destined for the Chuitna River, a non-navigable waterway bordering our village which is owned, almost entirely, on one side by our ANCSA Village Corporation, Tyonek Native Corporation, and on the other by the federal government held in trust as Native Allotments for the benefit of individual Tribal Members. We take the management of the Chuitna seriously, we have safeguarded and stewarded that river for the last 10,000 years. The take of fish bound for the Chuitna is sustainable at the levels we have harvested in the past. We plan to continue to harvest these fish into the future.

Let us be additionally clear, the Native Village of Tyonek and the Tyonek Tribal Council is adamantly, directly, and unequivocally opposed to any reductions to the number or duration of subsisting King Salmon fishing opportunities in the Tyonek Subdistrict. Any such reductions infringe on the ability of residents to fill their freezers and smokehouses; they jeopardize the food security of our community and ultimately fail to provide a fair and equitable opportunity for permitholders to fulfill their quotas.

We look forward to the opportunity to work with the Board and the Department to provide a fair and equitable opportunity for our Tribal Members and residents of the Native Village of Tyonek to harvest what is needed to meet the subsistence needs of our community.

 Janelle Baker (Mar 2, 2026 18:37:55 AKST)

Janelle Baker IRA Council Secretary/Treasurer for Robert Stephan Sr. President
IRA Tribal Council
Native Village of Tyonek

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 Larsen Nebl, and I am a Southeast drift gillnet permit holder based in Ketchikan, Alaska. I operate the F/V Silver Mist.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals would drastically affect my yearly income to the point that I may have to step away from something that has been in my family for generations.

We have multiple hatcheries connected to our island, and reducing their production could potentially harm wild runs by weakening the survivability of each species against predators.

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,

Larsen Nebl

Submitted by: Nik Nebl

Community of Residence: Ketchikan

I oppose 170,171,172

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 Nicholas Nekeferoff, and I am a Native Alaskan, commercial fisherman, tribal member, subsistence fisherman, and sport fisherman based in Sitka, Alaska. I operate the F/V Garnet.

I am writing to urge the Board to reject Proposals 170, 171, and 172. I am a Southeast Alaska limited entry gillnet permit holder, and I rely heavily on hatchery-produced salmon in the Southeast Alaska region. A reduction or moratorium on hatchery production would greatly affect my family's income stability, job security, business viability, and livelihood.

As a Sitka resident, these reductions would greatly reduce harvest opportunity, reduce community job opportunities, create job instability, and have negative effects on food availability for me and my tribe. There would also be negative impacts to our local economy.

Egg takes are a scientific process, and placing a blanket restriction on an already established process is dangerous and unnecessary.

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.

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 Jessie Nelson, and I am a commercial fisherman based in Homer, Alaska.

Our family greatly depends on hatchery fish for our livelihood, and has since the inception of the hatchery program. These proposals would devastate the fisheries we depend on for our income.

My community has many, many fishermen who participate in these fisheries, live here, and do their boat repairs here. Without hatcheries, fishing pressure on wild stocks would increase, and fishermen would face possible bankruptcy.

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

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,

Jessie Nelson
Homer, Alaska



Submitted by: Parry Nelson

Community of Residence: Kodiak

im in strong support of proposal 167. ive been jigging cod here in kodiak since i got my first boat 15 yrs ago. it is a great open entry fishery that covers a part of the year when not much else is happening fishing wise. unfortunatly cheating has gotten way out of hand in recent years. ive caught several illegagl unmarked groundlines when ive been out jigging and theres currently no way of enforcing 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 Parry Nelson. I am a commercial fisherman and a year-round resident of Kodiak, and I fish aboard the F/V Redline.

If Proposals 170, 171, and 172 are adopted, it would significantly compress the Kodiak seine fleet into the areas I typically fish, increasing congestion and reducing workable opportunity. It would also reduce overall fish volume, which in turn reduces income for tenders, processors, processing workers, and local city/borough tax revenue that depends on a functioning fishery.

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,
Parry Nelson
Kodiak, Alaska



Submitted by: Rob Nelson

Community of Residence: Kasilof, Alaska

Madam Chair, Members of the Board,

I am the author of proposal 174 which, if adopted, would Delete subletter (I) under 5AAC 39.260.

This states “During the operation of a purse seine, the propulsion engines of the seine vessel or the skiff assisting the operation, must be running and the vessel must be controlling the configuration of the purse seine.”

This is an unnecessary regulation. In this day and age, what’s the point? The vast majority of the time, the vessel is actively controlling the net, but when fishing is slow or fish are spooky, and don’t want to go into the net, you may just want to just hang on the gear.

Being forced to burn fuel in this situation seems an unnecessary burden.

I also OPPOSE proposals 170 and 171. These seek to reduce permitted egg takes at Alaskas hatcheries.

Fish produced by these hatcheries generate fishing opportunities for commercial, recreational and subsistence users and generate revenue for the State, local communities and local businesses.

Salmon produced by these hatcheries also take fishing pressure off wild stocks.

There are no studies showing compelling evidence of negative effects of hatchery fish on wild stocks.

Alaska hatchery salmon are a drop in the bucket of the fish biomass in the North Pacific.

I hope to get a chance to chat with you all at the meeting, Thank you

Submitted by: Thomas Nelson

Crescent Moon Inc

Community of Residence: Homer, AK

Member of the Board of Fisheries,

My Name is Thomas Nelson, I am a full-time resident of Homer, AK, and am a PWS commercial fisherman participating in the seine fishery. I am writing to Strongly OPPOSE proposal's 170-171-and 172. All in one way or another attempt to reduce the permitted egg take of the hatcheries within Alaska. This would be very detrimental to many aspects of Alaskan fisheries. The hatcheries provide a steady supply of salmon for the commercial fisheries and processor's, which is key to our livelihood. This would also affect sport, personal use and subsistence fisheries as many fish harvested in these endeavors are hatchery fish. If you dipnet the copper river, catch silvers about anywhere in southcentral, sockeye in Cook Inlet, Main Bay, or Resurrection Bay you have undoubtedly caught hatchery fish. Many places would be exclusively hatchery produced fish. If egg takes are cut for pink and chum salmon the very first programs to go will be the sport related programs as they are all paid by pink and chum harvests, these programs do not pay for themselves. The effects will be far more reaching than the proposers anticipate.

Furthermore, the reasoning behind these proposals is based on flawed logic, and skewed studies with cherry picked data to support conclusions to fit their narrative. There is no scientific evidence that hatchery salmon are detrimental to wild stocks. In fact, there is considerable observational data that suggest otherwise, as well as prominent genetic studies that concluded diversity has remain with hatchery produced fish in the eco system.

In conclusion I would ask the board to vote NO on proposals 170-172.

Thank you, Thomas Nelson Homer, AK

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 Aaron Nevin. I am a commercial fisherman and subsistence user in Kodiak.

Adoption of Proposals 170, 171, and 172 would greatly impact my ability to make a living. There are seasons where the difference between turning a profit or not comes down to hatchery fish that provide stability and opportunity when wild runs are low. The harm these proposals would cause would be significant.

Reduced harvest opportunity would affect my community directly. Less income for fishermen and processors means less money spent at local businesses and fewer job opportunities in Kodiak.

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,
Aaron Nevin
Kodiak, Alaska



PC339

Submitted by: Jake Newton

Community of Residence: Nikiski

Hi , my name is Jake Newton I am a lifelong Alaskan born in soldotna and commercial fishing since I was a little kid, I've fished in cook inlet my entire life and have watched as we get restricted further and further and lose time and area that we will never get back, commercial fishing is my livelihood and my wife and kids depend on it as do the rest of my family . I would ask that the board please take no action on proposal 186. Thank you

PC340

Submitted by: Melissa Norris

Community of Residence: Eagle River

I support proposal 186 to manage Northern Cook Inlet coho on a more sustainable basis. Southcentral Alaska relies on this resource for food security. Many also rely on coho abundance for their livelihood and well being. We need to restore Alaska to the levels our communities need to thrive. Thank board members for your time and commitment to Alaska's sustainability.

PC340

Submitted by: Melissa Norris

Community of Residence: Eagle River

I meant to submit an additional comment in full support of restricting trawl under proposals 11, 163, 164 and 165. I am also in favor of restricting hatchery pink salmon and chum salmon release. Wouldn't it be great if you enabled these modifiers and in the coming years we see an improvement in stocks all around? You have the power to make real change. Please help Alaska thrive.



North Pacific Fisheries Association
 P.O. Box 796 Homer, AK 99603
 npfahomer@gmail.com // www.npfahomer.com

March 2, 2026

Alaska Department of Fish and Game
 Board of Fisheries

RE: OPPOSE Proposals 170, 171, & 172.

Chairwoman Carlson-Van Dort and Members of the Board of Fisheries,

North Pacific Fisheries Association (NPFA) represents over 60 independent commercial fishermen, their families, and crewmembers, many of whom fish or tender salmon and all of whom benefit from Alaska's hatchery programs and, more importantly, Alaska's wild fisheries.

NPFA opposes Proposals 170, 171, and 172, which seek unnecessary reductions or limitations on hatchery production.

Proposal 170 would impose a blanket 25% reduction in pink and chum egg take statewide. This action is not supported by Alaska-specific findings demonstrating that such a reduction is necessary to protect sustained yield. The proposal lacks region or stock-specific causation, productivity modeling, or quantified ocean carrying capacity analysis. A statewide cut would immediately reduce harvest opportunity and impact cost-recovery revenues that fund hatcheries without demonstrated biological benefit.

Proposal 171 seeks to reduce Prince William Sound pink production in response to straying concerns. NPFA agrees straying must be managed conservatively and consistent with Comprehensive Plan standards. However, the proposal presumes egg take reduction is the necessary remedy without demonstrating that production level—rather than operational factors such as release timing or environmental variability—is the primary driver. Corrective action, if warranted, should be adaptive and region specific.

Proposal 172 would impose a moratorium on increases in pink and chum egg take. While framed as precautionary, it establishes an open-ended constraint without defined duration or objective benchmarks. Existing statutory authority and comprehensive Alaska Department of Fish and Game (ADF&G) oversight already provide mechanisms to evaluate and regulate production.

Alaska's hatchery programs operate under the Hatchery Act, the Sustainable Salmon Fisheries Policy (5 AAC 39.222), regional enhancement plans, and detailed ADF&G permitting and monitoring. Structural production cuts or freezes absent Alaska-specific, stock-level evidence would destabilize a program that supports fishermen, communities across Alaska, and shared user access to fish. Continued monitoring and adaptive management remain the most appropriate path forward.

NPFA respectfully urges the Board to reject Proposals 170, 171, and 172.

Sincerely,

Malcolm Milne

President, North Pacific Fisheries Association



North Pacific Fisheries Association
 P.O. Box 796 Homer, AK 99603
 npfahomer@gmail.com // www.npfahomer.com

March 2, 2026

Alaska Department of Fish and Game
 Board of Fisheries

RE: OPPOSE Cook Inlet Drift Proposal 186

Chairwoman Carlson-Van Dort and Members of the Board of Fisheries,

North Pacific Fisheries Association (NPFA) represents more than 60 independent commercial fishermen, their families, and crewmembers, many of whom participate in the Cook Inlet drift gillnet salmon fishery, most of whom reside on the Kenai Peninsula.

NPFA 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.

Proposal 186, posed as a conservation proposal, lacks emergent need and instead seeks permanent reallocation of fishing opportunities via strict drift gillnet limits in Area 1, regardless of coho abundance or biology. ACRs exist to address unforeseen conservation or biological issues that arise outside the regular cycle and require prompt Board of Fisheries 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 Board of Fisheries standards, distinguishing conservation (management measures for maintaining sustained yield) from allocation (harvest distribution among users after conservation) is critical. Although the ACR cited coho conservation concerns, Proposal 186 is allocative. It does not address coho run size, escapement, or stock status. It lacks any conservation objective or explanation of the restrictions' benefits and should tie to measurable biological metrics and adjust with conditions, but *it does 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 data 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. 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 and presents a significant burden on stakeholders that must travel to an extra meeting out of cycle, far from home.

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



Established 1955

North Pacific Fisheries Association

P.O. Box 796 Homer, AK 99603

npfahomer@gmail.com // www.npfahomer.com

management instability, concentration of effort, and early closures driven by regulatory interaction *rather than* biological necessity. Proposal 186 undermines effective salmon management in Cook Inlet, which depends on coordination and predictability.

Drift gillnet fisheries support Alaska residents, family businesses, seafood processors, and coastal communities throughout Cook Inlet. Permanent allocative 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.

NPFA requests that the Board of Fisheries either reject Proposal 186 or 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.

Thank you for your careful consideration and for your prioritization of open and transparent management of State of Alaska fisheries.

Respectfully,

Malcolm Milne

President, North Pacific Fisheries Association



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

From: Northwest Setnetters Association Board of Directors

Re: Opposition to proposals 170-172

Date: 2/28/2026

Thank you for the opportunity to provide comment on proposals 170-172.

The Northwest Setnetters Association represents set-gillnet fishermen from Kodiak's Northwest district. Our members' salmon enhancement tax goes to the Kodiak Regional Aquaculture Association (KRAA), which provides many benefits for the community at large. Proposals 170-172, if passed, would so severely cripple KRAA's operations that they would not be able to support the programs that make a difference on Kodiak Island.

Our association is concerned about KRAA's ability to continue its king salmon rehabilitation efforts, which are critical for set-gillnet fishermen in our area. Currently, set-gillnet fishermen in our district bear the largest burden of lost fishing opportunity due to declining chinook runs. Due to limited chinook escapement, our district is completely shut down for the duration of June, during which the early sockeye run occurs. We cannot move to other areas the way seiners may, or target species besides salmon the way sport fishermen may. We firmly support KRAA's efforts to change the trajectory for Kodiak's chinook runs and are alarmed that these proposals would so deplete KRAA that it would lose its ability to engage in these rehabilitation efforts.

These proposals would also curtail the sport and subsistence opportunities that KRAA provides in some of the rural communities on the island, raising food security concerns. Our association cannot support proposals that would cause such negative impacts throughout the island's communities.

Across the state, hatcheries play an important role in the economics and security of their communities. We urge you to vote no on proposals 170-172.

Sincerely,



Adelia Myrick
President, Northwest Setnetters Association

Submitted by: Lily Noto

Community of Residence: California

I support Proposal 170 because reducing hatchery egg take by 25% will prioritize conservation and science-based management. A global

review of peer-reviewed literature evaluating hatchery impacts on wild salmonids found that 83% of studies reported adverse or minimally adverse effects on wild populations, most commonly through

genetic diversity loss, reduced productivity, and ecological competition. With even newer synthesized evidence coming out in 2023-2025, the impact of hatcheries on wild salmon are detrimental. Wild salmon are the backbone of Alaska's ecosystem and economy. Approving this proposal would ensure we protect wild salmon stocks.

I strongly support Proposal 172 because it addresses legitimate concerns about hatchery pink salmon straying into wild salmon streams. The Prince William Sound/Copper River Comprehensive Salmon Plan specifies the proportion of hatchery salmon straying into wild-stock streams must remain below 2% of the

wild-stock escapement over the long term. Though evidence shows the reality, PWS hatchery contributes 22%. This is causing a reduction of genetic variation and a weakened ecosystem. Proposal 172 will help enforce already existing responsibilities that lead to the necessary protection wild salmon populations.

I support 172 because there must be a moratorium in order to engage in time for review and revisions on Alaska's salmon hatcheries. There must be time to consider the current data and create a comprehensive salmon hatchery policy, because currently that does not exist.



NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, INC.
 1308 Sawmill Creek Road
 Sitka, Alaska 99835
 Office: (907) 747-6850 fax:(907) 747-1470

February 27, 2026

Alaska Board of Fisheries
 PO Box 115526
 Juneau, AK 99811

Re: Proposal 170, 171 & 172

Dear Members of the Alaska Board of Fisheries,

The Northern Southeast Regional Aquaculture Association or better known as NSRAA, submits the following comments regarding Proposals 170, 171, and 172. My comments represent our 25-member board, and the hundreds of fishermen they represent.

Proposal 170-5 AAC 40.XXX New Regulation – 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 same proposal was just heard in January of 2025 at the Ketchikan SE Region Board of Fish meeting (Proposal 156) and failed to pass. Proposal 170 has now been submitted to the BOF with similar language a total of 12 times since the early 2000's in regions from Southeast to Prince William Sound, to Lower Cook Inlet to Kodiak, and now is proposed for Statewide implementation. Half of these proposals sought a significant reduction of hatchery production by 50% or greater. At the 2025 Ketchikan meeting Proposal 156 was opposed by a broad cross section of SE Alaska comprised of 195 individuals, 11 cities and boroughs in SE, was opposed by 7 tribes, opposed by many involved in the sport/charter industry, opposed by 4 chambers of commerce, opposed by 3 economic development organizations, opposed by 22 organizations directly involved in the fisheries in SE, and lastly, was opposed by 10 Advisory Committees in SE: East Prince of Wales, Elfin Cove, Icy Straits, Juneau Douglas, Ketchikan, Klawock, Pelican, Petersburg, Sitka, and Wrangell.

For over two decades these arbitrary proposals, submitted by the Fairbanks AC or members of the Fairbanks AC, have not been supported by the Board of Fisheries and NSRAA encourages the board to oppose Proposal 170. The current proposal before you is the most recent submission, which takes up tremendous time by ADFG and BOF staff, hatchery operators, processors, commercial salmon fishermen, and yourselves, the Alaska Board of Fisheries members.

The Alaska State Legislature had tremendous forethought in 1974 when drafting the Private Nonprofit Hatchery statutes to remediate local depressed salmon stocks. By establishing an array of legislative guardrails to ensure that Alaska did not make the same historic salmon mismanagement mistakes that Washington and Oregon have, salmon enhancement programs in Alaska can and do

operate in alignment with principles that prioritize conservation and protection of wild fish ahead of commercial fisheries supplementation and economic benefit.

The *Comprehensive Salmon Enhancement Plan for Southeast Alaska* continues to reinforce those safeguards today. Statutes such as a Genetics Policy, Fish Health and Disease Policy, avoidance of mixed-stock fisheries, and identification of enhanced fish through marking all ensure hatchery fish are produced in a responsible, ethical fashion that will not impose trophic competition or genetic harm upon wild stocks. Change requests to hatchery permits and Annual Management Plans are rightfully heavily scrutinized by ADFG Divisions of Commercial and Sport Fisheries and the Joint Northern/Southern Regional Planning Teams to ensure wild fish stocks remain protected, and the public maintains the right to participate in the process.

The economic effect of a cut to enhanced salmon production and resultant loss of common property harvest opportunity will unquestionably be significant and felt statewide at every level of the seafood producing sector. Furthermore, this loss will come to commercial salmon permit holders during a period of continued low fish prices and uncertain global markets. Since 1980, the commercial ex-vessel value contributed to the SEAK economy from NSRAA alone exceeds \$372,000,000 and has alleviated harvest pressure off local wild salmon stocks by providing new common property harvest opportunities that otherwise did not exist. This proposal will undoubtedly result in an increase in harvest pressure on wild fish, thereby undermining the objectives of the State of Alaska and the proponents of this proposal to protect wild fish populations.

It should be noted that the theory of SEAK hatchery fish imposing harm to wild-born Interior Alaska salmon runs by way of density-dependent, trophic competition is doubtful, as these two cohorts inhabit different regions of the Bering Sea (BS), western Gulf of Alaska (GOA), and eastern GOA (Larson, et al. 2013). Genetic analysis in Chinook has shown that seasonal migration patterns of SEAK Chinook and chum stocks are distributed across the GOA year-round, while Yukon and western Alaskan Chinook and chum reside in the middle and western (BS). The North Pacific Fishery Management Council (NPFMC) reports that bycatch of SEAK origin Chinook and Pacific Northwest origin chum in the BS pollock fishery of eastern GOA origin chum comprise only 1.4% of Chinook and 18.7% of total chum. (Ianelli and Stram, 2015), indicating a spatially divergent distribution between the two regional aggregates. The blanket argument behind Proposal 170 that SEAK hatchery fish are compromising wild western Alaskan salmon stocks does not consider the trophic competition

*Larson, Wesley A., et al. 2013. Single-nucleotide polymorphisms reveal distribution and migration of Chinook salmon (*Oncorhynchus tshawytscha*) in the Bering Sea and North Pacific Ocean. Canadian Journal of Fisheries and Aquatic Sciences, vol. 70(1), p. 128–41, <https://doi.org/10.1139/cjfas-2012-0233>.*

lanelli, James N. and Stram, D. L. 2015. Estimating impacts of the pollock fishery bycatch on western Alaska Chinook salmon. ICES Journal of Marine Science, vol. 72(4), p. 1159-1172, <https://doi.org/10.1093/icesjms/fsu173>.

imposed by Russian and Japanese origin, wild and hatchery pink and chum which do spatially overlap in the western GOA and BS. The bycatch data does not support concurrent trophic overlap with SEAK origin enhanced production.

Genetic analysis in Chinook has shown that seasonal migration patterns of SEAK Chinook and chum stocks are distributed across the GOA year-round, while Yukon and western Alaskan Chinook and chum reside in the middle and western BS. The North Pacific Fishery Management Council (NPFMC) reports that bycatch of SEAK origin Chinook and Pacific Northwest origin chum in the BS pollock fishery of eastern GOA origin chum comprise only 1.4% of Chinook and 18.7% of total chum. (Ianelli and Stram, 2015), indicating a spatially divergent distribution between the two regional aggregates. The blanket argument behind Proposal 170 that SEAK hatchery fish are compromising wild western Alaskan salmon stocks does not consider the trophic competition imposed by Russian and Japanese origin, wild and hatchery pink and chum which do spatially overlap in the western GOA and BS. The bycatch data does not support concurrent trophic overlap with SEAK origin enhanced production.

We respectfully request that the BOF **oppose Proposal 170** due to the lack of scientific evidence to support the desired outcome of improving wild salmon stocks, and consequential economic burden to all fishery user groups and coastal Alaskan communities that a 25% reduction in enhancement fish releases would impose.

Proposal 171- 5 AAC 40. XXX New Regulation - Amend Prince William Sound hatchery permits to reduce pink salmon egg take capacity

Proposal 171, while differing in argument on why hatchery production should be decreased in Prince William Sound (PWS), this proposal asks to achieve the same result as Proposal 170, a decrease of Alaskan Hatchery production. As with Proposal 170, this proposal does not offer any evidence of harm by hatchery production in PWS, just the presence of hatchery salmon. This proposal seeks reduction in PWS hatchery production to counter undocumented harm on Lower Cook Inlet (LCI) wild pink salmon.

If straying of hatchery produced pink salmon had a negative, deleterious effect upon wild pink salmon production, you would expect this effect to be most prevalent in areas closer to hatchery release sites in PWS. There is no evidence to support this is occurring. PWS has seen the largest wild pink salmon returns in history in the past 10 years. This is after over 40 years of large-scale hatchery production in PWS, equating to over 20 elapsed generations of pink salmon. Additionally, the ongoing Alaska Hatchery Research Project (AHRP) has determined that after more than 40 years of hatchery production there still is regional and local genetic stock differentiation in PWS. The AHRP was created to evaluate what, if any, effects hatchery production has on wild pink salmon in Alaska. This project is nearing completion and is best suited to evaluate concerns with pink salmon straying in LCI.

We respectfully request that the BOF **oppose Proposal 171** due to the lack of scientific evidence to support the desired outcome of improving wild salmon stocks, and consequential economic burden to all fishery user groups and coastal Alaskan communities in PWS that a reduction in enhancement

fish releases would impose.

Proposal 172- 5 AAC 40.XXX New Regulation - Board generated regulation that places a moratorium on pink and chum hatchery production

Proposal 172 seeks the BOF to issue a moratorium on increases in pink and chum hatchery production statewide. While not seeking a reduction in production, in contradiction to the same proposers ask in 171, this proposal highlights the error in all three of these anti-hatchery production proposals. The BOF does not possess the regulatory authority over hatchery permitted egg take capacity. That authority lies implicitly within ADFG and the ADFG commissioners' authority. NSRAA strongly encourages the BOF to pay particular attention to on-time comments submitted to the BOF by Ashburn and Mason on behalf of PWSAC and the Alaska Hatchery Operators directly addressing the authority the BOF possesses over fishery enhancement efforts.

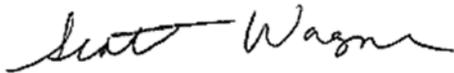
Not only do the Alaska Hatchery Operators believe the board lacks this authority, but ADFG **opposes** Proposals 170, 171, and 172 due to the same reasoning.

We respectfully request that the BOF **oppose Proposal 172** due to the lack of authority over hatchery permitted capacity.

Salmon hatcheries are often portrayed as willfully ignorant toward wild fish welfare and to have a perceived disregard for responsible salmon conservation biology, which is demonstrably untrue. As hatchery operators, we want healthy wild salmon runs and find collateral damage to wild stocks ethically unacceptable, thereby reinforcing our adherence to the best possible science when it comes to broodstock genetics and hatchery management practices. NSRAA is committed to working with ADFG staff to cooperatively manage enhanced fish production that is in alignment with ADFG statutes, regulations, and policies while providing economic opportunities to our SEAK fishing communities.

Based on the aforementioned information, we respectfully request that the **BOF oppose Proposals 170, 171, and 172**. We invite the BOF members to visit our facilities to see firsthand our dedication to upholding a high degree of scientific rigor, stewardship of natural resources, and the added economic value that supports our local fishing communities.

Sincerely,



General Manager



NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, INC.

1308 Sawmill Creek Road
 Sitka, Alaska 99835
 Office: (907) 747-6850 fax:(907) 747-1470

February 28th, 2026

Alaska Board of Fisheries
 PO Box 115526
 Juneau, AK 99811

Re: Proposals 170, 171, 172

Dear Members of the Alaska Board of Fisheries,

The following comments underscore the Northern Southeast Regional Aquaculture's (NSRAA) commitment to scientific integrity, wild fish protection, and sustainable fisheries enhancement, as well as our collaborative work with resource managers to ensure our practices remain fully aligned with regulations designed to safeguard wild salmon stocks. **We respectfully request that the BOF oppose Proposals 170, 171, and 172 as there is insufficient scientific evidence to demonstrate that these measures would improve wild salmon stocks, and the claims that hatchery fish harm wild fish remain unsubstantiated.**

To support our Southeast Alaska fisheries enhancement projects, NSRAA, based in Sitka, operates a comprehensive research and evaluation program that serves as a cornerstone of our operations. This program is responsible for collecting local fisheries contribution and added-value estimates, conducting research into optimizing fish survival, and developing new methodologies for minimizing the potential for interactions with wild fish populations at every life stage.

This program is founded on a thorough otolith-marking and coded-wire tagging program for all species, annually sampling over 12,000 chum from local Southeast fisheries. Otolith-marking functions as a biological tag that identifies the age, release location, and, when applicable, experimental treatment, with 100% of NSRAA-produced fish receiving a mark. This work is critical to upholding NSRAA's core values of responsible resource stewardship and maintaining a "do no harm" ethos, as well as for our ability to make decisions that prioritize fish welfare and ultimately program success. This essential work would not be possible without support from chum cost recovery and Salmon Enhancement Tax revenue.

Support new interagency fisheries management technologies

NSRAA maintains a unique, one-of-a-kind long-term dataset on returning adult chum in northern Southeast Alaska through our otolith-marking program. By collecting both otoliths and scales paired from the same fish, in 2024 and 2025 NSRAA was able to support an interagency working group –



NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, INC.

1308 Sawmill Creek Road
 Sitka, Alaska 99835
 Office: (907) 747-6850 fax:(907) 747-1470

including the ADFG Mark, Tag and Age Lab, NOAA’s Alaska Fisheries Science Center, Fisheries and Oceans Canada (DFO), and the Pacific States Marine Fisheries Commission – in the development of new machine learning technology for aging chum salmon scales. Scales from escapement and bycatch surveys are typically aged by experienced human readers, making the process slow and expensive. NSRAA’s library of thousands of paired otolith-scale samples served as calibration, or absolute known-age, for developing this technology by eliminating the potential for human reader error and demonstrably improved the model accuracy. This collaboration represents one example of the meaningful contributions and broad partnerships that NSRAA’s research brings to the Alaska fisheries management community.

Ongoing monitoring of Crawfish Inlet hatchery chum

In response to growing concerns about the potential impacts of hatchery and wild chum salmon interactions, and to support state resource managers in obtaining accurate wild stock escapement estimates, NSRAA has conducted extensive self-funded research since 2023 to better understand hatchery fish behavior in Crawfish and West Crawfish Inlet. These efforts include multi-year studies (2023–2025) of post-release outmigration patterns of hatchery chum fry, chum spawner surveys to quantify hatchery-origin presence and estimate wild stock escapement, water quality analyses within migration corridors to assess potential effects on homing and imprinting, and evaluations of tidal current dynamics that may influence juvenile outmigration pathways.

Although the West Crawfish Inlet summer-run chum stock was removed by ADFG as an index population in 2024 from the Northern Southeast Outside (NSEO) aggregate, NSRAA is continuing to study the presence and assess the ecological implications of fall-run hatchery chum in West Crawfish Inlet. In 2025, the NSEO summer-run chum management group was designated as a Stock of Concern following several years of poor returns and under-escapement, resulting in increasing public attention on this hatchery program and its potential for interaction with wild stocks. Statistical analyses have shown that wild fish returns for the West Crawfish Inlet index were not significantly different from the other eight index populations in the NSEO management unit. In 2025 the ADFG Commissioner applied a precautionary approach by reducing the permitted number of Crawfish Inlet hatchery chum released by 25%.

NSRAA has partnered with ADFG biologists and biometric staff to implement a multi-year spawner survey program designed to quantify the proportion of hatchery-origin fish, estimate escapement, and document age class composition of the wild stock. Age-at-maturity data are not currently collected by the state for the West Crawfish Inlet system; however, NSRAA’s surveys now provide an opportunity to generate valuable insight into survival variability among brood years within the wild return. Spawner surveys were independently designed and conducted by NSRAA in 2023 and 2024

**NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, INC.**

1308 Sawmill Creek Road
Sitka, Alaska 99835
Office: (907) 747-6850 fax:(907) 747-1470

using a structured and systematic sampling approach. In 2025, the study design was further refined in coordination with ADFG to enhance statistical robustness and ensure consistency with long-term management objectives. This collaborative effort between NSRAA and ADFG resource managers reflects a shared commitment to transparency, sound science, and adaptive management. Spawner composition monitoring in West Crawfish Inlet is intended to continue through at least return year 2029 to inform future management decisions.

Integrating mariculture and salmon aquaculture to mitigate straying

In 2025 NSRAA partnered with the University of Alaska and the Sitka Sound Science Center to undertake a 5-year project aimed to develop a practical, science-based tool for modulating salmon homing behavior with the goal of mitigating hatchery straying and improving homing accuracy. The foundational concepts draw from established salmon olfactory research exploring how dissolved free amino acids (DFAAs) influence juvenile imprinting and adult fish return fidelity. This study integrates mariculture and salmon aquaculture by cultivating kelp to produce a distinct DFAA signature that juvenile hatchery salmon can imprint upon during known critical imprinting life stages. Through systematic otolith sampling and spawner surveys, the project will evaluate whether this kelp-derived olfactory cue improves homing performance and reduces unintended straying into nearby watersheds.

The goal of this project is to develop new techniques and methodology that could be applied as a straying mitigation tool for hatchery programs statewide. This project has garnered strong interest and support from researchers across the state. The study design emphasizes repeatable, scalable protocols so that results can inform long-term management and be transferable beyond a single pilot facility.

Importantly, this effort represents a form of Integrated Multitrophic Aquaculture (IMTA), which is widely recognized as one of the most environmentally responsible approaches to propagating fish in seawater net pens and is considered a best management practice in sustainable aquaculture. By pairing salmon culture with kelp cultivation, the project not only serves as a tool for hatchery managers to minimize potential impacts, but also as a means of exploring ecological benefits such as improved water quality and habitat complexity, while creating economic opportunity for Alaska's growing mariculture sector. If successful, the methodology developed through this work has the potential for statewide application across Alaska's private nonprofit hatchery system, providing fisheries managers and operators with an additional tool to support responsible enhancement, improve hatchery-wild stock separation, and sustain both fishing and mariculture communities.

**NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, INC.**

1308 Sawmill Creek Road
Sitka, Alaska 99835
Office: (907) 747-6850 fax:(907) 747-1470

Contrary to some perceptions, salmon hatcheries are deeply committed to understanding and minimizing the potential ecological impacts of our operations, and to supporting the protection of wild fish populations. NSRAA remains dedicated to upholding the highest scientific standards and working collaboratively with ADFG staff to manage enhanced fish production in full alignment with ADFG statutes, regulations, and policies, while continuing to provide meaningful economic opportunities for Southeast fishing communities. In light of the information above, we respectfully urge the BOF to **oppose Proposals 170, 171, and 172.**

Sincerely,

A handwritten signature in black ink that reads 'Taylor Scott'. The signature is written in a cursive style with a long horizontal line extending from the end.

Taylor Scott
NSRAA Hatchery Research Biologist

Board of Fisheries

October 15-16, 2018

Work Session Anchorage, Alaska

Dear Chairman Jensen and Board of Fish Members:

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

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

**Alex Wertheimer, NOAA Fisheries Research Biologist (retired)¹
Fishheads Technical Services**

William Heard, NOAA Fisheries Research Biologist (retired)²

EXECUTIVE SUMMARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Introduction

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

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

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

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

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

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

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

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

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

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

II. Trends in Harvest of Alaska Salmon

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

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

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

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

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

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

III. Ocean Conditions and Carrying Capacity

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

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

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

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

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

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

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

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

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

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

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

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

to PWS was the lowest since 1993.

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

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

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

IV. Trophic Position of Salmon in the North Pacific Ecosystem

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

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

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

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

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

Similarly, the impacts of juvenile salmon feeding during early marine residency on zooplankton has been found to be relatively low. As noted above, the early marine residency is a period of high and variable mortality which may determine year class strength. Given more limited areal habitat than the coastal zone and ocean basin, this period may represent a potential bottleneck for survival. Orsi et al. (2004) used a bioenergetics model to examine consumption of zooplankton by hatchery and wild chum salmon in Icy Strait, Southeast Alaska. They found that juvenile chum salmon consumed only 0.05% of the zooplankton/km² in the upper 20-m of the water column, and 0.005% for the integrated water column to 200 m in June and July in 2001. Because juvenile salmon are typically in the upper water column, total standing crop of zooplankton is not likely to be available as forage on a daily basis, but does represent a source for zooplankton abundance in the surface layer through vertical diel migrations. The percentage of available prey consumed by juvenile salmon in the neritic habitat of Icy Strait was less than 0.05% of the available standing stock. Low consumption estimates were also estimated by several other studies. Karpenko (2002) reported that juvenile chum salmon consumed between 0.1 and 1.1% of the total stock of zooplankton in the upper 10 m of Karaginskii Bay, Kamchatka from June to August over a 5-year period. Cooney (1993) estimated juvenile salmon in PWS consumed 0.8–3.2% of the total herbivore production and 3.0–10.0% of the macrozooplankton production. Boldt and Haldorson (2002) reported that juvenile pink salmon near PWS could consume 15–19% of preferred prey taxa such as large calanoid copepods and amphipods if the available standing crop was fixed over a 10-day period; however, on a daily basis, consumption of no taxon exceeded 2% of the standing stock.

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

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

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

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

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

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

V. Competition and density dependence versus density independent responses

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

VI. Conclusions

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

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

Authors

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

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

Figures

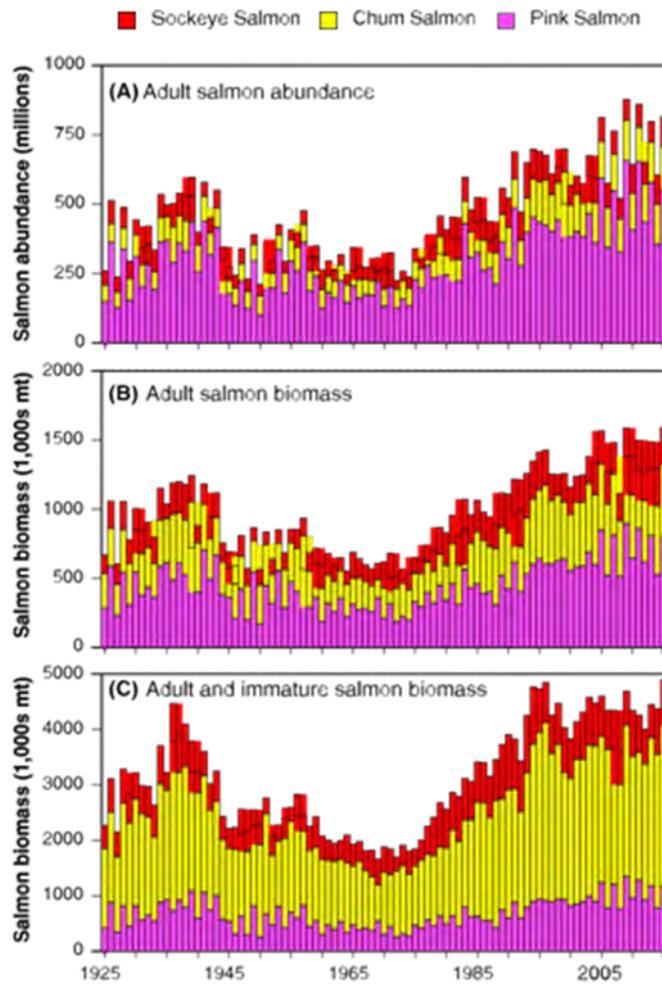


Figure 1. (A) Abundance (millions of fish), (B) adult biomass (thousands of metric tons), and (C) adult and immature biomass (thousands of metric tons) of Sockeye Salmon, Chum Salmon, and Pink Salmon in the North Pacific Ocean, 1925–2015. From Ruggerone and Irvine (2018).

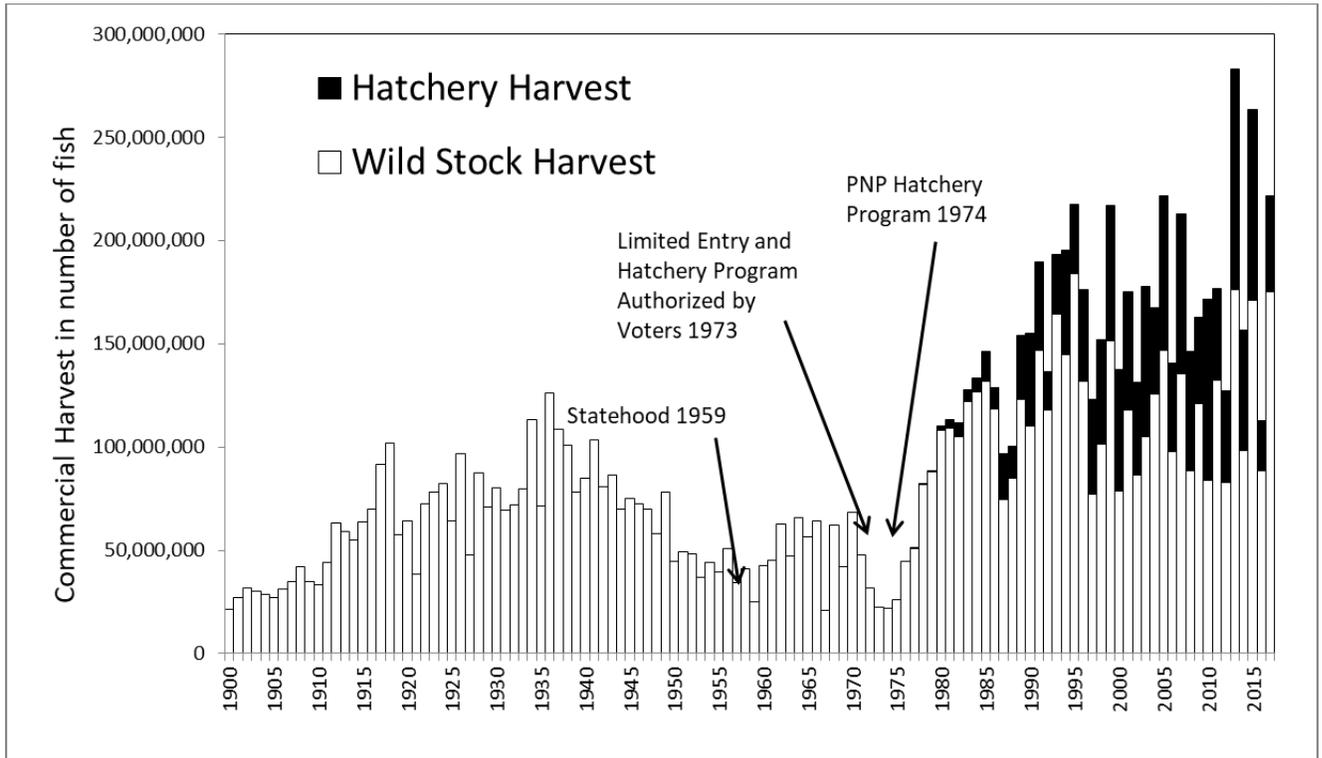


Figure 2. Commercial salmon harvest in Alaska, 1900-2017. From Stopha (2018).

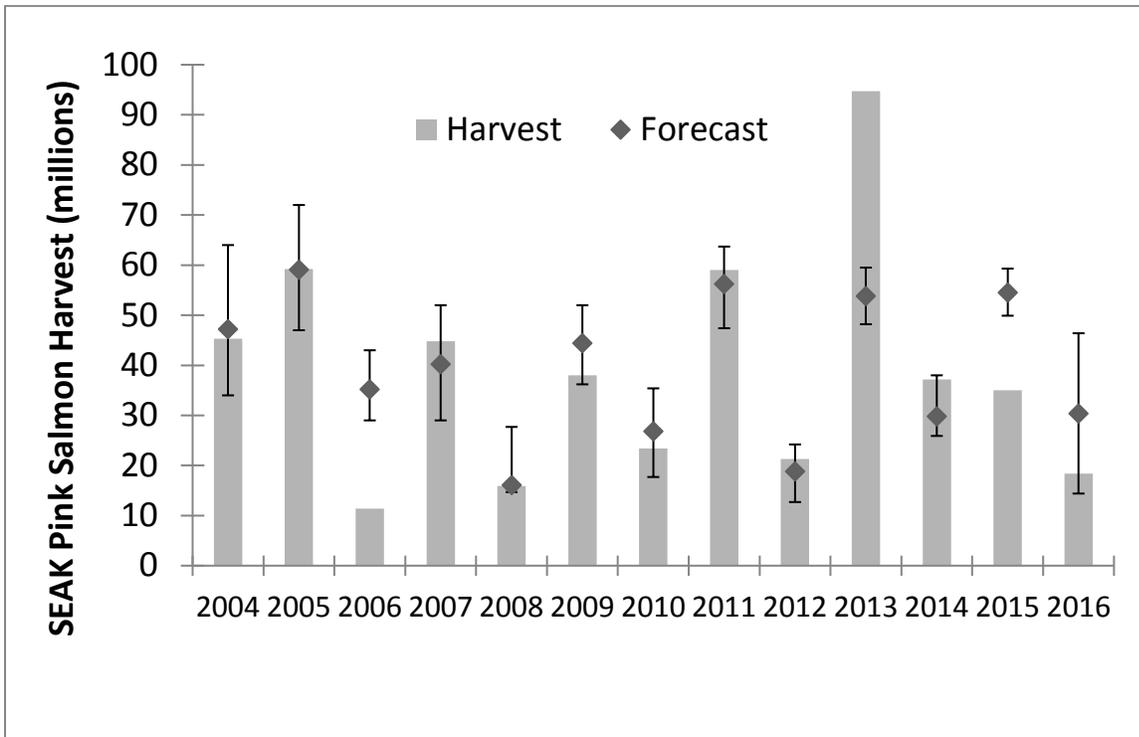


Figure 3.—Southeast Coastal Monitoring (SECM) project pink salmon harvest forecasts for Southeast Alaska (SEAK; symbols), associated 80% confidence intervals (lines), and actual SEAK pink salmon harvests (grey bars), 2004-2016.

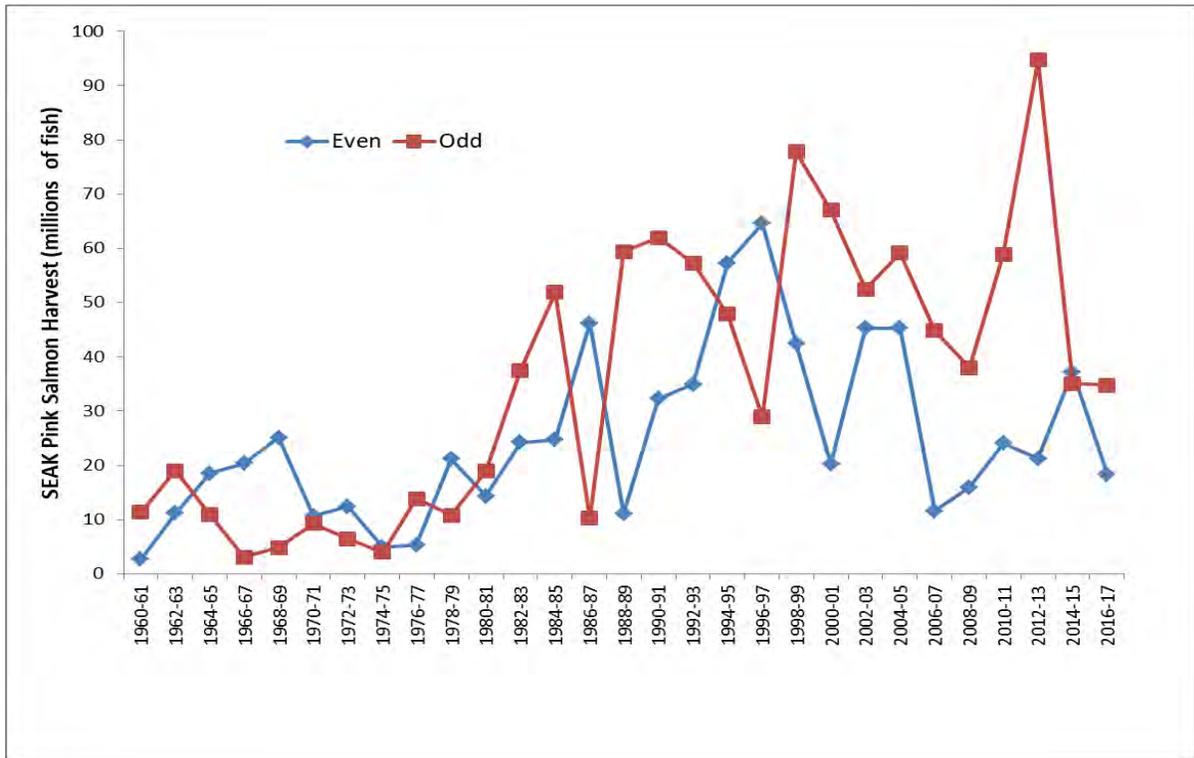


Figure 4. Even- and odd-year harvests of Southeast Alaska pink salmon, 1960-2017. Data are from Alaska Department of Fish and Game catch statistics.

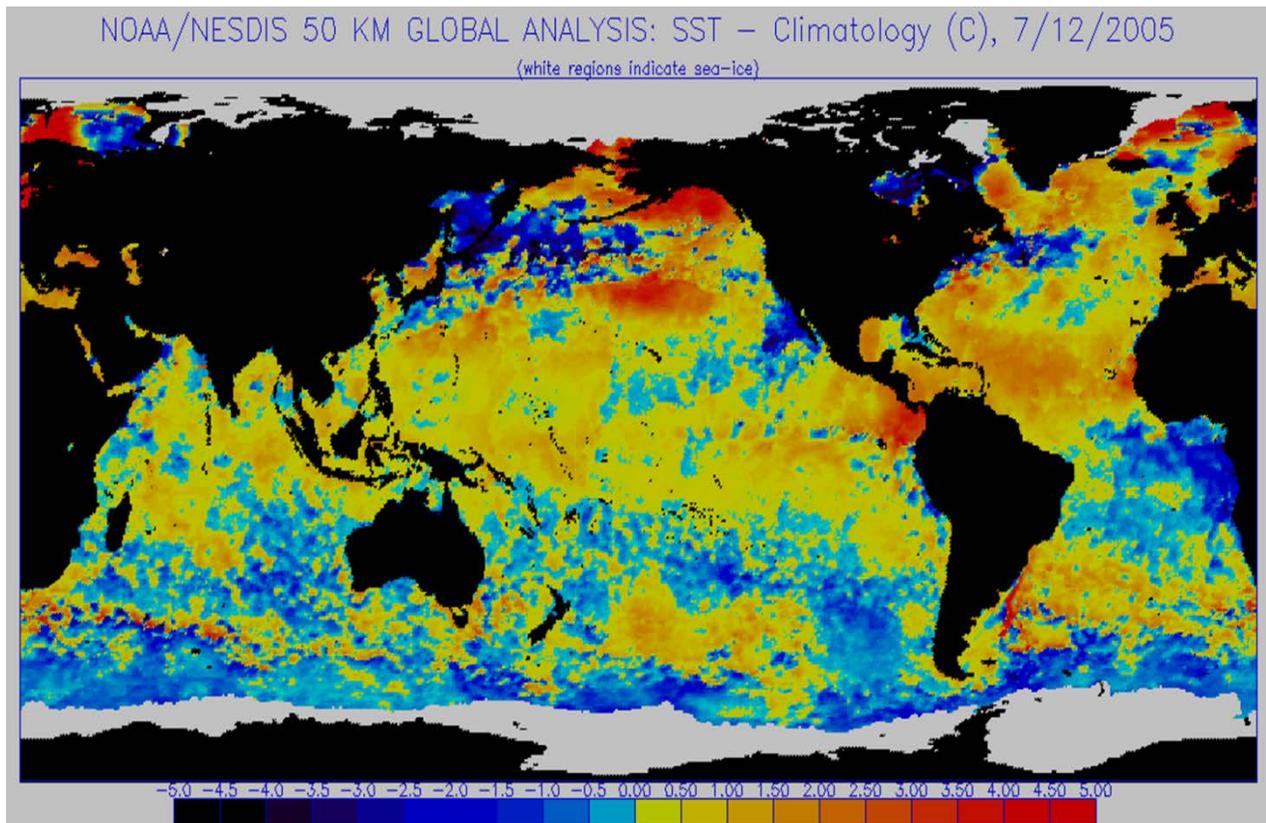


Figure 5. Sea surface temperature anomalies, July 12, 2005. NOAA Satellite and Information Service, National Environmental Satellite, Data, and Information Service (NESDIS)
<http://www.osdpd.noaa.gov/PSB/EPS/EPS.html>

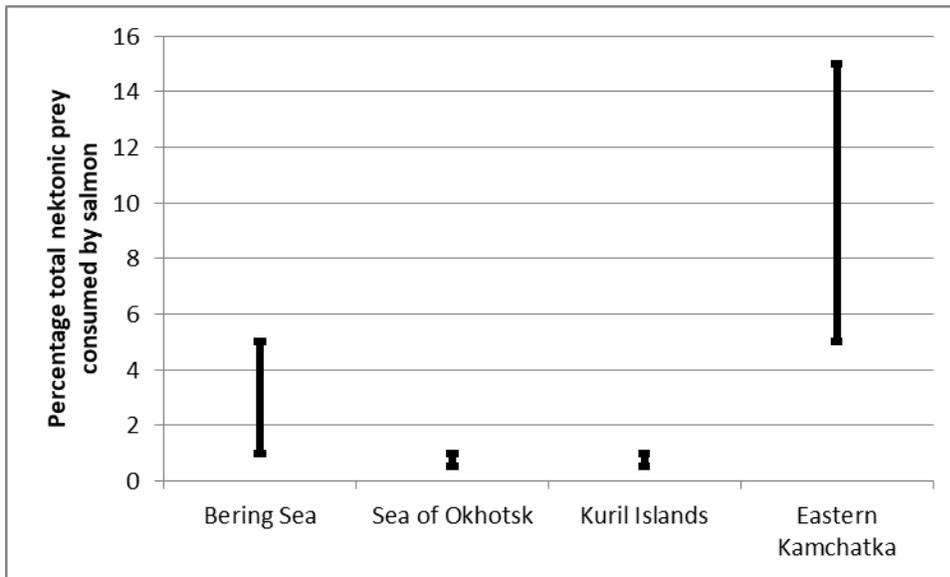


Figure 6. Percentage total nektonic prey consumed by salmon in the western North Pacific Ocean. Estimates are from Shuntov et al. (2017).

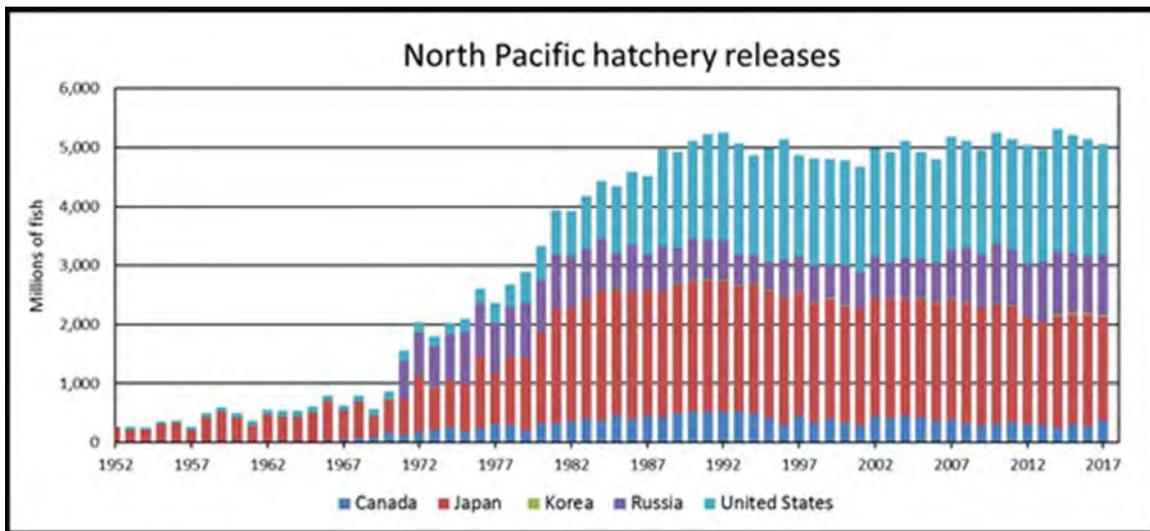


Figure 7. Hatchery releases of salmon into the North Pacific Ocean, 1952-2017. Source: North Pacific Anadromous Fish Commission.

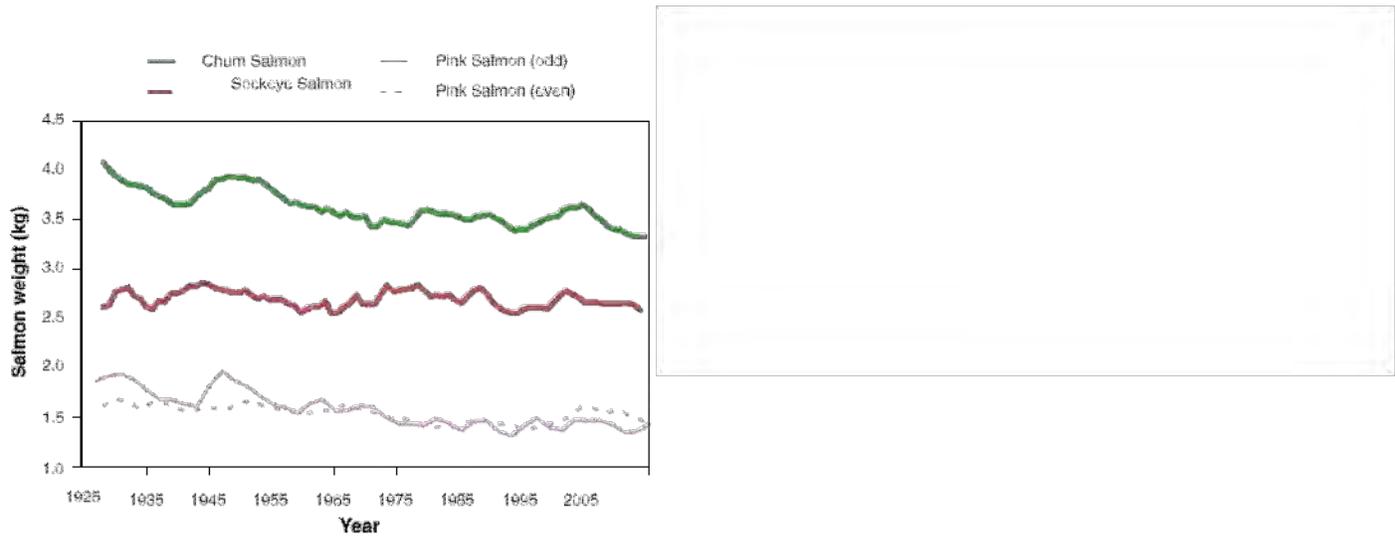


Figure 8. Average weight of pink salmon, chum salmon, and sockeye salmon captured in commercial fisheries, 1925-2015. From Ruggerone and Irvine (2018).

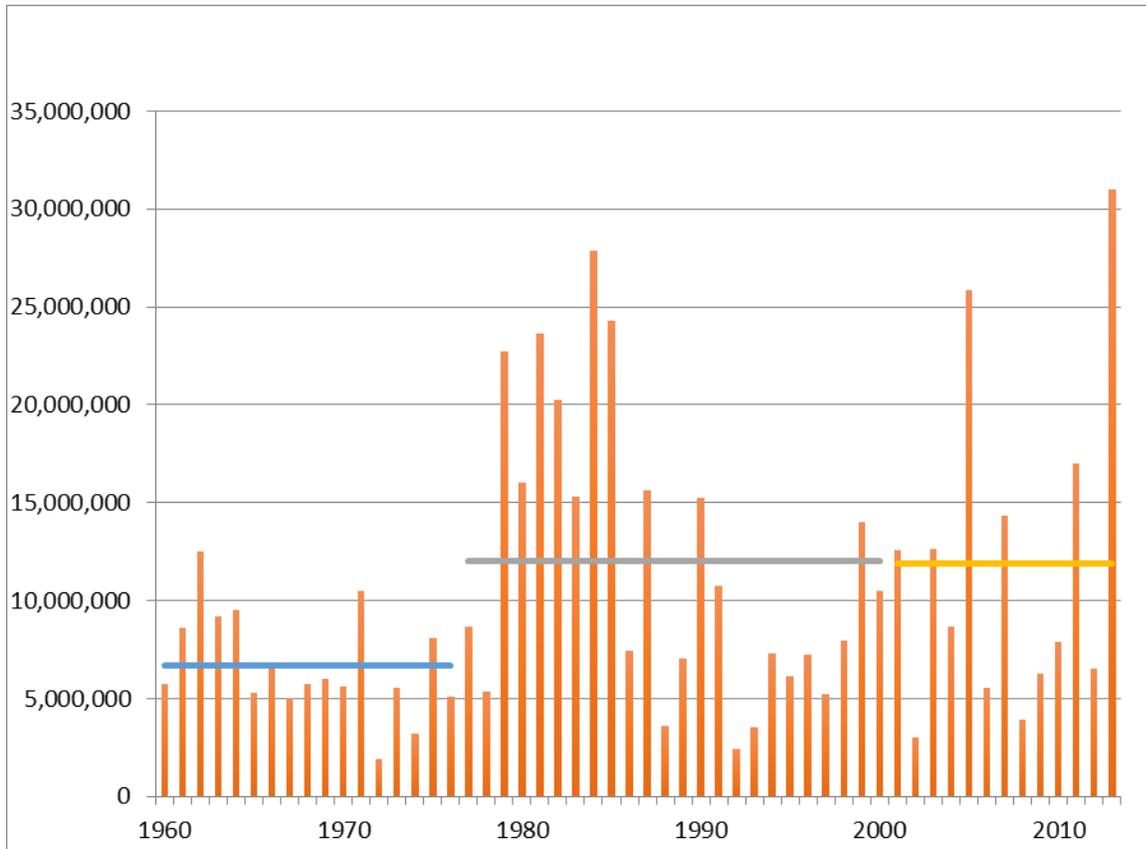


Figure 9. PWS Wild Pink Salmon Production for 1960-2013. Lines indicate average production for pre-hatchery years (1960–1976) and two hatchery time periods: 1977–2000 and 2001–2013. From Gaudet et al. (2017).

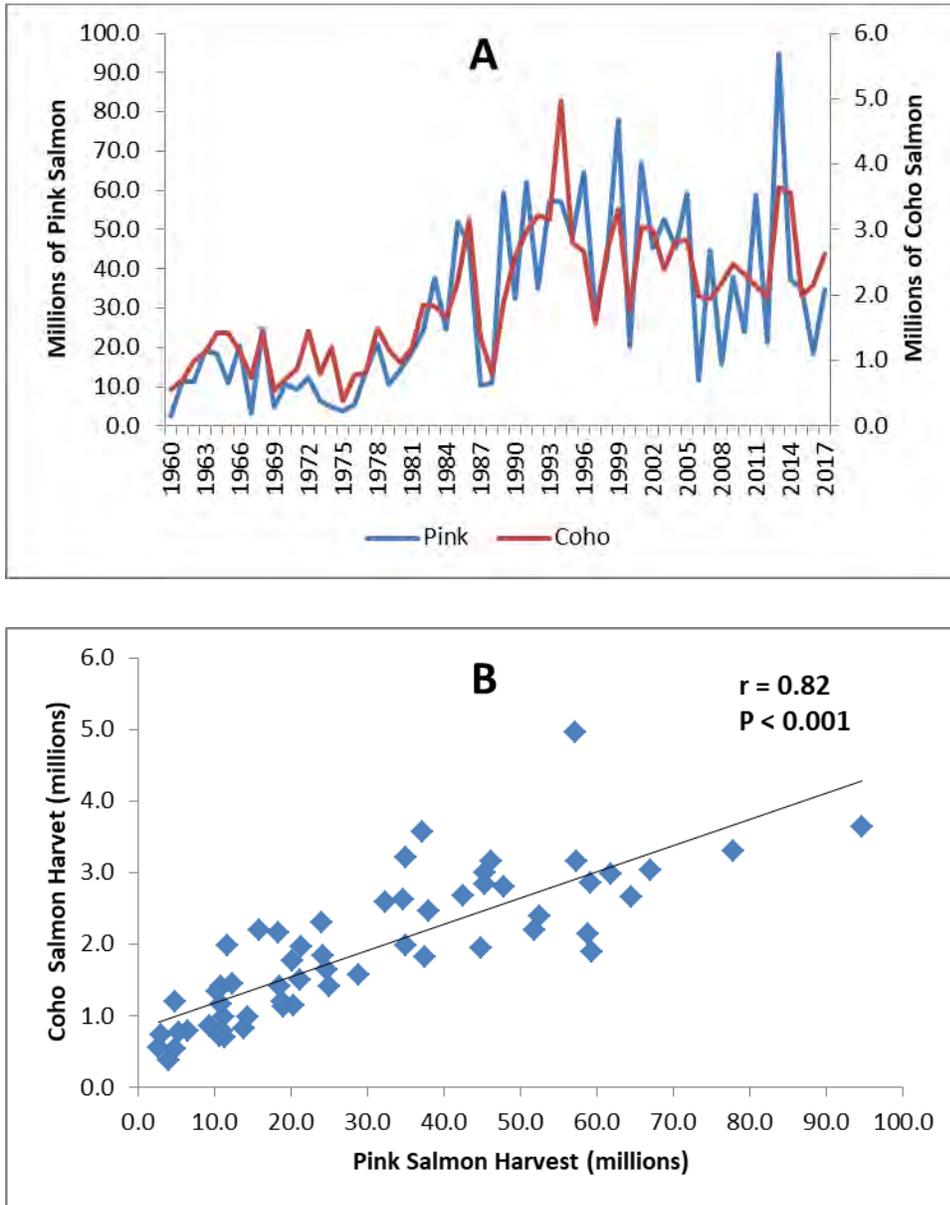


Figure 10. Commercial harvest of Southeast Alaska pink and coho salmon, 1960-2017 (A), and their correlation (B). Data are from Alaska Department of Fish and Game catch statistics.

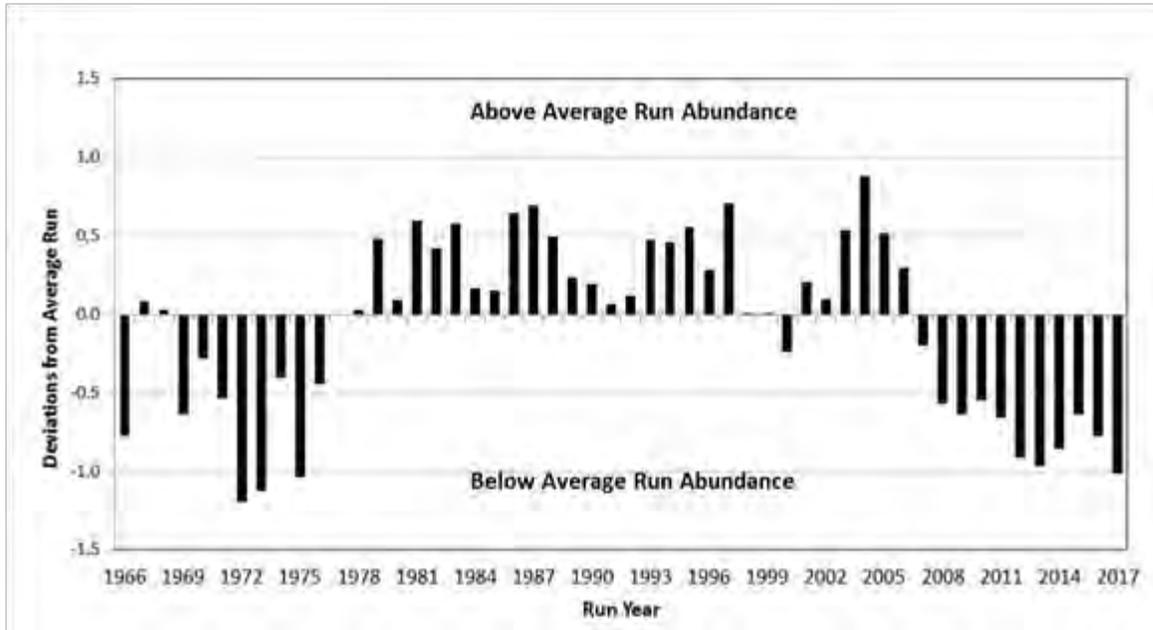


Figure 11—Average of standardized deviations from average run abundance for 21 stocks of Chinook salmon in Alaska (the Unalakleet, Nushagak, Goodnews and Kuskokwim in western Alaska; the Chena and Salcha on the Yukon River; the Canadian Yukon, the Chignik and Nelson on the Alaska Peninsula; the Karluk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

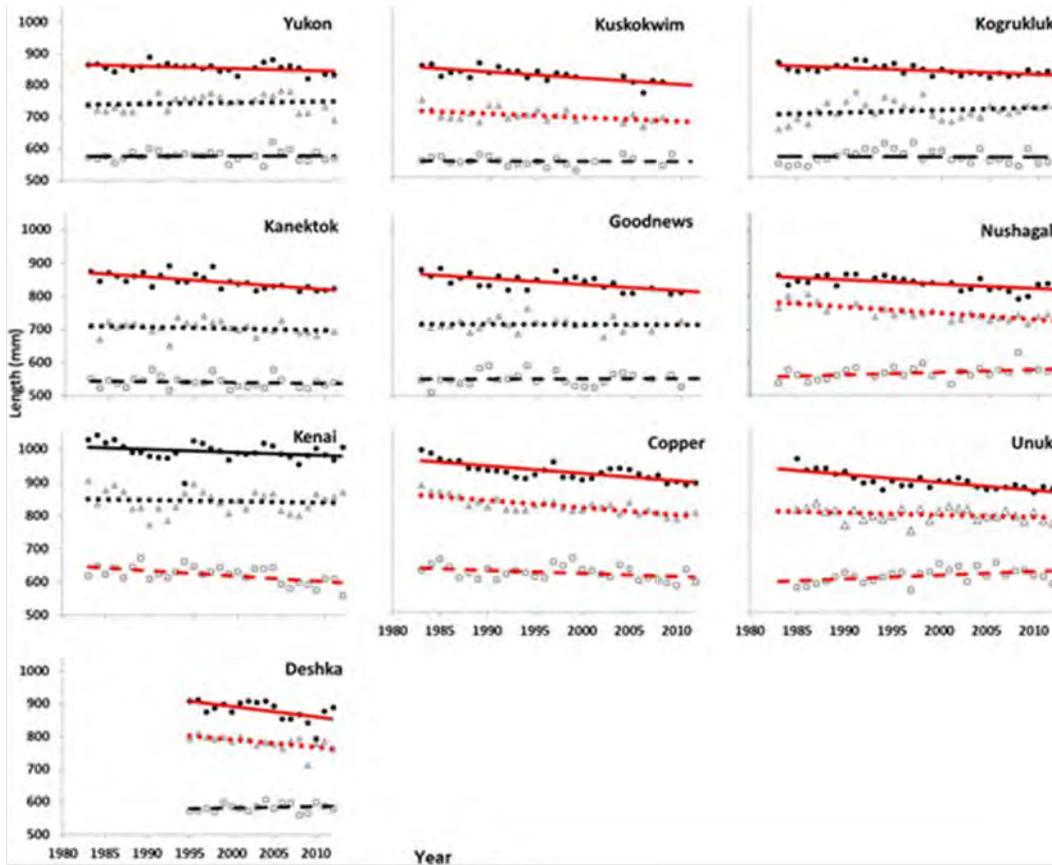


Fig 12. Linear regression of mean annual length (mm) Chinook salmon by stock, age class, and year. Closed circles and solid line = 4-ocean; triangles and dotted line = 3-ocean, open square and dashed line = 2-ocean. Red lines indicate slopes significantly different from zero ($P < 0.05$). From Lewis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

References

- ADF&G (Alaska Department of Fish and Game Chinook Salmon Research Team). 2013. Chinook salmon stock assessment and research plan, 2013. Alaska Dep. Fish Game Spec. Pub. No. 13-01. 56 pp.
- Agler, B. A., G. T. Ruggerone, and L. I. Wilson. 2011. Historical Scale Growth of Bristol Bay and Yukon River, Alaska, Chum Salmon (*Oncorhynchus keta*) in Relationship to Climate and Inter- and Intra-Specific Competition. North Pacific Anadromous Fish Commission Technical Report No. 8: 108-111, 2012
- ATA (Alaska Trollers Association). 2016. ATA logbook program. aktrollers.org/logbook.html
- Amoroso, R. O., M. D. Tillotson, and R. Hilborn. 2017. Measuring the net biological impact of fisheries enhancement: Pink Salmon hatcheries can increase yield, but with apparent costs to wild populations. *Canadian Journal of Fisheries and Aquatic Sciences* 74:1233–1242.
- Anderson, P. J., and J. F. Piatt. 1999. Community reorganization in the Gulf of Alaska following ocean climate regime shift. *Marine Ecol. Prog. Series* 189: 117-123.
- Aydin, K. Y. 2000. Trophic feedback and carrying capacity of Pacific salmon (*Oncorhynchus* spp.) on the high seas of the Gulf of Alaska. PhD. Dissertation. University Washington, Seattle. 413 pp.
- Batten, S. D., G. T. Ruggerone, and I. Ortiz. In press. Pink Salmon induce a trophic cascade in plankton populations in the southern Bering Sea and around the Aleutian Islands. *Fisheries Oceanography*. DOI: 10.1111/fog.12276.
- Beamish, R.J., K.L. Lange, C.M. Neville, R.M. Sweeting and T.D. Beacham. 2011. Structural patterns in the distribution of ocean- and stream-type juvenile Chinook salmon populations in the Strait of Georgia in 2010 during the critical early marine period. NPAFC Doc. 1354. 27 pp.
- Beamish, R. J., L. A. Weitkamp, L. D. Shaul, and V. I. Radchenko. 2018. Ocean ecology of coho salmon. Pages 391-453 in R. J. Beamish, ed., *The Ocean Ecology of Pacific salmon and trout*. American Fisheries Society, Bethesda, Maryland.
- Boldt, J.L. and Haldorson, L.J. (2002) A bioenergetics approach to estimating consumption of zooplankton by juvenile pink salmon in Prince William Sound, Alaska. *Alaska Fish. Res. Bull.* 9(2), 111–127.

- Briscoe, R.J. 2004. Factors affecting marine growth and survival of Auke Creek, Alaska coho salmon (*Oncorhynchus kisutch*). M.S. Thesis, Univ. Alaska, Fairbanks. 59 pp.
- Brodeur, R. D., and D. M. Ware. 1992. Long-term variability in zooplankton biomass in the subarctic Pacific Ocean. *Fisheries Oceanography* 1:32–38.
- Brodeur, R. A., and 9 others. 2007. Regional comparisons of juvenile salmon feeding in coastal marine waters off the west coast of North American. *AFS Symposium 57*: 198-204.
- Celewycz, A. G., J. D. Berger, J. Cusic, and M. Fukuwaka. 2006. High seas salmon coded wire-tag recovery data, 2006. NPAFC Document 978, 66p. NOAA, NMFS, Auke Bay Laboratory, Juneau. (Available at www.npafc.org).
- Chasco, B., I. C. Kaplan, A. Thomas, A. Acevendo-Gutierrez, D. Norem, M. J. Ford, M. B. Hanson, J. Scordino, S. Pearson, K.N. Marshall, and E.J. Ward. 2017. Estimates of Chinook salmon consumption in Washington State inland waters by four marine mammal predators from 1970-2015. *Canadian Journal of Fisheries and Aquatic Sciences* [dx.doi.org/10.1139/cjfas-2016-0203](https://doi.org/10.1139/cjfas-2016-0203).
- Clark, J. H., R. D. Mecum, A. McGregor, P. Krasnowski and A. M. Carroll. 2006. The Commercial Salmon Fishery in Alaska. *Alaska Fishery Research Bulletin* Volume 12, Number 1.
- Cooney, R. T. 1993. A theoretical evaluation of the carrying capacity of Prince William Sound, Alaska, for juvenile Pacific salmon. *Fisheries Research* 18: 77-87.
- CTC (Chinook Technical Committee). 2018a. Annual report of catch and escapement for 2017. Pacific Salmon Commission Technical Report TCCHINOOK 18-02. 235pp.
- CTC. (Chinook Technical Committee). 2018b. 2017 Exploitation Rate Analysis and Model Calibration Volume One. Pacific Salmon Commission Technical Report TCCHINOOK 18-01 V1. 153 pp.
- Davis, N.D. (2003). Feeding ecology of Pacific Salmon (*Oncorhynchus* spp.) in the central North Pacific Ocean and central Bering Sea, 1991–2000. Ph.D. Dissertation. Hokkaido University, Japan. 191 pp.
- DiLorenzo, E., Mantua, N. 2016. Multi-year persistence of the 2014/15 North Pacific marine heat wave. *Nature Climate Change*. Doi: 10.1038/nclimate3082.
- Drobny, P., B. Norcross, B. Holladay and N. Bickford. 2008. Identifying life history

characteristics of squid in the Bering Sea. Univ. Alaska, School Fish. Ocean Sci., NRPB Project 627 Final Rep. Fairbanks. 73 pp.

Duffy, E. J., and D. A. Beauchamp. 2011. Rapid growth in the early marine period improves the marine mortality of Chinook salmon (*Oncorhynchus tshawytscha*) in Puget Sound, Washington. *Can. J. Fish. Aquat. Sci.* 68: 232-240.

Farley, E.V., J.H. Moss, and R.J. Beamish. 2007. A review of the critical size, critical period hypothesis for juvenile Pacific salmon. *N. Pac. Anadr. Fish Comm. Bull.* 4: 311–317.

Farley, E. V., T. Beacham, and A. V. Bugaev. 2018. Ocean ecology of sockeye salmon. Pages 319-389 in R. J. Beamish, ed., *The Ocean Ecology of Pacific salmon and trout*. American Fisheries Society, Bethesda, Maryland.

Gaudet, D., R. Josephson, and A. Wertheimer. 2017. Precautionary Management of Alaska Salmon Fisheries Enhancement. Document for Marine Stewardship Council and Responsible Fisheries Management certification of Alaska salmon fisheries. Alaska Fisheries Development Foundation, Wrangell, Alaska. 45 pp.

Green, C. M., D. W. Jensen, G. R. Press, and E. A. Steele. 2005. Effects of environmental conditions during stream, estuary, and ocean residency of Chinook salmon return rates in the Skagit River. *Trans. Amer. Fish. Soc.* 134: 1562-1581.

Hanson, M. B., R.W. Baird, J.K.B. Ford, J. Hempelmann-Halos, D.M. Van Doornik, J.R. Candy, C.K. Emmons, G.S. Schorr, B. Gisborne, K.L. Ayres, S. K. Wasser, K.C. Balcomb, K. Balcomb-Bartok, J.G. Sneva, and M.J. Ford 2010. Species and stock identification of prey consumed by endangered southern killer whales in their summer range. *Endangered Species Research.* 11: 69-82.

Hard JJ, Gross MR, Heino M, Hilborn R, Kope RG, et al. (2008) Evolutionary consequences of fishing and their implications for salmon. *Evol Appl* 1: 388–408. doi: 10.1111/j.1752-4571.2008.00020.x PMID: 25567639

Hargreaves, N. B., and R. J. LeBrasseur 1985. Species selective predation on juvenile pink (*Oncorhynchus gorbuscha*) and chum salmon (*O. keta*) by coho salmon (*O. kisutch*). *Can. J. Fish. Aquat. Sci.* 42: 659-668.

Hard J. J., W.H. Eldridge, and K.A. Naish. 2009. Genetic consequences of size-selective fishing: implications for viability of Chinook salmon in the Arctic-Yukon-Kuskokwim region of Alaska. Pages 759-780 in C. C. Krueger and C.E. Zimmerman, editors, *Pacific salmon*:

ecology and management of western Alaska's populations. Am. Fish. Soc. Symposium 70. Bethesda, Maryland.

Healey, M. C. 1983. Coast-wide distribution and ocean migration patterns of stream- and ocean-type Chinook salmon, *Oncorhynchus tshawytscha*. Canadian Field Naturalist 97:427-433.

Healey, M. C. and W. R. Heard. 1984. Inter- and intra-population variation in the fecundity of chinook salmon (*Oncorhynchus tshawytscha*) and its relevance to life history theory. Can. J. Fish. Aquat. Sci. 41: 476-483.

Healey, M.C. 1991. Life history of Chinook Salmon (*Oncorhynchus tshawytscha*). Pages 311-394 in C. Groot and L. Margolis, editors. Pacific Salmon Life Histories. University of British Columbia Press, Vancouver.

Heard, W. R. 1991. Life history of Pink Salmon (*Oncorhynchus gorbuscha*). Pages 121–230 in C. Groot and L. Margolis, editors. Pacific salmon life histories. University of British Columbia Press, Vancouver.

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) Interactions of fisheries and fishing communities related to aquaculture. NOAA Tech. Memo. NMFS-F/spo-113.

Heard, W. R., and A. C. Wertheimer. 2011. Why Are Pink and Chum Salmon at Such High Abundance Levels in the Gulf of Alaska? NPAFC Technical Report 8: 9-12.

Helle, J.H., E.C. Martinson, D.M. Eggers, and O. Gritsenko. 2007. Influence of salmon abundance and ocean conditions on body size of Pacific salmon. N. Pac. Anadr. Fish Comm. Bull. 4: 289–298.

Hilborn, R., S. P. Cox, F. M. D. Gulland, D. G. Hankin, N. T. Hobbs, D. E. Schindler, and A. W. Trites. 2012. The effects of salmon fisheries on southern resident Killer Whales: final report of the independent science panel. Prepared with the assistance of D. R. Marmorek and A. W. Hall, ESSA Technologies Ltd., Vancouver, for National Marine Fisheries Service (Seattle) and Fisheries and Oceans Canada (Vancouver).

Hilborn, R., and D. Eggers. 2001. A review of the hatchery programs for Pink Salmon in Prince William Sound and Kodiak Island, Alaska: response to comment. Transactions of the American Fisheries Society 130:720–724.

Hiroi, O. 1998. Historical trends of stock conditions and salmon trends in Japan. North Pac. Anad. Fish Comm. Bull. 1: 23-27.

- Holtby, L. B., B. C. Andersen, and R. K. Kadowaki. 1990. Importance of smolt size and early ocean growth to interannual variability in marine survival of coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Fisheries and Aquatic Sciences* 47:2181-2194.
- Jeffrey, K. M., I. M. Côté, J. R. Irvine, and J. D. Reynolds. 2017. Changes in body size of Canadian Pacific salmon over six decades. *Canadian Journal of Fisheries and Aquatic Sciences* 74:191–201.
- Jorgenson, E.M. 2011. Ecology of cephalopod early life history in the Gulf of Alaska and Bering Sea. Ph.D. Thesis, Univ. Washington, Seattle. 193 pp.
- Karpenko, V.I. (2002) Review of Russian marine investigations of juvenile Pacific salmon. *N. Pac. Anadr. Fish Comm. Bull.* 3, 69–88.
- Katugin, O.N., G.A. Shevtsov, M.A. Zuev, A.M. Berkutova, and E.V. Slobodskoy. 2005. Spatial and seasonal distribution of the squid *Okutania anonycha* (Pearcy et Voss, 1963) (Cephalopoda: Gonatidae) in the northwestern Pacific Ocean and adjacent areas. *Ruthenica* 15: 65–79.
- Kobayashi, T. 1980. Salmon propagation in Japan. J.E. Thorpe (ed.). *Salmon ranching*, p. 91-107. Academic Press; London.
- LaCroix, J. J., A. C. Wertheimer, J. A. Orsi, M. V. Sturdevant, E. A. Fergusson, and N. A. Bond. 2009. A top-down survival mechanism during early marine residency explains Coho Salmon year-class strength in southeast Alaska. *Deep-Sea Research II: Topical Studies in Oceanography* 56:2560– 2569.
- Lewis, B., W. S. Grant, R. E. Brenner, and T. Hamazaki. 2015. Changes in size and age of Chinook Salmon *Oncorhynchus tshawytscha* returning to Alaska. *PLOS ONE* 10(6):e0130184.
- Mallick, M. J., M. D. Adkison, and A. C. Wertheimer. 2008. Variable effects of biological and environmental processes on Coho Salmon marine survival in Southeast Alaska. *Transactions of the American Fisheries Society* 138:846–860.
- Mantua, N. J., S. R. Hare, Y. Yang, J. M. Wallace, and R. C. Francis. 1997. A Pacific decadal climate oscillation with impacts on salmon production. *Bull. Amer. Meteor. Society* 78:1069-1080.
- Matkin, C. O., J. W. Testa, G. M. Ellis, and E. L. Saulitis. 2014. Life history and population dynamics of southern Alaska resident Killer Whales (*Orcinus orca*). *Marine Mammal Science* 30(2):460–479.

McKinnell, S. 2017. Atmospheric and oceanic extrema in 2015 and 2016 and their effect on North American salmon. Pacific Salmon Comm. Tech. Rep. No. 37: [88] p.

MMC (Marine Mammal Center). 2016. Stellar sea lion. Marine Mammal Center.
<http://www.marinemammalcenter.org/education/marine-mammal-information/pinnipeds/stellar-sea-lion/>

Moss, J. H., D. A. Beauchamp, A. D. Cross, K. W. Myers, E. V. Farley, J. M. Murphy, and J. H. Helle. 2005. Evidence for size-selective mortality after the first summer of ocean growth by pink salmon. *Transactions of the American Fisheries Society* 134:1313-1322

Murphy, J. M., K. G. Howard, J. C. Gann, K. Ceicel, W. D. Templin, C. M. Gutherie III. 2017. Juvenile Chinook salmon abundance in the northern Bering Sea: implications for future returns and fisheries in the Yukon River. *Deep-sea Research Part II: Topical Studies in Oceanography* 135: 156-167.

Mueter, F. J., B. J. Pyper, and R. M. Peterman. 2005. Relationships between coastal ocean conditions and survival rates of northeast Pacific salmon at multiple lags. *Transactions of the American Fisheries Society* 134:105–119.

Matkin, C. O., J. W. Testa, G. M. Ellis, and E. L. Saulitis. 2014. Life history and population dynamics of southern Alaska resident Killer Whales (*Orcinus orca*). *Marine Mammal Science* 30(2):460–479.

Meyers, K. W., A. G. Celewycz, and E. V. Farley, Jr. 2001. High seas coded-wire tag recovery data, 2001. (NPAFC Document 557) SAFS-UW-001. School of Aquatic and Fishery Science, Univ. Washington, Seattle, Wa. (Available at www.npafc.org).

Murphy, J. M. and W. R. Heard. 2002. Chinook salmon data storage tag studies in Southeast Alaska, N. Pac. Anad. Fish. Comm. Document 632. 16 pp. (Available at www.npafc.org).

Ohlberger, J., M. D. Scheuerell, and D. E. Schindler. 2016. Population coherence and environmental impacts across spatial scales; a case study of Chinook salmon. *Ecosphere* 7(4): e01333.

Olesiuk, P. F., M. A. Bigg, and G. M. Ellis. 1990. Life history and population dynamics of resident Killer Whales (*Orcinus orca*) in the coastal waters of British Columbia and Washington States. Report of the International Whaling Commission, Special Issue 12:209–243.

- Orsi, J. A., A. C. Wertheimer, M. V. Sturdevant, D. G. Mortensen, E. A. Ferguson, and B. L. Wing. 2004. Juvenile chum salmon consumption of zooplankton in marine waters of southeastern Alaska: a bioenergetics approach to implications of hatchery stock interactions. *Reviews in Fish Biology and Fisheries* 14(3): 335-359.
- Orsi, J. A., M. V. Sturdevant, J. M. Murphy, D. G. Mortensen, and B. L. Wing. 2000. Seasonal habitat use and early marine ecology of juvenile Pacific salmon in southeastern Alaska. *N. Pac. Anadr. Fish Comm. Bull. No. 2*:111-122.
- Orsi, J.A., and A.C. Wertheimer. 1995. Marine vertical distribution of juvenile Chinook salmon and coho salmon in southeastern Alaska. *Trans. Am. Fish. Soc.* 124: 159-169.
- Parker, R.R. 1968. Marine mortality schedules of pink salmon of the Bella Coola River, Central British Columbia. *J. Fish. Res. Board Can.* 25: 757–794.
- Parker, R. R. 1971. Size selective predation among juvenile salmonid fishes in a British Columbia inlet. *J. Fish. Res. Bd. Canada* 28: 1503-1510.
- Pauley, D., V. Chrisensen, and N. Haggan. 1996. Mass-balance models of Northeastern Pacific ecosystems. University British Columbia Fisheries Centre Research Report 4(1).
- Peterman R.M., D. Marmorek, B. Beckman, M. Bradford, N. Mantua, B.E. Riddell, M. Scheuerell, M. Staley, K. Wieckowski, J.R. Winton, C.C. Wood. 2010. Synthesis of evidence from a workshop on the decline of Fraser River sockeye. June 15-17, 2010. A Report to the Pacific Salmon Commission, Vancouver, B.C.
- Peterman, R. M. 1984. Cross-correlation between reconstructed ocean abundances of Bristol Bay and British Columbia sockeye salmon. *Can. J. Fish. Aquat. Sci.* 41: 1825-1829.
- Pinkerton, E. (1994). Economic and management benefits from the coordination of capture and culture fisheries: the case of Prince William Sound pink salmon. *North American Journal Fisheries Management*, **14**, 262-277.
- Pyper, B. J., F. J. Mueter, and R. M. Peterman. 2005. Acrossspecies comparisons of spatial scales of environmental effects on survival rates of Northeast Pacific salmon. *Transactions of the American Fisheries Society* 134:86–104.
- Quinn, T. P. 2005. The behavior and ecology of Pacific salmon and trout. American Fisheries Society, Bethesda., Md. 378 pp.
- Radchenko, V. I. and I. I. Glebov. 1998. Some data on Pacific salmon vertical distribution in the Bering Sea based on benthic trawl surveys. *Vopr. Ichthyologii* 38:627-632.
- Radchenko, V. I., R. J. Beamish, W. R. Heard, and O. S. Temnykh. 2018. Ocean ecology of pink salmon. Pages 15-160 in R. J. Beamish, editor. The ocean ecology of Pacific salmon and trout. American Fisheries Society, Bethesda.

- Reid, G. M. 1961. Stomach content analysis of troll-caught king and coho salmon, southeastern Alaska, 1957–58. U.S. Fish and Wildlife Service Special Scientific Report Fisheries 379.
- Riddell, B. E., and 9 others. 2018. Ocean ecology of Chinook salmon. Pages 555-702 in R. J. Beamish, ed., *The Ocean Ecology of Pacific salmon and trout*. American Fisheries Society, Bethesda, Maryland.
- Ricker, W. E. 1976. Review of the rate of growth and mortality of Pacific salmon in salt water, and non-catch mortality caused by fishing. *Journal of the Fisheries Research Board of Canada* 33:1483–1524.
- Ricker, W.E. 1981. Changes in the Average Size and Average Age of Pacific Salmon. *Can. J. Fish. Aquat. Sci.* 38: 1636-1656.
- Ruggerone, G.T., M. Zimmermann, K.W. Myers, J.L. Nielsen, and D.E. Rogers. 2003. Competition between Asian pink salmon and Alaskan sockeye salmon in the North Pacific Ocean. *Fish. Oceanogr.* 3: 209–219.
- Ruggerone, G.T., & Irvine, J.R. (2018). Number and biomass of natural- and hatchery-origin pink, chum, and sockeye salmon in the North Pacific Ocean, 1925-2015. *Mar Coast Fish.* 10: 152-168.
- Russell, C. W., J. Botz, S. Haught, and S. Moffitt. 2017. 2016 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 17-37, Anchorage
- Sharma, R., L. A. Velez-Espino, A. C. Wertheimer, N. Mantua, and R. Francis. 2013. Relating spatial and temporal scales of climate and ocean variability to survival of Pacific Northwest Chinook salmon (*Oncorhynchus tshawytscha*). *Fisheries Oceanography* 22: 14-31.
- Shaul, L. D., and H. J. Geiger. 2016. Effects of climate and competition for offshore prey on growth, survival, and reproductive potential of Coho Salmon in Southeast Alaska. *North Pacific Anadromous Fish Commission Bulletin* 6:329–347.
- Shuntov, V. P., O. S. Temnykh, and O. A. Ivanov. 2017. On the persistence of stereotypes concerning the marine ecology of Pacific salmon (*Oncorhynchus* spp.). *Russian Journal of Marine Biology* 43:1–28.
- Springer, A. M., and G. B. van Vliet. 2014. Climate change, Pink Salmon, and the nexus between bottom-up and top-down control in the subarctic Pacific Ocean and Bering Sea. *Proceedings of the National Academy of Sciences of the USA* 111:E1880–E1888.

Stopha, M. 2018. Alaska fisheries enhancement annual report 2017. Alaska Department of Fish and Game, Regional Information Report 5J18-02, Anchorage.

Sturdevant, M. V., J. A. Orsi & E. A. Fergusson (2012): Diets and Trophic Linkages of Epipelagic Fish Predators in Coastal Southeast Alaska during a Period of Warm and Cold Climate Years, 1997–2011, *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science*, 4:1, 526-545.

Trudel, M., J. Fisher, J. A. Orsi, J.F. T. Morris, M. E. Thiess, R. M. Sweeting, S. Hinton, E. A. Fegurson, and D. W. Welch. 2009. Distribution and migration of juvenile Chinook salmon derived from coded wire tag recoveries along the continental shelf of North America. Pages 157-182 in C. B. Grimes, R. D. Brodeur, L. J. Haldorson, and S. M. McKinnen, editors. *The ecology of juvenile salmon in the northeast Pacific Ocean: regional comparisons*. Am. Fish. Soc., Symposium 57. Bethesda, Maryland.

Walker, R.J., V.V. Sviridov, S. Uawa, and T. Azumaya. 2007. Spatio-temporal variation in vertical distributions of Pacific salmon in the ocean. *North Pacific Anadromous Fish Commission Bulletin* 4:193-201.

Walker, R.V. and K. W. Myers. 2009. Behavior of Yukon River Chinook salmon in the Bering Sea as inferred from archival tag data. *North Pacific Anadromous Fish Commission Bulletin* 5: 121-130.

Welch, D. W., Y. Ishida, and K. Nagasawa. 1998. Thermal limits and ocean migration of sockeye salmon (*Oncorhynchus nerka*): long-term consequences of global warming. *Can. J. Fish. Aquatic Sciences* 55: 937- 948.

Wertheimer A. C., W. R. Heard, and W. W. Smoker. 2004a. Effects of hatchery releases and environmental variation on wild stock productivity: consequences for sea ranching of pink salmon in Prince William Sound, Alaska. Pages 307-326 in K. M. Leber, S. Kitada, T. Svasand, and H. L. Blankenship (eds.), *Stock Enhancement and Sea Ranching 2*. Blackwell Science Ltd, Oxford.

Wertheimer A. C., W. W. Smoker, J. Maselko, and W. R. Heard. 2004b. Does size matter: environmental variability, adult size, and survival of wild and hatchery pink salmon in Prince William Sound, Alaska. *Reviews in Fish Biology and Fisheries* 14(3): 321-334.

Wertheimer, A. C., and E. V. Farley. 2012. Do Asian Pink Salmon Affect the Survival of Bristol Bay Sockeye Salmon? *North Pacific Anadromous Fish Commission Technical Report No. 8: 102-107*, 2012 *North Pacific Anadromous Fish Commission Technical Report No. 8: 102-107*,

2012 North Pacific Anadromous Fish Commission Technical Report No. 8: 102-107.

Wertheimer, A. C., J. A. Orsi, E. A. Fergusson, and J.M. Murphy. 2017. Forecasting pink salmon harvest in southeast Alaska from juvenile salmon abundance and associated biophysical parameters: 2016 returns and 2017 forecast. NPAFC Doc. 1740. 27 pp. Auke Bay Lab., Alaska Fisheries Science Center, NOAA, NMFS. (Available at <http://www.npafc.org>).

Wing, B. L. 2006. Unusual fish and invertebrates observed in the Gulf of Alaska, 2004-2005. Pisces Press 14: 26-29.

Submitted by: Phillip Null

Community of Residence: Kodiak

I support Proposal 182 to establish bow fishing as a lawful sport fishing gear. This initiative will provide increased recreational opportunities for anglers with a much more selective method of fishing than other currently authorized gear types. Adoption of a new legal gear type will increase recreational opportunities for many, promoting healthy lifestyles, community engagement and connection with nature. This proposal aligns with Alaska's traditions of responsible fishing and respect for our natural resources, making it a positive step forward for the state and its fishing community.

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 Tracey Nuzzi, and I live in Cordova, Alaska. I am a commercial fisherman and also a subsistence and sport fisherman and hunter.

If we were to adopt Proposals 170, 171, or 172, they would undermine 50 years of thoughtful hatchery production decisions made by fishermen, processors, biologists, communities, and others. These cuts would jeopardize income, job security, and our whole community that relies on these fish.

Salmon is the currency of our community—its history and industry.

In the 1970s, when fishing was very poor and making a living in Cordova was a struggle, the whole community came together to form the legislative concept for private nonprofit hatcheries. We acquired an old cannery site in Prince William Sound and learned about egg boxes and aquaculture from people in Canada to start Prince William Sound's first hatchery.

The City of Cordova sacrificed a major grant intended for its septic system to help start PWSAC. Fishermen donated hours and volunteer time to set up the first facility. Processors donated equipment. While it is a much larger organization now, it is still a community project.

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,

Tracey Nuzzi
Cordova, Alaska



Stephen OBrien, owner of
FV Uyak (Kodiak Boat) and Hollywood Fish camp (Kodiak Set Net)

Comments SUPPORTING proposals;
166 and 167

To whom it may concern,

I am here today to show SUPPORT on proposals 166 and 167.

I am a local Kodiak resident who has participated in the Kodiak Jig fishery for the past 11 years. I depend on the jig fishery to maintain a stable income for my family and crew during the winter and spring.

Each year starting in January I monitor the jig harvest rate on ADFG website. As the weeks pass, I am able to witness the total pounds and number of landings on jig cod deliveries add up. Early on in the season in January and February Jig deliveries rarely come in above 20k pounds. Mainly because the water is still cold and the cod are deep. That coupled with the short days makes it challenging to harvest jig cod that time of year. In 2025 there was a drastic increase in suspicious landings in Kodiak early in the winter that went on the Jig quota. There were numerous landings that broke the normal pattern of winter jig deliveries in Kodiak, multiple deliveries reaching over 40k lbs, which is unheard of for Kodiak jig deliveries in January and February. After further investigation it was concluded that all the unusual deliveries were coming in on long line boats that had claimed to be jigging. It was witnessed by the state troopers and cannery workers that boarded these boats that there were multiple slinky pots on deck along with snap on hooks (used for long lining) that were still in some of the cods' mouths. Current regulation does not prohibit long line gear or slinky pots on boats while jigging so there were no laws that had been broken. The only way to catch a vessel long lining on a jig trip is for the state trooper to physically catch these said vessels in the act. And even if they are caught in the act the said vessels can claim they are on a long line trip, when in actuality they were planning to deliver on the jig quota. This creates a situation where it is nearly impossible for local law enforcement to know exactly which gear type and which quota is being targeted during a trip by these long line vessels. This situation needs to be addressed to protect and maintain an honest and legal jig fishery in Kodiak.

Proposals 166 and 167 would enable law enforcement to keep the jig fishery honest and protect the jig fishery quota from fraudulent fishing activities.

Respectfully,
Stephen OBrien

Stephen OBrien, owner of
FV Uyak (Kodiak Boat) and Hollywood Fish camp (Kodiak Set Net)

Comments NOT IN SUPPORT of proposals 170,171 and 172.

To Whom It May Concern:

I strongly oppose Proposals 170, 171, and 172.

I am a lifelong salmon fisherman in Kodiak. Salmon fishing isn't just my job — it's how I provide for my family and stay connected to the community I've grown up in. I rely heavily on salmon runs, including hatchery fish, to make a living. In Kodiak, hatchery production plays a critical role in creating stability for fishermen, especially given our dramatic odd- and even-year swings in run strength. In the weaker cycle years, hatchery fish help smooth out those fluctuations and provide much-needed economic consistency for harvesters, processors, and local businesses.

There is no data demonstrating that Alaska hatchery pink and chum salmon are causing declines in Western Alaska salmon stocks. Proposals that call for production cuts without clear scientific evidence, measurable objectives, or a defined evaluation process create unnecessary risk and uncertainty for fishermen like me.

I oppose Proposal 171, which circumvents the established ADF&G permitting and review process. I also oppose Proposal 172 is premature and unnecessary, particularly given that there are no plans to expand pink or chum programs. Decisions about hatchery production should continue to be made at the regional level through public process, Regional Planning Teams, and ADF&G's established scientific review and permitting framework.

Respectfully,
Stephen OBrien

Submitted by: Tyler OBrien

Community of Residence: Kodiak Alaska

My name is Tyler O'Brien from Kodiak. I have the fishing vessel Loki. I support proposal 166 and I support proposal 167 to protect our cod jigging fishery. I have participated in this fishery for almost 15 years and rely on it to make a living here in Kodiak. There has been obvious cheating happening in the last couple years and there's nothing enforcement can do about it with the current laws. Last year I witnessed long line boats delivering cod as jig fish with long line hooks and snaps still in the fish coming out of the pump at the cannery. Enforcement witnessed this too but their hands were tied due to the language of the rules. Please help us change this and make this fishery fair for everyone. Last year the jig quota was caught and season was closed before most jig boats were able to turn a decent profit while long line boats were coming in loaded.

Submitted by: Elaine O'Brien

Community of Residence: Sequim

I urge the Board to pass proposals 11, 163, 164 and 165.

It's time to put an end to discussions about the definition of so-called pelagic/midwater trawl gear that are ongoing with federeral fishery managers. Pelagic means in the middle of the water column. Period. The State of Alaska needs to step up and stand by that defined gear requirement.

The North Pacific Fishery Management Council's own scientific staff reports that pelagic gear is hard on bottom up to/more than 85% of the time on average. That means "midwater" gear continues to fish in sensitive zones that are off limits to bottom trawl gear - because of "definition" discrepancies on the gear's make-up and performance!

For years, all other Alaska fishery users - subsistence, commercial, sport, personal use - have seen bag limits and fishing time reduced. The trawl sector must be held to the same standards to protect Alaska's fisheries, ecosystems and coastal communitites.

Please note that at a time when Alaska is desperate for sustainable. economic resources - nearly 75% of the value of ALL groundfish leaves the state, primarily taken by Seattle-based trawlers. (It's 82% of the value for pollock.)

https://reports.psmfc.org/akfin/f?p=501:910:6780133202690:INITIAL#LINK_URL#

Submitted by: Jim & Dee Dee O'Brien

Hollywood fish camp

Community of Residence: Anchorage

I strongly oppose Proposals 170, 171, and 172.

I am a lifelong salmon fisherman in Kodiak. Salmon fishing isn't just my job — it's how I provide for my family and stay connected to the community I've grown up in. I rely heavily on salmon runs, including hatchery fish, to make a living. In Kodiak, hatchery production plays a critical role in creating stability for fishermen, especially given our dramatic odd- and even-year swings in run strength. In the weaker cycle years, hatchery

fish help smooth out those fluctuations and provide much-needed economic consistency for harvesters, processors, and local businesses.

There is no data demonstrating that Alaska hatchery pink and chum salmon are causing declines in Western Alaska salmon stocks. Proposals that call for production cuts without clear scientific evidence, measurable objectives, or a defined evaluation process create unnecessary risk and uncertainty for fishermen like me.

I also oppose Proposal 171, which circumvents the established ADF&G permitting and review process. Proposal 172 is premature and unnecessary, particularly given that there are no plans to expand pink or chum programs. Decisions about hatchery production should continue to be made at the regional level through public process, Regional Planning Teams, and ADF&G's established scientific review and permitting framework.

721 Depot Drive
Anchorage, AK 99501



www.oceanconservancy.org

March 2, 2026

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

Dear Chair and Board Members:

Ocean Conservancy¹ submits the following comments in support of Proposals 163, 164, and 165. These proposals, both individually and collectively, will advance enforceability and accountability in state water trawl fisheries, will reduce habitat and bycatch impacts and support long-term fishery and ecosystem sustainability.

Benthic habitat supports subsistence and commercial fisheries, is the foundation of ecosystem diversity and function and is critical to a myriad of species of crab, fish, marine mammals and the Tribes whose way of life is inextricably linked to our oceans. Bottom trawling is recognized as one of the most intense forms of widespread benthic disturbance throughout the world^{2,3} and has significant negative impacts to the seafloor and benthic ecosystem function by reducing the density of organisms that cycle nutrients,^{4,5} reducing the density of faunal biomass with each pass,⁶ impacting biogeochemical cycles,⁷ impairing nutrient fluxes,³ and damaging biogenic bottom structure necessary for demersal fish throughout various life stages.⁸ Areas with high trawling footprints also exhibit reduced carbon storage capabilities.⁹

¹ Ocean Conservancy is a non-profit organization working to protect the ocean from today's greatest global challenges. Together with our partners, we create evidence-based solutions for a healthy ocean and the wildlife and communities that depend on it.

² Kaiser, M.J., Ramsay, K., Richardson, C.A., Spence, F.E. and Brand, A.R., 2000. Chronic fishing disturbance has changed shelf sea benthic community structure. *Journal of Animal Ecology*, 69(3), pp.494-503.

³ Pitcher, C.R., Hiddink, J.G., Jennings, S., Collie, J., Parma, A.M., Amoroso, R., Mazon, T., Sciberras, M., McConnaughey, R.A., Rijnsdorp, A.D. and Kaiser, M.J., 2022. Trawl impacts on the relative status of biotic communities of seabed sedimentary habitats in 24 regions worldwide. *Proceedings of the National Academy of Sciences*, 119(2), p.e2109449119.

⁴ Olsford, F., Schaanning, M.T., Widdicombe, S., Kendall, M.A. and Austen, M.C., 2008. Effects of bottom trawling on ecosystem functioning. *Journal of Experimental Marine Biology and Ecology*, 366(1-2), pp.123-133.

⁵ Bradshaw, C., Jakobsson, M., Brüchert, V., Bonaglia, S., Mörth, C.M., Muchowski, J., Stranne, C. and Sköld, M., 2021. Physical disturbance by bottom trawling suspends particulate matter and alters biogeochemical processes on and near the seafloor. *Frontiers in Marine Science*, 8, p.683331.

⁶ Hiddink, J.G., Jennings, S., Sciberras, M., Szostek, C.L., Hughes, K.M., Ellis, N., Rijnsdorp, A.D., McConnaughey, R.A., Mazon, T., Hilborn, R. and Collie, J.S., 2017. Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. *Proceedings of the National Academy of Sciences*, 114(31), pp.8301-8306.

⁷ Pusceddu, A., Bianchelli, S., Martín, J., Puig, P., Palanques, A., Masqué, P. and Danovaro, R., 2014. Chronic and intensive bottom trawling impairs deep-sea biodiversity and ecosystem functioning. *Proceedings of the National Academy of Sciences*, 111(24), pp.8861-8866.

⁸ Pauly, D., Christensen, V., Guénette, S., Pitcher, T.J., Sumaila, U.R., Walters, C.J., Watson, R., Zeller, D., 2002. Towards sustainability in world fisheries. *Nature* 418, 689-695.

⁹ Zhang, W., Porz, L., Yilmaz, R., Wallmann, K., Spiegel, T., Neumann, A., Holtappels, M., Kasten, S., Kuhlmann, J., Ziebarth, N. and Taylor, B., 2024. Long-term carbon storage in shelf sea sediments reduced by intensive bottom trawling. *Nature Geoscience*, pp.1-9.

State trawl fisheries must be held to equal (if not greater) standards with regards to accountability and enforcement due to the significant habitat and bycatch impacts associated with state trawl fishing operations. State regulations currently define pelagic trawl gear as gear that *does not operate in contact with the seabed*. However, there is no compliance pathway or requirement to ensure state trawl fisheries operate within these regulatory standards for bottom contact. Meanwhile, the best available science confirms that trawl nets are estimated to contact the bottom 20-60% of the time for “pelagic” trawl catcher vessels (CV) and 70-100% for “pelagic” trawl catcher processors (CP). In the Gulf of Alaska, where a 10% bottom contact limit is in place (but not enforced), bottom contact estimates for CVs are estimated at 40%.¹⁰

The current management approach to regulating trawling in state waters therefore results in some of the largest fisheries in state waters being allowed to operate out of compliance with current law due to lack of enforcement of the standard for bottom contact. This erodes state regulatory credibility, leads to ineffective enforcement, and creates elevated and unaccounted-for risks to benthic habitat and non-target species, including salmon and crab. Proposals 163, 164, and 165 address this fundamental problem directly and will result in a more robust state management framework that provides for accountability and enforceability to ensure pelagic trawl fisheries in Alaska operate in state waters as truly as midwater fisheries.

Proposal 163 will increase transparency and accountability for trawl fisheries by treating trawl gear as bottom-contact gear unless operators can demonstrate, through enforceable verification methods, that the gear is not fishing on the seafloor. Proposal 164 builds on Proposal 163 and requires seafloor monitoring technology on pelagic trawl gear to verify compliance with state regulations. We support Proposal 164 as a critical accountability tool and practical verification method that will ensure the existing state pelagic definition is enforceable and that habitat impacts are reduced in state trawl fisheries. Proposal 165 requires salmon excluders in all pelagic trawl nets and will reduce bycatch impacts to salmon. Trawl fleets are the primary source of bycatch of multiple salmon species, many of which are experiencing significant declines (chum, Chinook). It is the state’s responsibility to minimize bycatch of salmon as a keystone species that is critical for food security, subsistence use and traditional ways of life across Alaska.

In summary, we strongly support Proposals 163, 164, and 165 as tangible and structured pathways to increase accountability and enforceability in state trawl fisheries while reducing habitat and bycatch impacts. This process can be informed and strengthened through Tribal and stakeholder engagement as well as the incorporation of available bottom contact sensor and salmon excluder technology. Thank you for your consideration of our comments.

Sincerely,



‘Wáahlaal Gíidaak Barbara Blake (Xaadas/Lingít/Ahtna)
Vice President, Arctic & Northern Waters

¹⁰ Zeleski et al. 2022. [2022 Evaluation of Fishing Effects on Essential Fish Habitat](#). NOAA.

175 South Franklin Street, Suite 418
Juneau, Alaska 99801 USA

+907.586.4050
OCEANA.ORG

March 2, 2026

Alaska Department of Fish and Game
Board of Fisheries
PO Box 115526
Juneau, AK 99811

RE: Support for Proposals 163, 164, and 165

Dear Madam Chair Märit Carlson-Van Dort and Members of the Alaska Board of Fisheries:

Oceana urges the Board to support Proposals 163, 164, and 165 proposed by The Alaska Healthy Habitat Alliance. These proposals address pelagic (midwater) trawl gear definitions, seafloor contact monitoring, and salmon bycatch mitigation in Alaska state waters (0–3 nautical miles from shore). Together, they clarify regulatory expectations, strengthen enforcement, and reduce risks to benthic habitat and salmon populations.

Alaska Administrative Code 5 AAC 39.105 clearly establishes that pelagic trawl gear may not operate in contact with the seabed.¹ Pelagic trawls differ from groundfish bottom trawls primarily in that the trawl doors that keep the net open are designed to ‘fly’ above the seafloor instead of dragging along it. Unlike bottom trawls, pelagic trawls are not equipped with mitigating mechanisms such as rollers, discs, or bobbins intended to reduce impact during bottom contact. When pelagic gear operates along the seabed, weight and towing force can be applied over concentrated surfaces. The federal Gulf of Alaska Fishery Management Plan acknowledges these effects, stating:

Non-living structures may be more affected by pelagic trawl footropes than by bottom trawl footropes because of the continuous contact and smaller, more concentrated, surfaces over which weight and towing force are applied...pelagic trawls have an almost entirely smoothing effect [on the seafloor].²

Despite Alaska’s regulatory definition of pelagic trawl gear, analyses and fleet testimony indicate that pelagic trawl gear frequently contacts the seafloor in practice. Gulf of Alaska pelagic trawls are typically 50 to 100 meters wide, and the National Marine Fisheries

¹ Alaska Administrative Code 5 AAC 39.105. Types of legal gear.

² Appendix F, FMP for Groundfish of the GOA Management Area. [GOAfmppAppendix.pdf \(npfmc.org\)](http://GOAfmppAppendix.pdf(npfmc.org))

Service (NMFS) has quantified the proportion of that nominal swept area where the gear interacts with the seabed. For pelagic trawls in the Gulf of Alaska targeting pollock and slope rockfish, NMFS estimates that seabed contact occurs across 0 to 40% of the swept area, depending on vessel type and operating conditions.³ For smaller Sand Point pelagic trawl catcher vessels, NMFS determined that seabed contact occurred across 100% of the fished area.⁴ These findings demonstrate a clear mismatch between the regulatory definition of pelagic trawl gear and its documented performance on the water.

These federal estimates are directly relevant to Alaska state waters because parallel pelagic trawl pollock fisheries in the Central and Western Gulf of Alaska (Kodiak, Chignik, and South Alaska Peninsula Areas) operate concurrently with the adjacent federal fisheries, and vessels may fish across the state–federal boundary during the same season using the same trawl gear.⁵ Federally permitted vessels routinely participate in both federal and parallel fisheries during the same openings, subject to largely consistent management measures. As a result, seafloor contact rates observed in federal waters by NMFS provide a meaningful indicator of how pelagic trawl gear is likely to perform in state waters.

Impacts of Seafloor Contact on Benthic Habitat

Figure 1 shows that most areas are open to pelagic trawling, including Prince William Sound. Federal reports and NOAA surveys in Prince William Sound have documented multiple benthic invertebrate groups characteristic of structure-forming habitats, including sponges, stony corals (e.g., *Caryophyllia* spp.), gorgonian corals such as red tree corals, soft corals, and similar taxa.^{6,7}

³ Zaleski, M., T.S. Smeltz, S. Rheinsmith, J.L. Pirtle, and G.A. Harrington. 2022 Evaluation of Fishing Effects on Essential Fish Habitat January 2023. NPFMC C4 EFH Component 2. Fishing Effects Evaluation (February 2023)

⁴ Zaleski, M, TS Smeltz, and S Rheinsmith et al. (February 2023). 2022 Evaluation of Fishing Effects on Essential Fish Habitat. January 2023. NPFMC C4 EFH Component 2 Fishing Effects Evaluation at Table A2.1

⁵ Alaska Department of Fish and Game, “Current CGOA Pollock Fishery in State Waters.”

https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/cgoapollockworkgroup/pdfs/cgoa_fishery.pdf

⁶ NOAA Office of Ocean Exploration and Research, *Seascope Alaska 5 Expedition*, Dive 19 (Lone Island, Prince William Sound) <https://oceanexplorer.noaa.gov/explorations/>

⁷ Cimberg, R.L., T. Gerrodette, and K. Muzik. 1981. *Habitat Requirements and Expected Distribution of Alaska Coral*. Outer Continental Shelf Environmental Assessment Program, Research Unit 601. Final Report, October 1981. U.S. Department of the Interior. <https://www.govinfo.gov/content/pkg/GOVPUB-I-5b25276401e812e05c5de98b45b57123/pdf/GOVPUB-I-5b25276401e812e05c5de98b45b57123.pdf>

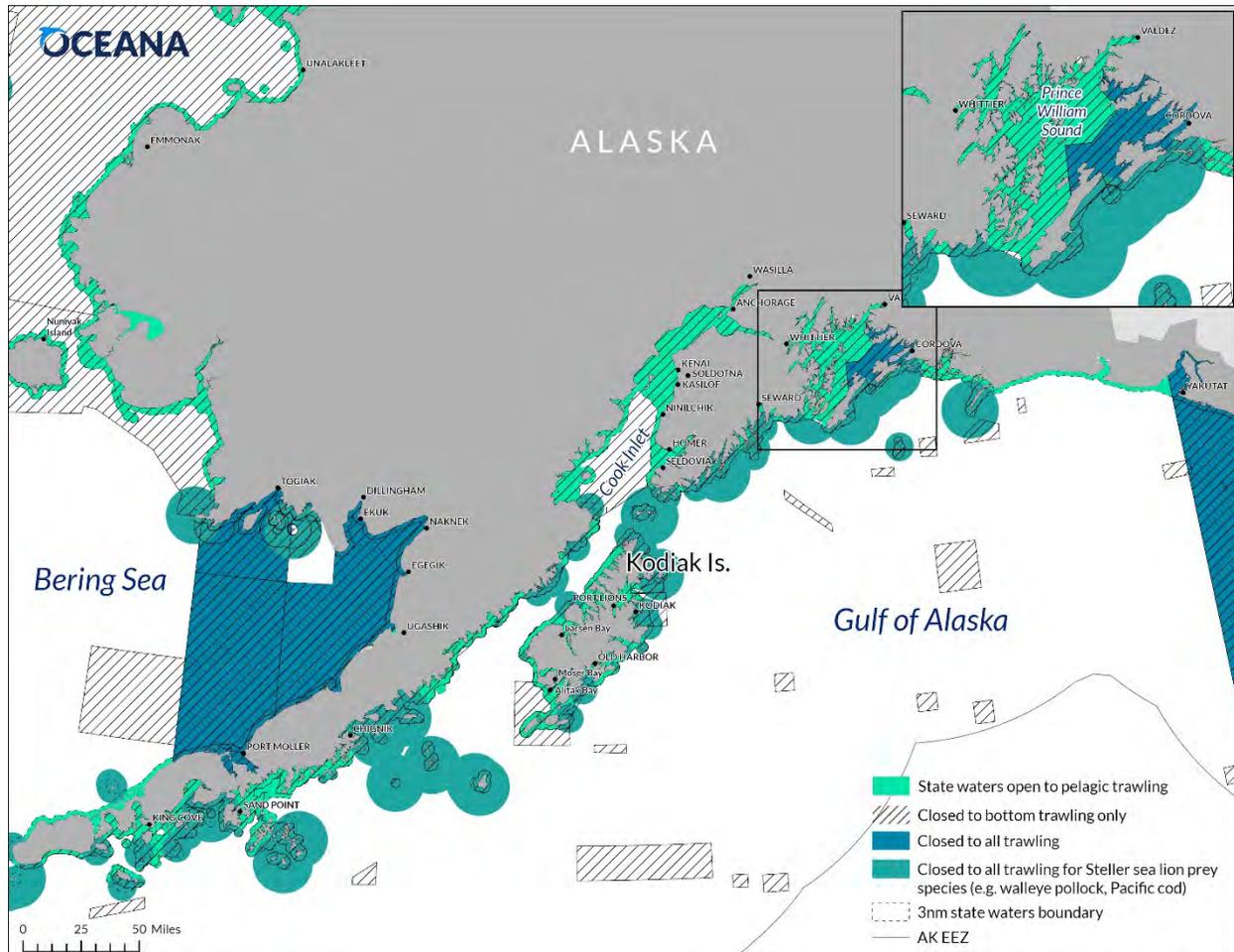


Figure 1. Spatial distribution of trawl regulations in marine waters off Alaska, including state waters open to pelagic trawling, bottom-trawl-only closures, full trawl (pelagic and bottom) closures, and Steller sea lion (SSL) prey species closures. The 3 nautical mile state waters boundary and U.S. Exclusive Economic Zone (EEZ) are shown for regulatory context.

The ecological consequences of repeated seafloor contact are well established. The National Academy of Sciences Consensus Study Report,⁸ “Effects of Trawling & Dredging on Seafloor Habitat” reflects scientific consensus from hundreds of studies worldwide. The study concluded that trawling on the seafloor reduces the complexity, productivity, and three-dimensional structure of seafloor habitats by smoothing bedforms, eliminating bottom roughness, and destroying structures like sponges and corals. There have not been new studies that refute this scientific consensus. In fact, trawling on the seafloor is the most

⁸ National Research Council. 2002. Effects of Trawling and Dredging on Seafloor Habitat. Washington, DC: The National Academies Press. <https://doi.org/10.17226/10323>

widespread cause of reduced habitat complexity along the North American continental shelf and slope.⁹ With heavy chain footropes, pelagic trawl gear contacting the seafloor may cause damage equal to or greater than gear specifically engineered for bottom contact.

Deep-sea corals and sponges, which occur in Alaska state waters, epitomize some of the most sensitive biogenic habitats because they are long-lived, typically inhabit low-disturbance habitats, and are highly vulnerable to disturbance. Cold-water corals are known to live for hundreds, or even thousands, of years.¹⁰ For example, Risk et al. (2002)¹¹ showed ages of over 300 years for red tree corals (*Primnoa resedaeformis*), a species that NOAA has documented in Alaska state waters open to pelagic trawling. Heikoop et al. (2002)¹² found that deep sea corals (*Primnoa* spp.) in Alaska and elsewhere have lifespans of several centuries. Roark et al. (2005)¹³ used radiocarbon dating techniques to conclude that bamboo corals from the Gulf of Alaska are long-lived (75–126 years). Sponges present in the Alaska region are known to live for hundreds of years. Leys and Lauzon (1998)¹⁴ found large deep water hexactinellid sponges to be 220 years old with average growth rates of 1.98 cm/year. These sponges are found throughout Alaska, particularly in the Aleutian Islands and Gulf of Alaska. Knowlton and Highsmith (2000)¹⁵ found that *Halichondria panicea*, a sponge found in the Gulf of Alaska, is also long-lived.

The approximately 70 species of cold-water corals documented throughout the Gulf of Alaska¹⁶ help to create complex “coral gardens” that provide habitat for invertebrates such as basket stars and anemones, as well as commercially important species including rockfishes, cod, and flatfishes. Fish and crab use coral habitat for shelter and feeding sites because there is often increased prey abundance. Some rockfishes, such as yelloweye

⁹ *Id.* NRC 2002.

¹⁰ Prouty et al. 2017. Age, Growth Rates, and Paleoclimate studies in deep-sea corals of the U.S. In: Hourigan TF, Etnoyer PJ, Cairns SD (eds.). The State of Deep-Sea Coral and Sponge Ecosystems of the United States. NOAA Technical Memorandum NMFS-OHC-4. Silver Spring, MD.

¹¹ Risk, M. H., J. M. Heikoop, M. G. Snow, and R. Beukens. 2002. Lifespans and growth patterns of two deep-sea corals: *Primnoa resedaeformis* and *Desmophyllum cristagalli*. *Hydrobiologia* 471: 125–131; Roark, E. B., T. P. Guilderson, S. FloodPage, R. B. Dunbar, B. L. Ingram, S. J. Fallon, and M. McCulloch. 2005. Radiocarbon-based ages and growth rates of bamboo corals from the Gulf of Alaska, *Geophys. Res. Lett.* 32: 5.

¹² Heikoop, J., D. Hickmott, M. Risk, C. Shearer and V. Atudorei (2002). Potential climate signals from the deep-sea gorgonian coral *Primnoa resedaeformis*. *HYDROBIOLOGIA* 471, SI: 117-124

¹³ Roark et al. 2005. Radiocarbon-based ages and growth rates of bamboo corals from the Gulf of Alaska. *Geophysical Research Letters* 32(4). DOI:10.1029/2004GL021919

¹⁴ Leys, S. P. and N. R. J. Lauzon (1998). Hexactinellid sponge ecology: growth rates and seasonality in deep water sponges. *Journal of Experimental Marine Biology and Ecology* 230(1): 111-129.

¹⁵ Knowlton, A. and R. Highsmith (2000). Convergence in the time-space continuum: a predator-prey interaction. *Marine Ecology Progress Series* 197: 285-291.

¹⁶ Stone RP and Cairns SD. 2020. Deep-Sea Coral Taxa in the Alaska Region: Depth and Geographical Distribution (v. 2020). Available: <https://deepseacoraldata.noaa.gov/library/2020-regional-deep-sea-coral-specieslist>

rockfish, use the shelter of coral and sponge gardens as juvenile, spawning, and breeding habitat.^{17,18}

There are 50 confirmed sponge species in the Gulf of Alaska, but scientists predict there could be more than 80.¹⁹ Like corals, sponges are a fundamental component of the Gulf of Alaska’s benthic ecosystems and contribute significantly to living marine habitat. Large sponge aggregations, often occurring alongside corals, provide shelter, feeding areas, and breeding habitat for fish and other invertebrates, supporting broader food webs and marine biodiversity in the region.

Sea whips and sea pens (pennatulids) found in the Gulf of Alaska are habitat-forming cold-water corals. They provide vertical structure in soft sediments and can create habitat up to a meter in height in what would otherwise be a flat, featureless plain. Sea whip groves provide cover from predators and enhance the abundance and availability of prey species. For example, Pacific ocean perch have been observed using sea whip groves as shelter at night after feeding on krill above the groves during the day.²⁰

Cold-water corals, sponges, and pennatulids are long-lived and slow-growing, and recovery from physical disturbance can take decades to centuries. As documented above, pelagic trawl gear in the Gulf of Alaska frequently contacts the seafloor. In Alaska state waters, such contact places structure-forming habitats that support commercially important species—including rockfishes, cod, flatfishes, and crab—at risk. Damage to these habitats can reduce ecosystem productivity and, over time, affect the fisheries that sustain coastal communities and Alaska’s broader economy.

Aligning Gear Classification, Monitoring, and Bycatch Requirements

Although state regulation establishes that pelagic trawl gear may not operate in contact with the seabed, existing monitoring and enforcement mechanisms are not sufficient to consistently verify compliance. As a result, gear designated as “pelagic” may function in ways that cause benthic disturbance similar to bottom trawling. This gap between regulatory definition and operational reality exposes sensitive seafloor habitats to preventable risk.

¹⁷ Stone RP and Shotwell SK. 2007. State of Deep Coral Ecosystems in the Alaska Region: Gulf of Alaska, Bering Sea and the Aleutian Islands. pp. 65-108. In: Lumsden SE, Hourigan TF, Bruckner AW and Dorr G (eds.) The State of Deep Coral Ecosystems of the United States. NOAA Technical Memorandum CRCP-3. Silver Spring MD 365p

¹⁸ North Pacific Fishery Management Council (NPFMC). 2020. Fishery Management Plan for Groundfish of the Gulf of Alaska. November 2020. Anchorage, Alaska.

¹⁹ Hoff GR, Malecha PW, Rooper CN, et al. 2021. Science Plan for the Alaska Deep-Sea Coral and Sponge Initiative (AKCSI): 2020-2023. AFSC Processed Rep. 2021- 01, 45 p. Alaska Fish. Sci. Cent., NOAA, Natl. Mar. Fish. Serv., 7600 Sand Point Way NE, Seattle WA 98115

²⁰ Brodeur RD. 2001. Habitat-specific distribution of Pacific ocean perch (*Sebastes alutus*) in Pribilof Canyon, Bering Sea. Cont Shelf Res 21:207–224

March 2, 2026
Support for Proposals 163–165
Page 6 of 6

Proposal 163 addresses this gap by aligning gear classification with documented performance. Since pelagic trawls are contacting the seabed, they should be managed as bottom-contact gear unless, and until, operators can demonstrate true midwater operation. This creates accountability.

Proposal 164 provides the enforcement mechanism necessary to make 5 AAC 39.105 meaningful. Requiring approved seafloor contact detection systems and clear data standards ensures that compliance is measurable, transparent, and consistently applied. Monitoring transforms an unenforceable expectation into a verifiable standard.

Proposal 165 addresses salmon bycatch through technology already proven in the Bering Sea pelagic trawl pollock fishery. Salmon excluder devices have demonstrated that bycatch reduction can be achieved while maintaining operational efficiency. Extending this requirement to pelagic trawl fisheries within Alaska state waters reflects both practical experience and Alaska’s longstanding commitment to salmon conservation.

Together, Proposals 163–165 strengthen compliance with existing state law, reduce risk to long-lived benthic habitats, and improve accountability and bycatch performance without unnecessarily restricting access. Aligning gear definitions, monitoring requirements, and bycatch mitigation with documented gear behavior will help ensure that pelagic trawl fisheries operate in a manner consistent with Alaska’s habitat protections and economic priorities.

For these reasons, we urge the Board to support Proposals 163–165.

Sincerely,



Lauren Hynes
North Pacific Campaign Manager and Marine Scientist
lhynes@oceana.org

Submitted by: Chandler OConnell

Community of Residence: Sitka

Dear Board of Fisheries,

I am writing to urge you to support proposals 163, 164 and 165. I believe they offer pragmatic and necessary solutions to ensure that existing State of Alaska regulations prohibiting seafloor contact by pelagic trawls are respected and enforced.

There are many vessels currently considered "pelagic" trawls that actually have substantial contact with the seafloor, directly contradicting the intended definition of pelagic trawls and undermining Alaska's regulatory goals. Much information to this effect has been presented to the North Pacific Fishery Management Council. Proposal 163 would correct this issue by considering trawls as bottom trawls unless they can provide positive proof that they are operating off of the sea floor and are complying with state regulations. The seafloor is an important and sensitive habitat and we should all be responsible for not damaging it.

Proposal 164 complements the important change that would be made by proposal 163, by providing better documentation for managers and the trawl fleet. Transparency, accountability and good data support sustainable fisheries; proposal 164 is good for all constituents.

And finally, proposal 165 is an important step to limit bycatch and to protect Alaska's precious salmon, which are essential for culture, food, community and economy. My household is highly dependent on salmon both as a primary food with which we nourish our children, and as a source of revenue through commercial trolling. Our Alaska Native friends and neighbors have been in relationship with salmon for millenia. Any salmon bycatch is a horrible loss, especially in the context in which entire communities are facing food insecurity and are being denied the opportunity to practice their way of life.

The Trawl industry has unsustainable and harmful bycatch levels of many species. Please use every tool at your disposal to rectify this crisis, including passing proposal 165 to require salmon excluders on pelagic trawls operated in state waters.

Thank you for considering my comment. Again, please vote for and work for passage of proposals 163, 164 and 165.

Sincerely,

Chandler O'Connell

Submitted by: Victoria OConnell Curran

Community of Residence: Sitka

Dear Chairman and Board Members,

Thank you for the opportunity to comment on statewide proposals. I have lived in Alaska for over 40 years, 20 of which I was the Groundfish Project Leader for the Alaska Department of Fish and Game, Commercial Fisheries Division.

I support Proposal 163, 164, 165. As a package they begin restoring accountability for the pelagic trawl sector and protect critical marine habitats necessary for sustainable fisheries. Evidence shows that many pelagic trawl operations are fishing on bottom, a direct violation under the definition of pelagic trawling. Requiring seafloor monitoring technology on pelagic trawl nets would provide verification that pelagic trawlers are fishing pelagic waters not bottom trawling. Requiring the use of salmon excluders in pelagic trawl nets is something I think

everyone will support and they are already standard gear in federal fisheries. One only had to listen to the heartbreaking testimony at the North Pacific Council meeting to understand we must do a better job managing bycatch and salmon.

I support proposal 180 – I agree with Mr. Krygier that chinook salmon are facing a crisis and escapement goals are not being met in many rivers. An annual statewide sport fish limit of 5 chinook is reasonable. Increasing the accuracy and efficiency in annual reporting is a necessary for successful management.

I oppose proposal 177. An angler should be required to catch their own fish. Allowing the bag limit to be pooled means that the combined bag limit is more likely to be taken and puts additional pressure on the resource. Folks are sport fishing, not subsistence fishing. No pooling of bag limits.

PC355

Submitted by: Makoto Odlin

Community of Residence: Kodiak

Proposal 166, 167

I am submitting my support for these two proposals on behalf of myself. I have been jigging the last few years and it has increasingly important aspect of my business plan. I execute the fishery with my 13y/o daughter and it has been rough to see the blatant disregard for the rules in this fishery because I rely on this income to help the ever-increasing costs of fuel, insurance, maintenance, etc. Boats have been fishing different different gear types and delivering as jig cod. More definitions and only one gear type allowed while jigging cod will help enforcement officers to easily recognize whether a boat is in compliance from a distance and/or at the dock while delivering or whatnot. We desperately need to show that we are making steps toward accountability.

There is no guarantee that these measures will eradicate all cheating but it is progress. Last season I witnessed, multiple times, longliners working offshore in federal waters all night, come in to state waters anchor up next to me and then go to sleep. Never seen anyone working the deck all day. Yet somehow these guys were making huge deliveries under state jig cod.... all this when not a single federal jig cod delivery was ever made. Not only that, but guys had slinky pots and longlines onboard, some reports of huge deliveries with only one jig machine onboard.... pretty flagrant....

I would really like to see support for proposal 166 and 167, thank you.

PC355

Submitted by: Makoto Odlin

Community of Residence: Kodiak

Proposal 176- Oppose

Proposal 177- Oppose

I personally oppose these two proposals because I have seen this pooling be abused by the charter industry. I have seen deckhands and captains bring kids and friends to 'fill out the boat,' so clients could catch and keep more limits of fish. Too much potential for taking more fish out of the water than would otherwise have been taken. Catch your fish as allowed by ADF&G no ifs, ands, or butts.

Proposal 180- Support

I would support a state wide seasonal bag limit of 5 fish. Chinook are at a point where they need all the help they can get, and as we have seen commercial fisheries shut down early or experience severe restrictions, I think sport fishermen probably have a higher rate of take of local Alaskan king salmon due to their increased efforts in or near the native rivers.

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 Makoto Odlin, and I am a commercial fisherman who salmon seines in Kodiak, Alaska. I fish aboard the F/V Laidy Sage.

The hatchery helps many boats through the season and spreads the fleet around in a way that increases fishing time for everyone. It helps fill in people's seasons in years when wild stocks are low.

Reduced hatchery production would reduce harvest opportunities while increasing effort and competition in other areas. This hurts everyone on the water, and local businesses see reduced spending as a result.

It seems premature to start reducing hatchery production without doing extensive research to determine what positive results would come from that reduction. We could be making changes without clearly defined markers of success. Will Russia, Canada, and lower 48 hatchery production remain constant, making it difficult to measure impact? What would be the benchmarks for determining success or failure?

Please keep to science-based management rather than adopting measures without clear data demonstrating 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,

Makoto Odlin
Kodiak, Alaska



Patrick O'Donnell
Golden West Fisheries, Inc. and F/V Caravelle
PO Box 3075
Kodiak, Alaska 99615

March 2, 2026

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

Re: **Oppose Proposals 11, 163, 164, 165**

Dear Chairwoman Carlson-Van Dort and Board Members,

My name is Patrick O'Donnell and I have lived and fished out of Kodiak for 37 years. I own an 85-foot trawler that is a family run business employing my daughter, son, and brother, along with 4-5 additional crew that also live in Kodiak. In total my vessel supports 7 families on an annual basis. All of repairs and maintenance for the Caravelle also take place in Kodiak, which further supports local businesses.

Proposal 11 opposition. I oppose proposal 11 because it would eliminate all trawling in state waters West of 170 longitude, including the State water cod fishery and federal parallel cod fishery. Table 29 in Staff Comments shows that trawling for Pacific cod is limited to 1,537 square miles, which is equivalent to 39.2 miles X 39.2 miles. To put this in context, a single statistical area in the Gulf of Alaska is 30 miles X 30 miles, and there are more than 200 statistical areas in the GOA. In other words, the amount of area currently available for trawlers to harvest cod West of 170 longitude is very limited.

If this proposal is approved it will essentially shut down Pacific cod trawl operations. The shelf in this area is very narrow¹ and Pacific cod mostly occur on the shelf, which is within state waters. Since cod are much less accessible for catcher-vessels out in deeper water the result of restricting trawl fishing from inside 3-miles will be near elimination of the trawl cod fishery in its entirety. This will create even more challenges for the community of Adak, which is actively working to restart shore-based processing operations. Removing the ability for trawl to harvest cod near Adak will further curtail these efforts, and preclude shore-based processing operations which would benefit all gear types fishing in the area

¹ See NOAA chart 16460

The proposer states that the intent is to reduce impacts and bycatch of Golden King Crab inside state waters. However, based on Table 30 in Staff Comments (Regional Information Report NO. 5J25-04) the only year there was appreciable crab catch in the trawl fishery was 2021 at 396 crab. In 2020,2022,2023 and 2025 there were 0 crab taken, and 2024 had 1 crab taken. Overall, this averages to 66 crab per year, but in fact four out of six years had no crab bycatch at all.

Proposal 163 opposition: I oppose this proposal because pelagic trawl is already clearly defined in State regulation², and Gulf of Alaska trawlers do not use pelagic trawl gear to fish for bottom fish. I have fished out of Kodiak with trawl gear for over 36 years and can tell you that seabed in the Gulf is mostly volcanic and rocky with few exceptions. Bottom trawl gear is designed for fishing on this type of bottom for cod, flatfish rockfish and pollock. On the other hand, pelagic or midwater trawl is designed for fishing well clear of the bottom and primarily in the midwater column. If this was not the case then we would be using pelagic trawl gear to catch bottom-dwelling cod fish, but we are not. Most of the fishing grounds in the Gulf of Alaska inside State waters and particularly around Kodiak are on steep shelves and in canyons, dangerous conditions for pelagic trawl gear. A pelagic midwater net, codend, bridles, net sonars, catch sensors and third-wire costs on average \$300,000. Why would I take the risk of destroying that amount of gear on a net that was designed never to touch the seafloor.

The proposal indicates that reports from the North Pacific Fishery Management Council state that trawl fleet representatives affirm that pelagic trawl regularly operate outside of the state definition for pelagic trawl, but fails to note this report was specific to the Bering Sea and should not be assumed to apply to the Gulf of Alaska. I am telling you that this is not the case in the Gulf.

Proposal 164 opposition: I oppose this proposal. There is currently no technology available to support this proposal, and while there are bottom contact sensors available for static gear (gear that doesn't move) and depth recordings, there is currently no equipment available for mobile gear. The fishing line on a pelagic trawl is 500- 1000 feet and requirements would need to specify where sensors need to be placed on the trawl, and how far apart each sensor should be. Further these sensors are in the price range of \$5-10K each, and have not been field tested in actual fishing operations. The cost alone will be cost prohibitive to the small trawl vessels fishing in the Gulf of Alaska, and the technology has not even been proven as an accurate means of measuring or sensing bottom contact. The state of Alaska has no means or oversight and monitoring to verify data moving forward with this, however if this is something that ADF&G is willing to take on I will gladly participate moving forward if they are willing to fund it through an experimental fishery permit.

² Pelagic Trawl 5AAC 39.105 (C) a pelagic trawl is a trawl where the net, or the trawl doors or other trawl-spreading device, do not operate in contact with the seabed, 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

Proposal 165 opposition: I oppose this proposal. I have personally been involved in the development of halibut excluders in the late 2000's and also in modified sweep and crab vitality studies in the last decade. In 2014 I was one of the vessels selected to participate under the experimental fishery permit (EFP) to test Salmon Excluders in the Gulf of Alaska. Design for this particular excluder had been ongoing for 5 years of which I spent time at the flume tank³ in Newfoundland with many different net designers while trying to build and perfect the excluder which is being used today. There is no off the shelf type of excluder, and there are many factors involved in designing an excluder for a particular vessel because the net is designed to match the engine horse power, reduction gear, propeller size, shaft horsepower and bollard pull. Each codend dimension is different based on the size of the vessel and the width of the stern ramp which also relates to vessel horse power. The takeaway point is that there is no one size fits all, and it's not like going to the store and buying a loaf of bread. I have 5 midwater trawl nets, all of which have salmon excluders. Four of the excluders are built in to the tapered end of the net or intermediate, with different configurations for different nets. I cannot swap any of these excluders between nets because they are all different and customized to the specific net.

The proposer of 163, 164, and 165 is The Alaska Healthy Habitat Alliance which consists of:

- Alaska longline Fisheries Association
- Under Sixty Cod harvesters
- Bering Sea Fishermen's Association
- Homer Charters Association
- Native Peoples action
- The Boat Company
- AMCC Alaska Marine Community Coalition (was Alaska Marine Conservation Council)

None of these groups participates in trawl fisheries, and there seems to be a substantial lack of understanding of trawl operations and how trawl gear functions, since the result of these proposals would be to completely shut down trawl.

I rely on trawl fishing to keep my business operating, to support my family, and the families of all of my crew. Everyone one of these proposals could have devastating impacts on my business, other small Alaskan trawl operations, the shore-based processing plants we deliver to, all the people who work at the plants, and the Alaskan coastal communities in which we live.

I strongly oppose all of these proposals and ask the Board to vote them down.

Sincerely,

Patrick O'Donnell
F/V Caravelle

³ There is no flume tank in the U.S., and all gear testing is generally done in Newfoundland, Canada, or in Denmark



United States Department of the Interior
Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

In Reply Refer To:
OSM.M26006

Ms. Märit Carlson-Van Dort, Chair
Alaska Board of Fisheries
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

Dear Chair Carlson-Van Dort:

The Office of Subsistence Management (OSM), working with the other participating agencies, has reviewed the proposals being considered at the March 2026 Statewide Finfish and Supplemental Issues Meeting. The attached comments from OSM regard proposals that are associated with finfish resources within Federal subsistence management jurisdiction and are likely to impact federally qualified subsistence users.

Other proposals being considered may affect Federal subsistence fisheries and users. Many of these proposals involve fisheries outside of Federal jurisdiction. Adoption of these proposals may impact resources returning to Federal public waters that rural Alaskans rely on for the opportunity to continue subsistence activities. Furthermore, any of the ten Subsistence Regional Advisory Councils may have submitted written comments on these proposals, and we encourage the Board to consider these comments during its deliberations. OSM may also wish to comment during the meeting on other items that impact federally qualified subsistence users.

We appreciate the opportunity to comment on these important regulatory matters and look forward to working with the Alaska Board of Fisheries and the Alaska Department of Fish and Game on these issues. Please contact Scott Ayers, OSM Deputy Director (Sciences), 907-744-3824 or scott_ayers@ios.doi.gov, with any questions you may have concerning these materials.

Sincerely,

Crystal Leonetti

Crystal (Ciisquq) Leonetti
Director,
Office of Subsistence Management

Enclosure

Märit Carlson-Van Dort, Chair

PC357

2

Cc: Federal Subsistence Board
Interagency Staff Committee
Office of Subsistence Management
Ben Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Aaron Poetter, Federal Subsistence Liaison, Alaska Department of Fish and Game
Administrative Record

PROPOSAL 162**5 AAC 01.010. Methods, means, and general provisions.**

Prohibit commercial transport services in subsistence fisheries

Current Federal Regulations:

No similar regulations

Is a similar issue being addressed by the Federal Subsistence Board? No

Impact to Federal subsistence opportunities/fish: If this proposal is adopted, State regulations would prohibit commercial transport services for use in subsistence fisheries. Federal subsistence regulations do not provide parallel prohibitions, creating a mismatch in State and Federal regulations that may lead to user confusion or enforcement issues. This may increase Federal subsistence opportunity by reducing competition from State users that require commercial transport services to access the resource. Impacts on fish populations are likely negligible.

If adopted, a similar proposal could be submitted to the Federal Subsistence Management Program during the current open Federal fisheries proposal application period in 2026.

Federal Position/Recommended Action: The OSM recommendation is **neutral** on this proposal.

Rationale: The Office of Subsistence Management supports effective regulatory enforcement, which benefits from alignment of Federal and State regulations on this issue. Currently, Federal regulations (36 CFR 242 and 43 CFR 51) do not explicitly address commercial or compensated transport services in subsistence fisheries. If Proposal 162 is adopted, State regulations would prohibit such activities creating a mismatch in State and Federal regulations.

PROPOSAL 175**5 AAC 39.105. Types of legal gear.**

Modify dipnet mesh-size and configuration

Current Federal Regulations:

43 CFR 51.25 (a) Definitions

Dip net means a bag-shaped net supported on all sides by a rigid frame; the maximum straight-line distance between any two points on the net frame, as measured through the net opening, may not exceed 5 feet; the depth of the bag must be at least one-half of the greatest straight-line distance, as measured through the net opening; no portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches; the frame must be attached to a

single rigid handle and be operated by hand.

Is a similar issue being addressed by the Federal Subsistence Board? No

Impact to Federal subsistence opportunities/fish: If this proposal is adopted, State regulations would reduce net mesh size from 4.5 inches to 3.5 inches and prohibit the use of a rope attached to the net handle on one end, and the boat on the other, for use in subsistence fisheries. This proposal would not affect opportunity of federally qualified subsistence users fishing under Federal regulations. Federal subsistence regulations at 43 CFR 51.25(a) allow for dip net mesh up to 4.5-inch webbing on a frame that must be attached to a single rigid handle and be operated by hand. This change in mesh size is unlikely to have clear effects on mortality or capture rate of Chinook Salmon.

Federally qualified subsistence users would experience impacts due to regulatory complexity. Enforcement would be inconsistent across jurisdictions, as some rivers have State and Federal subsistence fisheries occurring at the same time. Access points to and from Federal public waters are the same as for some State subsistence or personal use areas regulated under State subsistence harvest. This conflict could lead to enforcement concerns. For example, Moose Meadows site and Mile 48 site of the Kenai River are Federal subsistence fisheries where use of a dipnet with 4.5 inch stretched mesh from a boat is permitted. Kenai River also supports a vibrant and robust personal use dip net fishery where dip netting from a boat is currently permitted. Additionally, this proposal could create a cost burden for federally qualified subsistence users who may need to purchase multiple dip nets or net bags to comply with differing State and Federal mesh size regulations.

If adopted, a similar proposal could be submitted to the Federal Subsistence Board during the current open Federal fisheries proposal application period in 2026.

Federal Position/Recommended Action: The OSM recommendation is **neutral** on this proposal.

Rationale: The Office of Subsistence Management supports effective regulatory enforcement, which requires alignment of Federal and State regulations on this issue. Currently, 43 CFR 51.25(a) allows mesh 4.5-inch mesh net and this proposal is unlikely to provide additional conservation for fish populations of concern.

PROPOSAL 182

5 AAC 75.XXX. New Section.

Establish bow fishing as lawful sport fishing gear for species without a bag or possession limit

Current Federal Regulations:

No similar regulations

Is a similar issue being addressed by the Federal Subsistence Board? No

Impact to Federal subsistence users/fish: This proposal seeks to allow the use of bow and arrow as a gear type for harvest of fish species that have no harvest limit. Currently, bow and arrow are not a legal gear type under Federal subsistence regulations in most areas of the state. Federally qualified subsistence users may use bow and arrow in limited locations, for salmon only: the Alaska Peninsula, specific areas within Bristol Bay (Togiak NWR, Sixmile Lake and its tributaries near Lake Clark National Park and Preserve, Lake Clark and its tributaries), and the Chignik Area (Chignik Lake). No impacts on fish populations are expected from this proposal.

If adopted, a similar proposal could be submitted to the Federal Subsistence Board during the current open Federal fisheries proposal application period in 2026.

Federal Position/Recommended Action: The OSM recommendation is **neutral** on this proposal.

Rationale: Adopting this proposal would misalign the Federal and State regulation. Bow fishing is not a legal gear type for subsistence fishing under Federal subsistence regulations in most areas of the state. No impacts on fish populations are expected.

PC358

Submitted by: Paul O'Keefe

Community of Residence: Crandon, Wisconsin

Having spent time on a small cruise boat adjacent to the Tongas National Forest in Alaska, I am requesting that you strongly consider banning trawler style commercial fishing in that area. It is a pristine area that should not be destroyed.

PC359

Submitted by: Eshokhai Omogbeme

ALASKA WORKER APPRENTICESHIP WELDER 8141 SCHOON STREET/CHARTER COLLEGE

Community of Residence: SEWARD-MATANUSKA BOROUGH

COAST GUARD REGULATIONS AND DAILY SPORT MANAGEMENT FOR THE GULF OF ALASKA ATTRACTS INVESTORS AND TRAWLERS FROM ALL WALKS OF LIFE TO BOOST ECO TOURISM AND ALL THE BENEFITS IT BRINGS BY DIVERSITY AND INCLUSION ,ENVIRONMENTAL IMPACT OF CONSERVATORY AND EXTENSION TRAINING DEVELOPMENT TO PROTECT YAKUTAT BIRD WATCHING, BEAD MAKING AND LONG DISTANCE MARATHON IN THE LAST FRONTIER. FORESTRY FIRE STARTERS CAUSED BY CAMPING IN THE HINTERLAND COULD BE CHECKED BY WORKING WITH FOREST RANGERS AND COPS TO CHECK DETRACTORS AND IMPLEMENT COMMON SENSE CRIME AND HOMELESSNESS FOR PEOPLE WHO FEEL THEY HAVE BEEN NEGLECTED BY THE SYSTEM

PC360

Submitted by: Nels Otness

Community of Residence: Petersburg

Proposal 170,I oppose this proposal, i fished salmon before the hatcheries, there weren't many wild stock around and no one was making much money. Without the status quo with our hatcheries today, well it would probably bankrupt me.

Dear members of the Board,

My name is Makena O'Toole. I am a life-long Cordova resident and commercial fisherman. I serve on the local ADFG advisory council, CDFU board and PWSAC board. I'm also one of the few fishermen still actively participating in the commercial coho set-net fishery on the Tsiu and Kaliakh rivers. I obviously oppose proposals 170,171,172. However, I am going to focus my comments today on opposition of proposal 187.

Firstly, I'll point out: The Board allowing this ACR to become an out-of-cycle proposal illustrates a breakdown of proper board process and undermines the integrity and credibility of the Board as a whole. This ACR clearly met none of the criteria needed to become an out of cycle proposal. Below, I will address each of the three criteria required:

1. "Conservation or Allocation Emergency"

There is clearly no conservation issue as the Tsiu and Kaliakh have met or exceeded escapement goals since records began 53 years ago. A claim I doubt any other river in Alaska can make.

2. " Cannot wait until the regular cycle"

There's no reason this couldn't have waited until regular cycle. There is precedent for rivers with separate management plans converging in Area D. None of the historical scenarios have ever resulted in an ACR or any action needed from Board of Fish. In these situations, ADFG has proven time and time again: they are fully capable of utilizing in-season management to ensure escapement goals are met. The rivers in question have been drifting slowly towards each other for over a decade. Their confluence formed two seasons ago. This was not a "sudden" or "unforeseen" event. There was no "storm surge" in 2025, as the proposer claims.

The confluence of the rivers actually moved in spring of 2024. No concerns were raised by any stakeholders or management in 2024, despite aerial surveys. In 2025, in response to this ACR, we sent the Board time-stamped photos and satellite images from 8680 (the previous year) to confirm that the change in river confluence occurred the previous season, the fishery was managed effectively, and there were no escapement concerns. In 2025, to assuage the concerns raised in this proposal, Management used their authority to move boundary lines in-season as needed on an opener-to-opener basis. This was done to avoid "perceived" user group conflicts, not out of legitimate concerns of meeting escapement. Escapement goals were met in 2025 and was presumed to be met in 2024 but could not be verified due to lack of late season arial surveys;

Furthermore, hearing this ACR out of cycle creates an unnecessary time and financial burden for stakeholders, forcing us to take time off work to travel to Anchorage for these meetings.

3. " The issue was not and could not have been raised earlier."

This issue absolutely could have and would have been raised earlier when the rivers first intersected in the spring of 2024, if any parties other than the proposer actually saw this as an issue. ADFG was fully aware of this confluence, and had ample time to raise the issue if they judged that it might impede their ability to manage "maximum sustainable yield" or were in any way concerned it may inhibit them from making their escapement goals. However, the Department did not raise this as a concern.

Despite the ACR not meeting any of the above-mentioned criteria, somehow this proposal is on the floor.

Proposal 187:

This proposal is purely allocative. The first sentence is "close all waters of the Tsiu river" before he tries to draw away focus by talking about the Kaliakh confluence. There is absolutely no conservation issue here. Since 2017 there has only been an average of 4 commercial permits fishing here vs the historical level of up to 40 permits on the Tsiu (and 37 on the Kaliakh). Historically, harvest on the Tsiu was 50,000-70,000 fish at its peak. Since 2018 the highest commercial harvest on the Tsiu was only 1,640 fish! Sport harvest in 2024 as was voluntarily reported, was 6,945 fish. This number does not take into account mortality rates on the 30,541 fish that were reported as landed that year. Furthermore, with our current fishing practices, we are severely limited by weather and the capacity of our small boats. As we now run the fish back 130 miles across the open Gulf of Alaska versus the historical practice of flying multiple DC3's a day full of fish out of the river. The truth is, even if the Tsiu and Kaliak were open 7 days a week, with current logistical challenges we would only be able to harvest a small fraction of historical catch. Most years I am thrilled if I have the weather to make it down to fish three or four openers a year. Each time I hope to catch 300-600 fish which is what I can safely transit the bar and the gulf with.

The goal of the proposer is not to ensure escapement goals, it is to permanently shut down a commercial fishery on the Tsiu river—a commercial fishery that has supported

the local communities of Yakutat and Cordova for 100 yrs. Native fishermen from both communities were salting salmon for commercial sale back to the 1920's. Throughout this fishery's history, the majority of permit holders have been native fishermen from Yakutat and Cordova. This proposal would effectively re-allocate the entirety of this resource to non-resident sport fishermen—the proposer's personal clientele. I'll remind the board that, this is not commercial VS subsistence, or even commercial VS personal use. This is commercial VS non-resident sport.

A little historical context on the importance of this resource to the Yakutat setnet fishery: This river used to support over 40 permit holders and their families. It was the single largest coho contributor to the commercial catch in area D for decades, producing 30-50% of the total area D harvest. Around 2013 rivers moved, making traditional air transport difficult. Participation dropped off due to challenging logistics of getting fish to market. Rivers are ever-changing and I fully believe participation would have increased back to meaningful levels if it wasn't for regulation passed at this board in 2017 (5.AAC 30.320), which introduced a new regulation limiting fishing time to just two 24 hour openers a week, until escapement goals are met. This regulation effectively shut down the Tsiu. Due to extreme weather, challenging logistics, and fish going blush, it was no longer economically viable to continue a full-scale fishery on the Tsiu River. This was economically damaging to Cordova and devastating to Yakutat. As long as this river remains open by regulation there is hope for the future generation of Yakutat and Cordova to re-open access to this resource and provide a vital source of income to these remote communities.

Since 2017 there have only been four to five permits fishing on these rivers. Although we have skiffs, cabins, four wheelers and fish trailers to fish the upper Tsiu, we mainly fish on the Kaliakh. Previously, we've made concerted efforts to avoid the Tsiu specifically to reduce the impact on sport fishermen. We are limited in harvest to what our small boats can pack and weight restrictions to safely cross the ocean bar with. The area in question at the confluence of the Kaliakh and Tsiu rivers is the only part of the river that is deep enough for us to get our boats into. Even then, we are often limited to only a couple hours of operation at the highest part of the tide. Closing this section of the river to us, would in effect close the whole fishery due to water depth or would push us to operate in areas of high sport fishing activity on the upper Tsiu. This area of coastline is ever changing and fishermen and management need maximum flexibility in regulation in order to align fishing time and area with very limited weather windows. Any increase in mandated regulation will only impede the Department's ability to manage for maximum sustainable yield for all user groups and to ensure escapement stays within optimal levels. If there ever truly was any concern about escapement, the only way to have meaningful impact would be to restrict sport harvest, as commercial harvest is just a small fraction of sport.

We have developed a good working relationship with most of the lodge owners on the Tsiu and frequently haul freight down on our boats to assist them in keeping their

operating costs down. We are proactive in discussing our fishing plans with the local guides prior to openers, to ensure we operate with as little impact as possible on their operations.

This proposal was never about biological concern. It was about one lodge owner who had access the entire river and doesn't want to have to look at us fishing in the one small postage stamp that's actually deep enough for us to fish. There are miles of clear pristine river full of fish with no commercial activity available to their clients. The reason for the proposer's focus on this part of the river is, traditionally when the Tsiu flowed into the ocean, lodge owners would bring clients to the mouth so they could retain higher "salt water" bag limits. Now, because the Tsiu terminates into the Kaliakh, some lodge owners are under the impression that these higher bag limits still apply, although the Tsiu is no longer classified as a saltwater terminus (it now terminates into freshwater, the Kaliakh river). Ironically, shortly after the proposer submitted this ACR, an Actual storm surge came and cut out the bank of the river, effectively eliminating his access to this section of the river. It seems to me that Karma has already addressed this issue before the Board could get to it.

There are plenty of fish for all in this river. In order to maintain this abundance, it is crucial that we don't take away the Department's only tool to manage this river and prevent over-escapement levels. Concurrently, it is important that we preserve this legacy fishery for future generations of commercial fishermen from Cordova and Yakutat. I hope that the board can understand the cultural, historical, and economical importance of preserving this fishery.

Thank you for your time and consideration.

Respectfully,

Makena O'Toole

OUZINKIE

NATIVE CORPORATION

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

February 26, 2026

Re: Opposition to Proposals 170, 171 and 172

Dear Madam Chair and Board members:

Ouzinkie Native Corporation is the ANCSA village corporation for the community of Ouzinkie on Spruce Island just north of Kodiak Island. We have been advocating to maintain and enhance fishing opportunities for Ouzinkie shareholders for many years. We oppose Board of Fisheries proposals 170, 171 and 172 and recommend that the Board take no action on these proposals.

Proposals 170, the reduction of hatchery output by 25%, would directly impact Ouzinkie in that the two Kodiak Regional Aquaculture Association (KRAA) projects imprinting sockeye salmon and coho salmon in Ouzinkie's harbor will be extinguished. These projects provide important subsistence fish for our community --- available to all Ouzinkie residents, not just those that have a skiff and can travel for subsistence fish. These subsistence fish are a big deal for Ouzinkie and proposal 170 will take them away.

Proposal 172 is also of concern for Ouzinkie. A moratorium on any additional hatchery permits or the expansion of existing permits may limit future fishing opportunities for Ouzinkie shareholders. KRAA has been considering expanding existing hatchery capacity to enable raising additional Chinook salmon and sockeye salmon. This is a concrete example of how a moratorium will harm Ouzinkie fishermen— sport, subsistence and commercial. Currently, much of the west side of Kodiak Island is closed to sport, subsistence and commercial fishing from May through early July due to limited Chinook salmon returning to the Karluk and Ayakulik rivers. KRAA's chinook enhancement contributions to these

OUZINKIE

NATIVE CORPORATION

populations may enable Ouzinkie shareholders to have additional June fishing opportunities. A moratorium on permits stops this possibility. ONC believes that the broad blanket moratorium on hatchery production will have many unexpected and unintended consequences. It's better for the Board to address region specific and species-specific issues regarding hatchery production. Speaking of region-specific issues, proposal 171 is specific to Prince William Sound hatchery production and should be addressed as a regional issue during the Prince William Sound board and/or Cook Inlet Board cycle.

Thank you in advance for your consideration of Ouzinkie Native Corporation's recommendation to take no action on proposals 170, 171, and 172.

Sincerely,



Darren Muller Sr.,

Chairman

Ouzinkie Native Corporation



Native Village of Ouzinkie

PO Box 130

Ouzinkie Ak. 99644

nvo.clerk@gmail.com

(907)680-2259

Date 2/23/2026

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

Re: Opposition to Proposals 170 and 172

Dear Board of Fisheries members:

The Native Village of Ouzinkie is the IRA tribal entity for Ouzinkie. Our tribe has subsisted on fish and marine resources since before recorded history. We continue to be avid subsistence fishermen and active hunters. For many years Ouzinkie tribal members have enjoyed the stocking of coho salmon in Ouzinkie as well as the imprinting of sockeye salmon on Ouzinkie's harbor. These stocking programs were initiated by the Kodiak Regional Aquaculture Association (KRAA) to help Ouzinkie tribal members who do not have a skiff obtain their subsistence fish and now provide most of the subsistence salmon captured and used by the tribe. Proposals 170 and 172 jeopardize our subsistence fish.

Proposal 170 would reduce KRAA's egg take by 25% and proposal and 172 would limit KRAA from expanding their egg take. If KRAA's egg take is reduced by 25% the organization is likely to focus exclusively on fish that generate revenue to KRAA and commercial fishermen. Enhancement projects like subsistence coho and sockeye in Ouzinkie and coho in Port Lions that are not "revenue generating" will likely go away. This could also be true for a moratorium on the number of eggs taken by KRAA. The organization is likely to prioritize hatchery space so that current egg take permits are maximized and the Native Village of Ouzinkie is again concerned that subsistence projects will go away.

The Native Village of Ouzinkie believes that Kodiak Regional Aquaculture Association has worked hard to support our tribe's subsistence needs as well and the enhancement of common property fish. We don't see that KRAA's practices and activities should be penalized by the Boards acceptance of either proposal 170 and 172.

Sincerely Yours,

Robbie Boskofsky, President Ouzinkie Tribal Council

Submitted by: Emma Owecke

Community of Residence: Homer

Proposal 164 and 165 - support. Both of these proposals are essential in maintaining the health of the ocean, the viability of the fishery, and keeping fishermen in compliance. Both of these proposals are no brainers if you care about the ocean. Please approve.

Proposal 175 - support, I support a dip net mesh size reduction.

Proposal 180 - support.

Proposal 187 - oppose, this is an allocative proposal. It is also a proposal based on the authors fears. Just because the river has changed, does not mean that the salmon run is threatened or in danger. There are currently no grounds for this proposal.

Submitted by: Paul Owecke

Community of Residence: Trempealeau, Wisconsin

Thankyou all BOF members for your efforts to protect and facilitate Alaskan fisheries.

I am a salmon setnet permit holder in PW S and have participated in the fishery for 42 years, and have also been employed prior to entry in the fishery as a fish culturist for ADFG.

Proposals 170, 171,172

Oppose

These are all unwarranted reactions that will not solve the stated problems, and create additional problems that affect broad segments of commercial, sport and subsistence users.

The most obvious problem that will result will be the threat to the economic viability of Alaskan communities that have a long and successful reliance on the benefits of salmon aquaculture programs in general.

The ongoing research regarding interactions between hatchery production of pink and chum salmon and wild stocks does not have the data to justify the proposed drastic reductions. This is especially true in light of the undeniable data that much the changing dynamics of salmon interactions, survival rates and carrying capacity are being driven by climatic variations and will be for the foreseeable future. To suggest that the above proposals will have any positive effect on the problems they intend to address detracts from a more logical and beneficial course of supporting ongoing research to improve continued salmon enhancement programs.

Proposals 164, 165

Support

These are common sense requirements that need to be implemented for habitat protection and salmon protection.

Proposals 175,180

Support

These are common sense requirements that protect king salmon.

Proposal 187

Oppose

This is a totally allocative proposal that essentially excludes a user group (setnet) from historical harvest without a logical justification. It has not been the practice of any previous board to allow one user group to essentially confiscate the entire harvest capacity of another user group. This displacement would establish an unheard of precedent for disenfranchisement of any user group from any fishery without cause.

Thankyou for your time.

Submitted by: David Pace

Community of Residence: Idaho Falls, Idaho

I have been coming to Alaska as a sport fisher for over 20 years. I highly support Proposals 163, 164 and 165 to protect the halibut and salmon fisheries I come there to enjoy.



March 2, 2026

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

RE: Oppose proposals 11, 163, 164, 165

Chairman Carlson-Van Dort and Board Members:

Thank you for the opportunity to comment in advance of the Statewide Alaska Board of Fisheries (BOF) meeting in Anchorage. ***The Pacific Seafood Processors Association (PSPA) opposes Proposals 11, 163, and 164, and while we support the concept of Proposal 165, it also cannot be implemented as written at this time.*** PSPA is a nonprofit trade association comprised of major Alaska seafood processing companies that operate 50 facilities in 22 coastal communities across Alaska. PSPA member companies purchase, process, and market hundreds of millions of pounds of wild Alaska seafood each year and include shore-based processors that serve fleets dependent on state salmon, cod, and pollock fisheries in Prince William Sound, Kodiak, and Western Gulf communities like False Pass, Sand Point, and King Cove.

Overall, the proposals create requirements for which ADFG does not have current authority, for which significant state funding would be necessary, and/or for technologies which do not currently exist. We note the Department opposes Proposals 163 – 165 and also identifies where some issues are being addressed at the North Pacific Fishery Management Council.

Proposal 163 would redefine all pelagic trawl gear to be bottom trawl gear and then require ADFG on a case-by-case basis to come up with standards for pelagic gear, monitoring practices to ensure vessels meet that standard, and an application process for each vessel. Proposal 164 would require ADFG to develop an as of yet undefined seafloor contact detection system and then pollock (pelagic gear) vessels to use it while in state waters. The proposal mentions bottom sensors and electronic monitoring. Proposal 165 would require salmon excluders and require ADFG to establish performance-based criteria for excluder devices, maintain a list of approved excluders based on field testing and scientific review; and implement a compliance timeline and outreach strategy. Proposal 11 is a separate proposal affecting Aleutian Islands fisheries and we do not address it here more than to say it seems unnecessary. There are so few vessels participating (1 – 2), if there is a concern with fishing location it could easily be solved outside of the BOF process and without closing a fishery that could affect Adak and Atka.

These proposals infer that much of state waters are highly impacted by trawl gear. Less than 1% of state waters are fished with trawl gear and you can review the ADFG website and other sources to understand how the vast majority of state waters are closed to trawling (and of what remains, much is rocky benthic habitat that would destroy trawl gear if it had significant bottom contact). Proposals 163 –

www.pspafish.net

KETCHIKAN, AK (mailing)
 Post Office Box 5086
 Ketchikan, AK 99901
 206-281-1667
admin@pspafish.net

ANCHORAGE, AK
nicolek@pspafish.net

JUNEAU & WRANGELL, AK
 222 Seward Street, Ste. 200
 Juneau, AK 99801
 907-586-6366
julied@pspafish.net

SEATTLE, WA
 4039 21st Ave W, Ste. 400
 Seattle, WA 98199
 206-281-1667

WASHINGTON, DC
 1601 K Street NW
 Washington, DC 20006
 202-661-6220

165 seem unaware of the regulations for and management of trawl fisheries, the current fisheries that are open to trawling, or how smaller trawl vessels, including those under <58', operate differently than larger vessels. In addition, these fisheries operate in state waters for a short period of time during the year but are historically important parts of a fishing economy in these small communities that are struggling to retain the infrastructure, jobs, schools, and tax base that allow Alaskans to continue to live there. These proposals primarily affect the state-managed PWS pollock fishery, and the Kodiak and Western Gulf of Alaska pollock fisheries (majority of vessels are <58'), where the limited areas and openings in state waters are in conjunction with federal fisheries and subject to all the same rules and monitoring. ***Please refer to the ADFG comments to understand the scale of the state water portion of these fisheries. While small, the state water portion is extremely important to the vessels that participate, given the location of the fish and the safety needs of smaller vessels in bad weather.***

Per Proposals 163 – 165, they are very vague on what they want the Department to do in terms of developing new monitoring standards or requirements. **As the Board has reviewed previously, ADFG does not currently have the authority to require electronic monitoring (cameras/sensors¹) under state law, even when the fleet has said they could voluntarily leave their EM systems on in PWS.** Many of the Gulf vessels at issue already have EM (camera) systems they use when in Federal waters, and NOAA reviews the data to ensure compliance with full retention requirements at-sea so all fish and bycatch can be accounted for by observers at the shoreside plant. In addition, significant state funding would be needed to both conduct the Department field testing required of the proposals and review any collected data 'to support compliance enforcement.' Data review is the most expensive part of existing EM programs, with programs currently in place for federal pollock fisheries in both the Gulf of Alaska and Bering Sea and for the longline and pot halibut and sablefish fisheries that are each in the realm of \$1 million annually to operate, excluding all hardware costs.

The requirement for salmon excluders is positive in concept, but the ADFG comments note it is inactionable at this time to conduct the requirements outlined in that proposal. ***It is also important to know that many in these fleets already use salmon excluders, in both federal and state waters, but there is not currently a standard salmon excluder that works on all <58' vessels which have a lot less horsepower.*** Excluders are tested in flume tanks and in the field extensively prior to use, to ensure there are no unintended consequences and the excluder works effectively. What works for a large Bering Sea vessel (where excluders are required) does not work for a <58' vessel, and previous experimentation by the Western Gulf fleet has found for some smaller vessels more salmon are escaping without an excluder than with it. The western Gulf pollock fleet continues to test salmon excluders that are effective on small boats.

¹Sensor technology to accurately detect bottom contact in a commercial fisheries setting does not exist. It is possible in a research setting, but not in a commercial setting. These technologies are continually being tested by fleets in the Bering Sea, and a review of available systems shows they 1) either lack the resolution to provide discrete measurements of the gear's distance from the seafloor; 2) are highly susceptible to interference from water currents and debris, which can result in inaccurate data and potentially mislead captains in adjusting their nets; or 3) lack durability for a commercial setting. Current sensor technology does not hold up in a commercial setting where gear is continually hauled onboard (the sensors pop off), but new technology continues to be tested.

Finally, the proposals assume having bottom contact via pelagic gear has a substantial negative impact. There is no evidence to support that assumption. Essential fish habitat impacts of all gear types are evaluated comprehensively through a peer-reviewed NOAA process every five years. This federal requirement² estimates bottom contact of all gear types and uses that and other characteristics to determine whether fishing activity has an impact on habitat that is 'more than minimal and not temporary in nature'. The pollock trawl fisheries have been formally determined by NOAA not to have more than a minimal or temporary impact on essential fish habitat by the NOAA scientists and stock assessment authors responsible for these determinations. The most recent EFH evaluation was completed in 2023. The next one is already ongoing, and NOAA will update fishery impacts using recent data and improvements to the fishing effects model, which is nationally peer-reviewed and recognized as supporting the most comprehensive essential fish habitat review in the U.S.

Proposals 163 – 165 affect small Gulf of Alaska pollock fisheries in state waters, in which all fish are delivered into Alaska communities and provide jobs, income, and fish tax revenue in those communities. These are fisheries where young people are getting involved and preparing for business succession from those ready to retire. Prohibiting pollock fishing in state waters through the proposals' approach of setting regulations that the Department could not truly implement (and thus no one could comply with) is arbitrary and harmful.

Thank you for the opportunity to comment.



Julie Decker, President, PSPA
Wrangell, Alaska

² Section 303(a)(7) of the MSA and 50 CFR 600.815(a)(2).



March 2, 2026

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

RE: Oppose proposals 170 - 172

Chairman Carlson-Van Dort and Board Members:

Thank you for the opportunity to comment in advance of the Statewide Alaska Board of Fisheries (BOF) meeting in Anchorage. ***The Pacific Seafood Processors Association (PSPA) opposes proposals 170 – 172.***

PSPA is a nonprofit trade association comprised of major Alaska seafood processing companies that operate 50 facilities in 22 coastal communities across Alaska. PSPA member companies have historically participated in and are fully dependent on salmon fisheries and the salmon enhancement program in Alaska, including processing plants located in Kodiak, Cordova, Valdez, and Yakutat, Sitka, Petersburg, Wrangell, Craig, and Ketchikan. They have been at the forefront of supporting management systems based on sound science and sustainability principles and have invested heavily in infrastructure and operations in Alaska’s remote communities to buy, process, and market salmon from Alaska fishermen.

Alaska’s unique salmon fisheries enhancement program is critical to the stability of the fishery-dependent communities and processing infrastructure in Southeast, Prince William Sound (PWS), and Kodiak, as well as the charter, sport, and subsistence opportunities for thousands of Alaskans. ***PSPA opposes Proposals 170 and 171 which would arbitrarily reduce hatchery production for no identified specific benefit or management objective but would cause direct harm to thousands of fishing and processing businesses, communities, and recreational, personal use, and subsistence fishermen.***

We also oppose Proposal 172, to cap hatchery and pink and chum salmon egg take level, statewide, at the capacity permitted in 2025. These proposals undermine ADFG’s responsibility and authority in hatchery permitting, and Proposal 172 is unnecessary for all practical purposes (the permitted capacity of pink and chum salmon has remained the same since 2019). We note ADFG opposes all three proposals.

Hatchery Benefits to Commercial, Sport & Subsistence

Hatcheries across Alaska are critically important to both fishermen and processors, especially in times of downturn, to help stabilize the situation for Alaskans that are dependent upon salmon. Processors need the volume of salmon to stay viable and operational for all fisheries, and hatcheries continue as a supplement to wild stocks as they were intended. **Alaska’s salmon hatcheries contribute 20% of the value of our state’s salmon harvests and generate \$576 million in economic output, with impacts**

throughout the economy.¹ More than 16,000 fishermen, processing employees, and hatchery workers can attribute some portion of their income to Alaska’s salmon hatchery production. In addition, more than 270,000 hatchery-origin salmon are harvested annually in sport and related fisheries, and these numbers are considered conservative (McDowell, 2018). **In Prince William Sound alone, hatcheries have supplied over 1 million fish to Alaskans for personal use and subsistence.**

Hatchery pink and chum salmon are crucial for processors in Southeast and PWS because they provide the additional volume and stability needed to keep plants operating. In this way seafood processors remain viable and provide markets not just for salmon fishermen, but for all other commercial fisheries as well. Processors and harvesters have made significant long-term investments in processing plants and their fishing businesses, respectively, based on fisheries enhancement programs and permitted production decisions. In addition, tenders, support vessels, support businesses, transportation companies, sportfish businesses, and community governments (through both state and local fish taxes) are dependent on the direct and indirect economic activity that the hatchery programs provide.

Alaska’s Hatcheries are Different than the Lower 48

Hatcheries were established differently in Alaska with significant and necessary precautionary restrictions in the form of Alaska’s Sustainable Salmon Policy and Genetic Policy. These enhancement programs have been historically supported by the State for the benefit of all Alaskans – subsistence, personal use, sport, commercial. We appreciate the BOF’s interest in the long-term research that is almost concluded through the Alaska Hatchery Research Project, as it is at the forefront of our understanding of local impacts of pink and chum salmon hatcheries in Southeast and PWS, as implemented under the precautionary policies established by the State to protect wild stocks.

The State of Alaska established the hatchery program in 1971—at a time when Alaska’s salmon returns were at historic lows—to provide for more stable salmon harvests and bolster the economies of coastal communities that would not otherwise have viable economies. Since the beginning, the hatchery program was designed to supplement natural reproduction, not replace it, and to minimize negative interactions with naturally occurring populations of salmon. A testament to this design is that wild pink and chum salmon returns in these regions greatly improved since the inception of the program, and the data show that trends in wild and hatchery runs are consistent. When wild salmon runs are up, hatchery returns are up; when wild salmon runs are down, hatchery returns are down. PSPA supports a strong hatchery program consistent with the Department and the Board’s sustainable salmon policy.

Proposals 170 – 172

Proposals 170 – 172 should be rejected because they seek to reduce or limit chum and pink salmon hatchery production unnecessarily through regulation and would significantly harm Alaska salmon users of all sectors, despite a lack of evidence that Alaska hatcheries are harming wild fish production. Straying occurs naturally in both wild and hatchery-origin pink salmon stocks and attempts to determine acceptable levels of straying should consider a genetic propensity to stray, recognition that the stock, species, and environmental conditions influence stray rates, and produce credible research on the impact of straying on the productivity of wild stocks. These are exactly the types of questions the state’s Alaska Hatchery Research Project is addressing and for which they are starting to understand and communicate results. This long-term project is an example of the type of robust studies needed to

¹McKinley Research Group (2024). Update of The Economic Impact of Alaska’s Salmon Hatcheries.

understand impacts, focused primarily on the extent and annual variability in straying of hatchery pink salmon in Prince William Sound and chum salmon in PWS and Southeast Alaska and the impact of that straying on the productivity of wild stocks. This project was the State of Alaska's commitment to and investment in research to ensure hatchery production is compatible with sustainable productivity of wild stocks.

Uncertainty regarding impacts will always exist, even after the conclusion of the State's hatchery research program. We depend on the BOF to weigh this uncertainty against the known harms and the scale of impact when considering any management action. Precaution is built into Alaska's enhancement program at all levels, so citing 'a precautionary approach' via these proposals that create so much certain harm to Alaskans is not defensible. In this case, the balance clearly shows that the harm from Proposals 170 – 172 is certain and significant, while the benefits of the proposals are entirely undemonstrated.

The hatchery program has been an incredible, long-term investment by the State of Alaska for Alaskans. The dependence on the hatchery program is clear from both objective analysis and overwhelming public and regional stakeholder support for the program conveyed at your July 2018 meeting, the October 2018 work session, the December 2024 PWS meeting, the January 2025 Southeast meeting, and several Hatchery Committee meetings. Yet these proposals continue to come before the BOF with no more merit or substance provided than at previous meetings.

Please oppose proposals 170 - 172, given they have no scientific justification and serve to directly harm Alaska's salmon dependent businesses, recreational, personal use, and subsistence fishermen.

Thank you for the opportunity to comment.

A handwritten signature in black ink that reads "Julie Decker". The signature is fluid and cursive, with the first name being the most prominent.

Julie Decker, President, PSPA
Wrangell, AK



March 2, 2026

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

RE: Oppose Proposal 186

Chairman Carlson-Van Dort and Board Members:

Thank you for the opportunity to comment in advance of the Statewide Alaska Board of Fisheries (BOF) meeting in Anchorage. The Pacific Seafood Processors Association (PSPA) is a nonprofit trade association comprised of major Alaska seafood processing companies that operate 50 facilities in 22 coastal communities across Alaska. PSPA member companies have historically participated in and are fully dependent on commercial salmon fisheries across the state, including on the Kenai Peninsula. **PSPA opposes Proposal 186 to change the Central District Drift Gillnet Fishery Management Plan and further restrict the commercial drift gillnet fishery out of cycle.** We oppose the proposal for the following reasons:

- The significance of the impact (closing the largest state waters district in Upper Cook Inlet in July) and allocative nature of the proposal warrant reviewing it in cycle, at the time other relevant proposals are being deliberated. This proposal should not have been accepted as an ACR as ADFG determined it did not meet the criteria, and the Board will be reviewing all Cook Inlet escapement goals and stock of concern recommendations in October, prior to the 2027 cycle. As noted in ADFG comments, this plan consistently receives multiple proposals in cycle.
- The stated purpose of the proposal is to conserve coho salmon returning to the Deshka and Little Susitna Rivers in Northern Cook Inlet so they can be harvested in the sportfish fishery, but the management plan itself is not tied in any way to coho abundance. The proposal creates a permanent closure without the ability to adjust time or area in response to actual coho harvests or escapement.
- The Deshka River and Little Susitna River weir counts have been incomplete in recent years due to high water (since 2020 and 2021, respectively) and represent a minimum count, or underestimate. We understand monitoring coho salmon presents many challenges to obtain consistent and complete run information. But note the two coho index streams in Northern

www.pspafish.net

KETCHIKAN, AK (mailing)
 Post Office Box 5086
 Ketchikan, AK 99901
 206-281-1667
admin@pspafish.net

ANCHORAGE, AK
nicolek@pspafish.net

JUNEAU & WRANGELL, AK
 222 Seward Street, Ste. 200
 Juneau, AK 99801
 907-586-6366
julied@pspafish.net

SEATTLE, WA
 4039 21st Ave W, Ste. 400
 Seattle, WA 98199
 206-281-1667

WASHINGTON, DC
 1601 K Street NW
 Washington, DC 20006
 202-661-6220

Cook Inlet that were able to be fully counted in recent years (Fish Creek and Jim Creek) have met or exceeded escapement.¹

- In February, the North Pacific Fishery Management Council set a low coho salmon TAC for the EEZ portion of Upper Cook inlet of 16,619, which is 75% below the preseason overfishing limit (and with an additional 38% buffer greater than recommended by the Science and Statistical Committee). The EEZ will close earlier than the August 15 regulatory closure if any salmon TAC is reached. ***Proposal 186, in combination with this low coho limit in the EEZ, could effectively close the entire lower half of the Upper Cook Inlet to commercial fishing at or just after the peak of the sockeye run.*** This is at a time when this region needs commercial opportunity, and we are already significantly over-escaping sockeye² with another large run forecasted for 2026 (7.6 million sockeye run for Upper Cook Inlet with 5.6 million available for harvest).

Please oppose Proposal 186 and allow these types of significant actions to be deliberated in cycle, and after the Board's October Work Session in which you receive escapement goal and stock of concern recommendations from ADFG.

Thank you for the opportunity to comment.

Sincerely,



Julie Decker, President, PSPA
Wrangell, AK

¹ 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.

² In 2025, approximately 4.25 million sockeye were estimated to have passed the river mile 19 sonar, which is the highest count on record. The preliminary escapement of 3.85 million is estimated using the 5-year average sport fishery harvest upstream of the sonar and exceeds the SEG of 750,000–1,300,000 fish (Table 186-12).

Submitted by: Robert Papai

Community of Residence: Homer, AK

proposal 176.

I support this proposal 100%. A cumulative bag limit for all vessels statewide is a huge step in the right direction for conservation efforts. Upon my first charters here in Homer last season, I was made aware of a "no party fishing" regulation and I was simply baffled. Confused by the regulation and the purpose it serves. With this current regulation in place, it is illegal for me or anyone else to assist an angler who needs assistance. Including but not limited to elderly, children, handicapped anglers who need extra assistance to hook and land fish.

This current regulation hurts the fish as well. Not simply one species or the other. It's all of them. Particularly the rockfish and halibut. I can't count the number of halibut and rockfish that were released by myself last year alone due to this regulation. Picture this...6 anglers on the charter boat. 5 of these anglers have caught and kept their halibut under 27". We keep fishing to get this one guy his limit as well. The other 5 people are either still fishing and releasing halibut or just waiting on this one guy. This one guy has now caught and released 8 more halibut all just over the 27" limit all while a few others are forced to throw back the 26" halibut they just boated. This regulation forces us to harass more fish than intended to successfully obtain a limit. And that is just the fish I have mentioned. Now let's list the other things that go to waste here. Time, energy (both human and the fish), fuel, bait, tackle, etc.

I feel this regulation was put in place to be more conservative of our fishery but in fact it is the exact opposite and is doing more harm than good!

proposal 183

I am against the retaining of carcasses. Keeping the under 27" halibut carcasses is bad enough. I feel the facilities here in Homer will not be able to keep up with the demand. The carcass bins would be overloaded if we had to keep the rockfish carcasses too. There is just no need to keep rockfish carcasses here in Homer. They are messy, spiny and scaly. I leave the skin on them when I fillet them and that is all a game officer or anyone else should need for an accurate fish identification. The amount of unnecessary effort this will create to our already exhausting workday is ridiculous. If you feel this is an issue in and can assist enforcement in another region then please specify that in the regulations. This would simply be a further nuisance in the Homer fishery and Homer harbor.

not proposed but something I would like to see happen.

Resident CHP holders with Resident Sportfishing guides operating the vessels should be able to WORK and retain halibut 7 days a week. Those of us who earn zero income in other states. Those of us who live here year-round so we can fish/work the 3-4 month very short season. Those of us who remain in our local community and contribute to the off-season efforts should be rewarded greater than less expensive fishing licenses and a few more fish retained annually. We should be allowed to fish every day we can to help us financially get thru the long winter months.

I am all for the daily closures on halibut for non-resident guides only. Nonresident CHP holders as well. Guys that own a cabin here and claim residency but live in their house in Florida 6-8 months a year and have a resident Florida license too.... hmmm

I am not asking to punish nonresidents. We need them to come here and work. I am simply asking to be more rewarded for staying year-round and working a minimal winter job because we are needed too. The season here is short enough as it is. The weather limits us enough, Gods work! Let the locals work every day the weather allows.

Thanks, y'all have a great day!

Captain Bobby Papai

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 Casey Pape. I am a commercial fisherman in Area E (seiner) and fish aboard the R/V Montague out of Cordova, Alaska.

Reducing hatchery production would have a severe negative impact on my business and livelihood. It would make the profitability of my operation—and the broader community—so marginal that it will be difficult to remain in the region. It would also deter future investment: when regulatory decisions remove predictability from natural resource management, families and businesses cannot confidently invest in Alaska.

In a global commodity market shaped by large-scale farmed production, Alaska's coastal fishing families rely on stable, science-led management to remain competitive and viable. These proposals would undercut that stability without demonstrating measurable benefits.

I don't know how to navigate investing in my state when confronted by a board of fisheries that is so obviously against in-shore small fishing families. Look to case studies of Grand Banks Cod as an example. It is always easier and more convenient to regulate in-shore small fishing family businesses than do the hard work of regulating off-shore large corporations fishing Alaska EEZ.

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,

Casey Pape
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 Kellan Patrick, and I am a commercial fisherman and seine vessel owner in Ketchikan, Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. If adopted, these proposals would negatively affect my business. I might go out of business entirely.

People would lose jobs, and many would have no other skills to find any other employment.

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,

Kellan Patrick
Ketchikan, Alaska



Submitted by: Nate Patsos

Community of Residence: Soldotna, AK

I am opposed to proposal 175. A change in dipnet mesh size would be an unnecessary expense for all fisherman without a clear conservation goal. Specifically not allowing the use of a rope would disproportionately negatively affect the ability for the young, elderly, and commercial participants to harvest fish. Conservation of certain fish stocks is better achieved by regulating dipnet fishing opportunity in specific areas as necessary. Also, securing a dipnet to the boat with a rope prevents the net from being dropped and lost and becoming a hazard in the waterway.

Submitted by: Wayland Patten

Community of Residence: Craig AK

I strongly oppose prop:171 and prop:172

Hatchery salmon both directly and indirectly put food on my table as well as fisherman taxes that go to the school systems these small towns desperately need.

Submitted by: Wyatt Patten

Community of Residence: Craig

I strongly appose prop. 171 & prop 172.

Hatcheries are critical coastal infrastructure. They support food security, fishing opportunity, processing capacity, harbor activity, and year-round jobs across 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 Wyatt Patten, and I am a commercial fisherman based in Craig, Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals would severely reduce my income in an already struggling industry. In some seasons, hatchery salmon make up over 50 percent of my gross stock. Without hatchery salmon, my operation would not be economically feasible. I employ my family and other local fishermen, who also have families of their own, from the Prince of Wales area, and we rely on hatchery salmon in the summer to feed, clothe, and keep a roof over our families' heads.

Hatcheries are not just for commercial fishing. They also provide many subsistence-qualified users an opportunity to harvest salmon every year. Klawock residents rely on hatchery coho every year for their subsistence needs. The ripple effect goes far beyond the dollar bill.

Without hatchery production, the risks include food insecurity, income insecurity, and the diminished quality of cultural practices such as catching, processing, and sharing salmon.

Protecting stocks of concern is a major factor in how and when we fish. Hatcheries provide directed fishing opportunity without interfering with stocks of concern.

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,

Wyatt Patten
Craig, Alaska



Submitted by: Jeremiah Pavlik

Community of Residence: Yakutat

5 AAC 30.320. Fishing periods, 5 AAC 30.331. Gillnet specifications and operations, and 5 AAC 30.350. Closed waters.

As a lifelong subsistence, commercial, and sports fisherman, I strongly OPPOSE proposal 187, which aims to remove commercial fishing from the Tsiu River.

Historically, ADF&G has done well managing this dynamic system with far less extreme measures. Their existing management tools have been successful. The Tsiu River meets/exceeds escapement goals every single year, even on the years with maximum sports and commercial fishing effort occurring simultaneously. This coho run is an abundant resource. There is no legitimate biological concern for the stock based on the current movement of the mouth. This change has been anticipated for quite some time and is not at all a new phenomenon.

The Tsiu River is significant to the traditional Native population of Yakutat, including my family. Several Alaska Native families own allotments adjacent to the Tsiu and Kaliahk rivers. Passing this proposal would negatively impact these families and all commercial fishing families of Yakutat for generations. The cultural effects of removing commercial fishing at Tsiu River would be overwhelmingly negative.

In years when fish transportation flights were available, the Tsiu River commercial setnet fishery accounted for a very significant portion of the overall coho catch in the Yakutat district. It is economically valuable to the Borough and to the people who reside there. For many fisherman, this commercial fishery makes up the majority of our setnet income. We cannot afford to lose more fishing grounds.

Furthermore, proposal 187 is out of cycle for the Yakutat area and, from my understanding, fails to meet the guidelines required to be admitted into the proposal book at this time, as it does not clearly represent an unexpected emergency that threatens the longevity of the stock. This proposal simply illustrates one user group's ongoing attempt to remove the other groups for personal gain. The proposer has repeatedly submitted proposals with this goal. It would be completely unjust to reallocate this bountiful resource to out-of-state tourism. Adopting this proposal would set a dangerous precedence as it is a direct assault on our way of life as rural Alaskans.

Please vote NO on proposal 187.

These drastic conservation measures are unjustified at this time. The existing strategies used by the Department are sufficient to address the current morphological changes.

- Jeremiah Pavlik

Submitted by: Jessica Pavlik

Community of Residence: Yakutat

Opposition to Proposal 187 - TSIU RIVER

5 AAC 30.320. Fishing periods, 5 AAC 30.331. Gillnet specifications and operations, and 5 AAC 30.350. Closed waters.

My name is Jessica. I am from Oregon originally but I grew up sports fishing out of Yakutat in the Summer months. I am now a year round resident of Yakutat. In addition to sports and subsistence fishing, I have also been participating in several commercial fisheries for the last 10 years.

My first trip to the Tsiu River was in 2015. I was flown up by the late Hans Munich, of Yakutat Coastal Airlines, to meet my now-husband. After setting foot outside of the plane, with no idea where to go, I was greeted by

another commercial fisherman whom I didn't know. She wore waders, drove a 4-wheeler, and to my surprise, she packed her baby around with her. She loaded my stuff up and hauled me off to camp to start one of the most impactful trips of my life.

Yakutat has been commercial fishing in the Tsiu area for generations, some by skiff but many by hand. The commercial season is short and fishing days are limited, not because of the run size, but because of the logistics of moving fish by air. My husband and the other commercial fisherman worked exceptionally hard to catch the fish, coordinate flights, and load the fish into planes to be shipped out. Not to mention the effort it takes just to live out of a fish camp in remote Alaska wilderness. Between the overly friendly bears stealing your gear, the wild wind storms that bury everything in sight, the long 4-wheeler rides to and from duck hunting grounds when food is scarce... We truly pour our souls into this fishery, as our parents did before us and as our children will after us.

Losing these fishing grounds would be devastating to my family and many others, including the families who own Native Allotment land nearby. I am asking that you please take all of us into consideration in your conversations surrounding this topic, and that you ultimately vote NO on proposal 187 and any associated proposals that seek to shut down this multi-generational fishery.

Respectfully,

Jessica Pavlik

PC376

Submitted by: Layla Pavlik

Community of Residence: Yakutat

My name is Layla Pavlik,

And I grew up as 3rd generation fisherman at Tsiu beginning at the young age of maybe 8-9 years old. I always remember looking forward to see my Father at the river because this river was so important to us as family. My Dad would be gone for my birthday in August almost every year. I would only be able to talk to him maybe once a day, but that never mattered because I knew I would be seeing him soon and be in Tsiu. It is one of my favorite places to this day. If you ask anyone who knows me well, I mention my life at the river as a child.

Not only did I get to see my dad thrive in an environment that made him who he is today, but it made me fall in love with all that the river and fishery could provide for us. I was able to experience and witness something that made all fisherman happy and most kids will never be able to experience. I hope one day that I will be able to provide my future children with the same opportunity as my father has been able to do for me.

Tsiu is once in a lifetime experience for anyone, whether you have fishing or hunting experience. To this day some of my first memories are getting ready to fly to the river to meet my dad. My sister and I would pack up all our fishing gear, toys, and any snacks we thought my dad would like as an extra special thing.^[L]_[SEP]

Most kids my age (25) have no clue what life you can live there, from the amazing fishing that I was able to experience, the deck hand life of hauling the fish back to the buying shack, to hauling totes of ice back to the set just to turn around with another load, to being stormed in and not knowing when the river will be shut down. When no one can fish all of the locals come over and have a big dinner and just all talking about the good spots, the bad spots, the seals, and all that has been coming in it or whatever new change was happening that they had noticed.

Tsiu is a notoriously difficult river, from the inconsistent Fall weather storms, to the tides making it unfishable even though it may have been an opener. Those who chose it didn't always want to choose it, but because it was our last option for make money for the winter. Not everyone had the choice to fly back every time we knew that the river would be closed or that the weather would make it so that we could not fish, but we made that choice because of the love that we have for the fishery but the love we have for the river itself as a home.

To lose the opportunity to be able to take my future family to Tsiu would be losing a part of my home.

Not only is this river beyond comparison for any fishing for anyone but it is also a second home to many of us. You would be taking away our traditional home lands and rights. Please think of our future generations that will not be able to experience their own traditional rights.

Thank you for considering my comment, Layla Pavlik, an 8 year old who fell in love with what her home can provide.

PC377

Submitted by: Dale Pedersen

Community of Residence: Sand Point

Chair Van Dort and board members, I am writing this in opposition to proposals 163 and 164 for the sole reason of trying to explain to you that where we fish and why we fish there is a good thing. If you force us outside of our traditional tow areas we are guaranteed to catch more king salmon in our pollock fishery. We have been fishing in these areas for more than 30 years for a reason. And that reason is because there's less bycatch when we fish there. We have basically one tow for A season and another different area for B season. If you force us outside e us out of those areas we will get more bycatch. I really hate to say this but everything you as board members are doing is detrimental to the resource and doesn't make a bit of sense! Kinda like when board member Carpenter tried to explain how getting rid of the adaptive salmon management plan wasn't to smart.

PC378

Submitted by: Grant Peel

Community of Residence: Homer

Grant Peel

Owner-Operator of Foxfire Fishing Charters out of Homer

Proposal 176 – Support

My name is Grant Peel. I am a charter owner-operator out of Homer, and I strongly support Proposal 176 as a practical measure to reduce discard mortality in both guided and unguided saltwater sport fisheries.

In a period of low abundance and elevated uncertainty across several stocks, cumulative vessel limits provide a more efficient and biologically responsible framework for harvest. By allowing anglers on the same vessel to pool their bag limits, the fleet can reduce unnecessary catch-and-release events once the total allowable harvest for the group has been achieved. Fewer releases translate directly into lower release mortality, particularly in fisheries with size limits.

The Department has expressed concern that vessel limits would alter angler behavior and increase retention. I believe this concern overstates the likely behavioral response. In my 11 years as a charter operator, when clients target a species under favorable conditions, the majority already retain their individual bag limit. The existing logbook structure does not capture angler intent, time spent targeting specific species, or the difference between targeted and incidental catch. Assuming that all retained fish reflect an angler behavioral shift rather than industry wide harvest pattern shift risks mischaracterizing the data.

A cumulative vessel limit would also provide the Department with an additional management tool. Rather than weakening management, it expands flexibility. If industry-wide fishing pressure shifts toward a particular species, the Board and Department could adjust vessel-level limits to moderate total harvest while maintaining angler opportunity. Other states, including Florida, use vessel limits as an overlay to individual limits to provide this type of control for a wide variety of species (Swordfish, Cobia, Blackfin Tuna, Mahi, Tarpon, African

Pompano, Barracuda, Sheepshead and Cubera Snapper among others). In practice, vessel limits can be set equal to or more restrictive than the aggregate of individual limits, depending on management objectives.

Enforcement may also become more straightforward. Instead of verifying compliance fish-by-fish with individual anglers, officers can evaluate compliance at the vessel level while annual limits and individual seasonal caps remain intact. The proposal does not eliminate individual annual limits.

Overall, Proposal 176 improves operational efficiency, reduces discard mortality, and provides the Department with an additional regulatory lever to manage harvest pressure when necessary. For these reasons, I urge the Board to adopt this measure.

Thanks for your consideration

Grant

Proposal 183 – Oppose

My name is Grant Peel. I am a charter owner-operator out of Homer, and I oppose Proposal 183 as it is written. Requiring carcass retention for all species of fish places an undue burden upon city and harbor facilities with limited benefit to ADFG samplers and enforcement.

As written, this proposal requires the retention of all fish carcasses (excepting pink salmon) citing the need for enforcement to verify the size requirements for certain species and for increased biological sampling. Requiring carcass retention by guided and unguided sport fisherman will not increase the sampling capacity by the department. As a charter vessel capable of carrying up to 22 anglers, I represent significant impact on the catch distribution of the Homer harbor. Despite this, my catch has not been biologically sampled in the past 3 years. This is not a criticism of port samplers, who work diligently, but rather an acknowledgment of limited departmental capacity. Increasing the volume of retained carcasses does not increase sampling effort without additional funding or personnel.

On the other side, the effects of this proposition on community resources are excessive. From 2021–2023, the Lower Cook Inlet charter fleet removed an average of 167,628 fish annually (Chinook, Coho, other salmon, halibut, pelagic and non-pelagic rockfish including yelloweye, and lingcod) based on saltwater charter logbook data. Requiring all these carcasses to be retained would dramatically increase carcass volume entering harbor waste systems.

This increased volume would quickly overwhelm city facilities like the Homer Harbor Fish Grinder and carcass trailers. It should be noted that these facilities were originally funded and installed because the city's prior disposal plan of dumping carcasses off the City Dock outside the Homer Harbor was deemed to exceed EPA limits for fish waste. Ultimately this proposal risks overwhelming local facilities and creating secondary environmental compliance issues at the municipal level.

If the Board's primary concern is verification of minimum length requirements or accurate species identification, a more targeted approach would be reasonable. Limiting this requirement to species with minimum length restrictions or documented identification challenges would achieve the enforcement objective without imposing unnecessary burdens across all species.

As written, this proposal creates broad operational and environmental consequences without demonstrable gains in sampling or enforcement efficiency. For these reasons, I respectfully urge the Board to reject Proposal 183 in its current form.

Thanks for your consideration,

Grant

Justin Peeler

F/V Defiant

Defiant Fishing Company LLC

Po Box 184 Sitka Ak 99835



Chair Carlson-Van Dort, Members of the Alaska Board of Fisheries,

I am a second generation fisherman from Sitka Alaska and have been involved in the salmon, herring and crab fisheries in Alaska all my life. As well as many other net, pot and hook fisheries on the West Coast and Gulf of Alaska. I currently serve my gear group(seine) as a officer(Vice President) on the board of Directors for Southeast Alaska Seiners Association(SEAS). I am also a seine representative on the board of directors for Northern Southeast Regional Aquaculture Association(NSRAA) of which I currently serve as president and serve as a representative on the southeast regional planning team.

Oppose proposal 170

This proposal is a wide attack on Salmon enhancement and lacks any evidence of a problem besides opinion. Any problems if any, should be heard first thru the Regional Planning Team and the commissioner of Fish and Game. Were they can work in their region to solve any problems thru the best science available.

Such a wide attack would have huge ramifications to all Salmon users in Alaska not just Commercial. Many of the enhancement programs benefit sport, substance and personal use. A huge amount of our enhancement programs have direct implications with the Pacific Salmon Treaty and a cut of any kind would have a huge rippling effect.

I strongly urge you to recognize the system in place at the regional level to deal with any problems if any with are hatchery programs. We saw this very same proposal last year, nothing has changed. Those of you on the board last year saw a overwhelming amount of support for the hatcheries. I ask you to remember that. The story is still the same.

Oppose proposal 171

I do not believe the Board of Fish has the power to change egg take capacity. This topic should be addressed at the regional level and by the commissioner of Fish and Game who holds the power to do so.

Oppose proposal 172

This proposal is again a reach of power. The PnP hatcheries have not asked or been issued a new pink or chum salmon egg permit since having a agreement with the commissioner since 2019. This is a issue that should be dealt with at the regional level and in fact are. No reason for the BoF to undermine the commissioners power and the work done at the RPT level.

Sincerely,

Justin Peeler

A handwritten signature in black ink that reads "Justin Peeler".

March 2, 2026

Alaska Board of Fisheries
Statewide March 2026 Meeting

Re: Opposing Proposal's 163, 164, 165 & 11

Submitted by: John Moller on behalf of Peninsula Fishermen's Coalition

Chairman Carlson-Van Dort and Board Members:

Peninsula Fishermen's Coalition (PFC) appreciates the opportunity to comment prior to the Statewide Alaska Board of Fisheries (BOF) meeting in Anchorage. PFC comprises 17 combination vessels 58 feet or less home ported in Sand Point and King Cove. The majority of this fleet are fishing during this meeting and have asked me to represent them. PFC opposes Proposals 11, 163, and 164; and recognizes the idea of Proposal 165, but does not believe it can be implemented as written.

PFC believes these proposals, if adopted, would create situations where ADFG lacks authority. The Department opposes Proposals 163, 164 and 165 and points out the North Pacific Fishery Management Council (Council) is currently addressing many of these issues. The state water and federal groundfish fisheries are interconnected (such as the Parallel fishery) and changes to one has nuanced impacts to all that may not be understood. For these reasons, **PFC believes the appropriate action by the Board of Fisheries is to NOT adopt these proposals. The Board can always request a Joint Protocol Committee meeting with the Council to better understand the potential impacts and report back to their respective bodies.**

Proposal 163 redefines pelagic trawl gear as bottom trawl gear and then asks ADFG to come up with standards and monitoring protocols to ensure vessels meet the standard. This is problematic, given the Departments limited authority.

Proposal 164, if adopted, requires ADFG to develop a seafloor contact detection system for pollock vessels to use while in state waters. The bottom sensors and electronic monitoring (EM) that this proposal suggests is problematic because ADFG currently does not have the authority to require EM under state law. Even if EM systems were allowed under state law, it is a very expensive proposition. Current EM programs that are required in federal fisheries cost about \$1M annually (for each fishery) for data collection alone. This does not include the cost of the cameras and other hardware needed for EM. That said, nearly 100% of PFC vessels currently operate EM systems and use electronic logbooks while fishing in federal and parallel fisheries for pollock.

Proposal 165 includes salmon excluders and requires ADFG to establish performance-based criteria for excluders. The proposal also requires ADFG maintain a list of approved excluders based on field testing and scientific review. Salmon excluders can be positive, but the ADFG

comment that it is "...inactionable to conduct the requirements outlined in the proposal..." is a compelling reason to not approve. Salmon excluders designed for smaller 58-foot vessels with lower horsepower (HP) are extremely limited. The success with salmon excluders by large trawlers, with much more HP, took years in development and millions of dollars testing in flume tanks. This is a necessary step to minimize unintended consequences. In fact, some reports show smaller vessels with no excluders have a lower salmon bycatch rate than those with excluders. That being said, the Western Gulf pollock fleet continues to test salmon excluders for effectiveness on their smaller boats.

Proposal 11 affects the Aleutian Islands (AI) fisheries and this matter is more appropriately solved outside of the BOF process and without closing fisheries impacting the AI communities of Adak and Atka. The PFC fleet has traditionally fished and delivered in the AI (when there was a processor in Adak) and if the opportunity presents itself again, would return. Adak needs to retain this opportunity to support a seafood processor.

The majority of state waters are already closed to trawling. Proposals 163 – 165 appear unfamiliar with state water regulations that manage trawl fisheries and are not realistic given the Department's limitations in testing and developing such standards, in addition to the lack of authority to require EM. These state water fisheries are very short in duration but the importance to Alaskan fishermen and fisheries dependent coastal Alaskan communities like Sand Point, King Cove and False Pass, should not be underestimated. These communities cannot afford another hit to their economy and these proposals, if adopted WILL contribute to more instability. Furthermore, Proposals, 163 and 164 have the potential of forcing the small boat fleet based out of King Cove and Sand Point into unsheltered waters, risking their safety.

The proposals, with no science to support them, assume bottom contact with pelagic gear has a substantial negative impact. NOAA, through its scientists and stock assessment authors determination is the pollock trawl fisheries have a minimal or temporary impact on essential fish habitat. NOAA's determination is contrary to these proposals.

In sum, all of these proposals have negative effects to Alaska, coastal Alaska communities, and fleets with little to no documented benefits, would require significant State funding to implement, and lack both detail and authority to move ahead.

Lastly, the state water and federal groundfish fisheries are interconnected (such as the Parallel fishery) and changes to one has nuanced impacts that may not be understood. For these reasons, we believe **the appropriate action by the Board of Fisheries is to vote to NOT adopt Proposals 11, 163, 164 & 165. The Board could request a Joint Protocol Committee meeting with the NPFMC to better understand the potential impacts of such actions and report back to their respective bodies.**

Thank you for considering our recommendations.



John Moller
Peninsula Fishermen's Coalition

Submitted by: Terry Perensovich

Community of Residence: Sitka

Dear Members of the Board,

I am writing in support of proposals 163,164, and165. Alaska state law needs better clarification to define when “pelagic” trawls make bottom contact.

I fish a longline skiff for Halibut. I also operate a troller for Salmon in Southeast. Fishing cleanly is important to protect habitat and avoid bycatch of non target species. I urge you to adopt these measures to clean up the trawl industry.

Thank you for this opportunity to comment,

Terry Perensovich

March 2, 2026

Dear Members of the Board of Fisheries:

My name is Eduardo Perez. I am a commercial fisherman in Kodiak, Alaska and own two fishing vessels that crab, cod, and salmon seine through El Caporal LLC and VeroVictoria LLC.

Kodiak depends heavily on its hatchery for pink salmon, chum, sockeye, and coho. A decrease in fry releases or a shutdown would have drastic impacts on the salmon fleet. It would increase pressure on already struggling wild stocks and cause loss of revenue to vessels, crews, processors, and the City of Kodiak through landing taxes.

Hatcheries have existed for many years and are a fundamental part of how our fleet operates. Reducing production will increase crowding in wild stock areas and reduce fishing time when escapement goals are not met.

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,

Eduardo Perez
Kodiak, Alaska





March 2, 2026

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

RE: Opposition to proposals 168, 170-172. Support for proposal 169.

Dear Chair Carlson Van-Dort,

Petersburg Vessel Owners Association (PVOA) represents a fleet of mixed gear vessels that operate in State and Federal fisheries in Alaska and the West Coast. PVOA's members participate in fisheries of all gear types and rely on the sound management of fisheries resources to ensure the viability of their businesses and Petersburg as a community. PVOA has taken positions on the following proposals for the March 17-21 Statewide Finfish and Supplemental Issues meeting.

Proposal 168 - **OPPOSE**

PVOA is Opposed to Proposal 168. PVOA understands that this proposal stemmed from gear use issues in one specific region and would instead suggest that it be brought up again in the correct in cycle meeting, rather than make it a statewide proposal. PVOA sees this proposal as well intentioned but the statewide implications go beyond what we understand to be the intent and would likely bring about operational harm if implemented statewide.

Proposal 169 - **SUPPORT**

PVOA Supports proposal 169. Slinky pots have rapidly grown in popularity for their effectiveness and the ability for both small and large vessels to harvest sablefish with pots rather than hooks. Slinky pots are a legal gear in many groundfish fisheries in the state, yet there is no definition for the gear type. PVOA sees this as a responsible and necessary definition to update regulations of a popular and widely adopted gear type.

Proposals 170-172 - **OPPOSE**

PVOA Opposes proposals 170-172. While PVOA opposes proposals looking to restrict hatchery output and production in the State, we do appreciate the Board's decision to take up hatchery specific proposals at the Statewide Finfish meetings rather than continue to see them at every region specific finfish meeting. That being said, our position has not changed and PVOA believes that the Board of Fisheries is not the correct venue for hatchery management, that is instead the Regional Plan Team (RPT) process. The RPT process allows stakeholders and the Department an opportunity to look prescriptively at each hatchery site and function to determine if changes need to be made. Attempts to change hatchery production and output through the Board of Fisheries loses the nuanced and prescriptive approach that we already have in place. PVOA represents fishermen and vessels that participate in salmon fisheries throughout the State, most all of which benefit from the State's salmon hatchery programs.

Alaska's salmon hatcheries have been in operation for 50 years, using a scientifically based management framework to eliminate harm on the natural stocks in the shared waterways. When established, hatcheries are required to be situated in areas with no natural salmon streams that they could impact, but take their initial brood stock from the nearest salmon systems so that in the occurrence of straying, the genetic makeup of the systems are not impacted.

While there is no evidence that hatcheries impact the surrounding salmon stocks, the impacts of reducing hatchery egg take and production would be felt immediately by the fishermen and communities that rely on commercial salmon fishing, the majority of Coastal Alaska. A reduction in hatchery production would reduce fishermen's income, reduce fish tax revenue to communities, put more pressure on wild stocks in the same region and likely lead to a decrease in chinook, coho and sockeye hatchery output due to the cost of rearing those species as a cost cutting measure for hatcheries. Reducing hatchery production with no sound ecological or stock driven needs will put people out of business and harm Coastal Alaskan communities.

Petersburg Vessel Owners Association thanks the Board of Fisheries for the opportunity to comment on proposals for the upcoming March 17 - 21 Statewide Finfish and Supplemental Issues meeting. We look forward to answering any questions that Board Members may have in regards to our comments.

Thank you,

A handwritten signature in cursive script that reads "Nels Evens".

Nels Evens,

Executive Director,

Petersburg Vessel Owners Association

PC384

Submitted by: Matt Peterson

Community of Residence: Wasilla

I'm writing in support of proposal 186. I have been a fisherman of the Little Su since 1982 when I was 3 years old. My first year out of High School I started guiding in 1996 and here I am going into year 30 as a guide, every year on the Little Su. I have seen that river when salmon fishing was at its best and now not being able to catch a king due to, in my opinion, mismanagement. I can see a trend in the Coho's following in the same direction as the Chinooks. My son who is 18 will be starting his first year of guiding this year and his livelihood will be short lived if we don't do something about it. Please strongly consider proposal 186 to be in effect as soon as possible so the Little Su can still be a fishable river for years to come.

PC385

Submitted by: Bryon Pfundt

Community of Residence: Petersburg

Proposals 170,171,172

I oppose proposals 170-172. These proposals seem very broad brush in their approach. This could very well lead to unintended harmful consequences. My experience working in the RPT process in years past has shown me that this is the place where these types of concerns can be fully evaluated in regard to that specific project.

PC386

Submitted by: Tuayan Phillip

Community of Residence: Anchorage

Opposing proposal 162 and 175

175 Bans 4 1/2" mesh nets and tying nets off to boats will severely affect elderly or handicapped people from being able to enjoy the beauty of subsistence and living off the land.

162 affects the ability for all people to traverse the copper river where in many places can only be accessed through boat access which is not affordable to many Alaskans.

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 Greg Phillips, and I am a commercial fisherman in Southeast Alaska. I operate the F/V La Nina under Phillips Fisheries LLC.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals would severely affect the livelihood of myself and my crew. They would reduce harvest opportunities, processing jobs, food availability, and local opportunities for subsistence and sport fishing.

These proposals represent opinion-based, self-interested action, not science-based, community-serving policy. I do not believe that hatcheries are contributing to ocean biomass decline or any negative outcomes in the marine ecosystem because I have not seen scientific proof. Hatcheries are essential to sustaining our fishery.

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,

Greg Phillips

Submitted by: Larry Platt

Community of Residence: Gustavus

Larry Platt Gustavus Alaska

My comments are I think proposals 163 to 165

My 2 cents. I do not want trawl to be able to fish within 3 miles of shore. I do not want trawl to exist. Ban Trawling forever! The fishing in my neck of the woods has been depleted during the 35 years I've lived here. Is it trawl? Is it ocean warming? Is it pollution? I don't know. What I do know is that Trawl wastes tons of fish and that kind of operation needs to go bye bye. Add up all the possible culprits and end them all. It's getting bad guys and nobody is doing anything about it. Quit protecting this fishery for the money. That is the problem.

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 Brooke Poirot, and I am a commercial fisherman based in Homer, Alaska. I operate the F/V Brooklyn.

I am writing to urge the Board to reject Proposals 170, 171, and 172. These proposals threaten my livelihood and income stability. They would also affect my winter employment building and repairing seines.

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

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,

Brooke Poirot
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 Stacy Poppe, and I am a commercial fisherman based in Juneau, Alaska.

I am writing to urge the Board to reject Proposals 170, 171, and 172. We are raising our family to be future fishermen, and we rely on the hatcheries for a continued fishery and a stable income. The communities in our region rely heavily on hatchery fish, and these proposals could be detrimental to their future. Fewer fish returning means fewer opportunities for everyone.

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

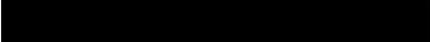
Alaska's hatchery system is already governed by a science-led, permit-based, adaptive management framework administered by the Alaska Department of Fish and Game (ADF&G). Hatchery production levels are not discretionary; they are established through permits, reviewed continuously, and adjusted when data 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,

Stacy Poppe
Juneau, Alaska



To whom it may concern.

I would like to apologize in advance because this situation cannot be summed up in 3 to 10 sentences. This is a topic filled with DEEP emotion.

My wife & I actively own and operate Drill Team Six Fishing Excursions, LLC. We have 11 years of guided fishing experience in the Mat-Su Valley. We fully support proposal 186. For years we have been watching BOF & ADFG try to manage returning salmon stocks. The problem is the agencies cannot manage anything if there is nothing to manage. Let's cut to the chase. Freshwater sport fishing.....not an issue. The issue is there's no salmon stocks returning... and those stocks only come from one place and that is the saltwater. Management of the saltwater needs to be much more realistic. This situation is a broken record we have been listening to for years. Between saltwater commercial trawling & saltwater commercial fishing interests we know where our fish are going because of GREED IN OUR OCEANS.

Control the nets, increase the returning stocks. Easy stuff.... but yet nothing much is ever done because of GREED IN OUR OCEANS.

A real kick in the pants to a sport fisherman is when we get restricted because of low returns, yet the nets are out there scooping up fish left and right. This isn't a fish issue, it's a management issue. The fish are there, the commercial harvest numbers support that statement. But they can't get to where they need to go to reproduce because they end up in a net because of GREED IN OUR OCEANS.

Quit catering to saltwater commercial interests. If you clear-cut a forest and don't plant more trees, you're out of trees. If you continue to over harvest (now limited) salmon stocks in the ocean you're never going to get anything to return.

What is so hard to understand about this?

I don't see Chinook salmon mentioned, do we care about them anymore? I sure do. That run of fish is absolutely destroyed. Why? Overharvesting. It used to be a commercial & sportfishing issue. Sport fishing has now been restricted for YEARS. Still no fish because of GREED IN OUR OCEANS.

It's time for REAL ACTION, not more words.

Myself, as well as many others, have given up on our fisheries management. It's the same story every year, the same outcome, the same management practices, the same restrictions, but yet nothing ever changes. Talk is talk, but action gets results. So let's quit talking and start acting.

I also want to add that Alaska fishing industry is an incredibly enormous part of our tourism industry. It puts food on our table. That portion of our industry is failing at an

alarming rate costing our state money, costing small businesses money, not putting excess cash flow into fish and game programs through the sale of temporary licenses...etc. Failure of management in our oceans is leading to failure as a whole. Those aren't words, that's reality. Every time we get restricted in season, our business loses between \$8,000 - \$12,000 in trips that we have to cancel because we can't conduct them. But what's more important to us is that our customer who has booked this trip 6 months ago, has planned for it & is looking forward to it because it's a once in a lifetime experience....opportunity is taken away because of GREED IN OUR OCEANS.

It has come to the point you have better odds in Vegas hitting a jackpot, than you do having a quality Chinook or Coho run in the Mat-Su because of GREED IN OUR OCEANS.

I was hesitant to write anything concerning this, I've written several times in the past and attended meetings, publicly spoke and just never saw any action. I have completely lost faith. I personally feel that Alaska's fisheries management has failed at the highest level possible concerning Coho and Chinook stocks. Our fisheries have been beyond terrible since 2018. I think there are lots of factors why. It is too late to worry about the past. You have a narrow window to get it right, so get it right.

Proposal 186 is a step in the right direction. There needs to be MORE of this type of thinking. If there will be an inconvenience, THEN LETS ALL SHARE IN THAT PAIN.....not just the END USER (Sport Fisherman).

Thank you for your time & consideration,

With Extreme Sincerely,

Sonia & Dan Praslowicz



March 2, 2026

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

Submitted via online comment form and email: dfg.bof.comments@alaska.gov

RE: PWSAC opposes Proposal 170, 171, and 172

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

The Prince William Sound Aquaculture Corporation (PWSAC) is a regional nonprofit hatchery organization operating four salmon hatcheries in Prince William Sound (PWS) and one on the Gulkana River, raising all five species of Pacific salmon for harvest in subsistence, sport, personal use, and commercial fisheries. Founded in 1974, PWSAC was initiated by local fishermen to support the region's serious financial distress following several years of low salmon abundance. Today, PWSAC employs 54 full-time staff members and approximately 75 seasonal workers funded by salmon enhancement taxes and cost recovery fish sales. These taxes and cost recovery fish sales are derived solely from Area E permit holders and PWSAC operations. PWSAC is governed by a diverse board of 45 members, of which only 27 are permit-based. The remaining 18 seats represent sport, subsistence, local municipalities, Native villages, processors, and general seats who bring valuable expertise and perspective supporting PWSAC's mission: "To ethically and professionally optimize salmon production in Area "E" for the long-term well-being of all user groups. PWSAC serves over 800 commercial salmon fishing permit holders, and thousands more stakeholders who benefit from PWSAC hatchery produced salmon. Since inception, PWSAC has returned on average 65% of fish produced to common property fisheries.

PWSAC salmon contribute significantly to Prince William Sound fisheries and regional economies. Between 2012 and 2017 PWS commercial fishermen (all gear types) harvested a cumulative total of 539 million pounds of PWSAC-produced salmon worth \$296 million¹. The annual commercial harvest of PWSAC fish averaged 90 million pounds worth \$49 million.

During the same period (2012-2017), the first wholesale value to processors of products originating from PWSAC salmon totaled more than \$730 million, or an annual average of about \$122 million. Pink salmon were the largest component, contributing an annual average of more than \$70 million.

Beyond commercial fisheries, PWSAC salmon production supports sport, personal use, and subsistence harvests statewide. Between 2012 and 2017, nearly 40,000 PWSAC coho salmon were harvested, equivalent

¹ Economic Impact of Alaska Salmon Hatcheries (McDowell Group 2018)

**DEVELOPING SUSTAINABLE SALMON FISHERIES
FOR ALASKA AND THE WORLD**

P.O. Box 1110 · Cordova, Alaska 99574
P. 907 424 7511 · F. 907 424 5508

www.pwsac.com

to approximately 2,200 daily bag limits annually. During the same period, approximately 7,500 PWSAC sockeye salmon were harvested, representing more than 200 daily bag limits annually.

PWSAC's operation of the Gulkana Hatchery produced nearly two-in-five sockeye salmon between 2008 and 2017 in the personal use and subsistence harvest. Residents of more than 50 Alaska communities including Fairbanks, Anchorage, Matanuska-Susitna, and Copper River Valley harvested more than 325,000 PWSAC produced sockeye salmon.¹

PWSAC salmon production also generates significant state and local taxes. Between 2012 and 2017, harvest of PWSAC salmon generated about \$10.6 million through the State of Alaska's Fisheries Business Tax. Half of this revenue was shared with communities where PWSAC salmon were landed (\$5.3 million) and the State retains the remainder. Cordova and Valdez receive most of these funds.

The scale of PWSAC operations translates directly into measurable cultural, social, and economic benefits to all user groups served by PWSAC's mission for nearly five decades.

For each of these proposals, please be aware, **pink and chum production and cost recovery fund the majority if not ALL PWSAC produced coho, chinook, and sockeye.** Coho, chinook, and sockeye programs generally are unable to pay for their operational costs.

Proposal 170 –5 AAC 40.XXX New Regulation.

Proposal 170 looks to reduce hatchery permitted eggtake levels of pink and chum by 25%. This proposal in similar form has asked the board to reduce hatchery eggtakes on at least 7 other occasions, all with a lack of empirical science and based on unsubstantiated claims.

ACR 2 – Submitted by Virgil Umphenour at the October 2018 BOF Work Session sought to cap statewide private non-profit salmon hatchery eggtake capacity at 75% of the level permitted in 2000 (5 AAC 40.XXX). **Failed 2-5 (Public comment was 11 in favor and 116 opposed)**

Proposal 54 – Submitted by Virgil Umphenour at the December 2021 PWS/Upper Copper/Upper Susitna Finfish/Shellfish meeting sought to amend the PWS Management and Salmon Enhancement Allocation Plan to specify hatchery chum salmon production by reducing to 24% of year 2000 levels. **Failed 0-6 (Public comment was 5 in favor and 94 opposed)**

Proposal 55 – Submitted by Virgil Umphenour at the December 2021 PWS/Upper Copper/Upper Susitna Finfish meeting sought to amend private non-profit hatchery permits to decrease allowable hatchery production to 75% of year 2000 levels. **N/A 6-0 (Public Comment was 4 in favor and 102 opposed)**

Proposal 43 – Submitted by Fairbanks Fish and Game Advisory Committee at the November 2023 Lower Cook Inlet Finfish meeting sought to amend the Cook Inlet Salmon Enhancement

DEVELOPING SUSTAINABLE SALMON FISHERIES FOR ALASKA AND THE WORLD

P.O. Box 1110 · Cordova, Alaska 99574
P. 907 424 7511 · F. 907 424 5508

www.pwsac.com

Allocation Plan and reduce hatchery production to 25% of the year 2000. **Failed 1-6 (Public comment was 6 in favor and 84 opposed)**

Proposal 59 – Submitted by Fairbanks Fish and Game Advisory Committee for the 2024 January Kodiak Finfish meeting. Reduce hatchery production to 25% of the year 2000 production. **Pulled due to lack of regulatory conformity.**

Proposal 78 – Submitted by Virgil Umphenour at the December 2024 PWS/Upper Copper/Upper Susitna Finfish/Shellfish meeting sought to amend private non-profit hatchery eggtake permits by 25%. **Failed 1-5 / 1 absent (Public comment was 20 in favor and 225 opposed)**

Proposal 156 – Submitted by Virgil Umphenour at the January 2025 Southeast and Yakutat Finfish and Shellfish meeting to reduce Southeast Alaska Hatchery Permitted eggtake of pink and chum salmon by 25%. **Failed 2-5 (Public comment was normal proportions with 264 opposed)**

In each instance, the Board evaluated available scientific, economic, and management information and found no conservation benefit that reducing hatchery production of chum and pink would justify the documented harm to fishermen’s small businesses, families, as well as sport, subsistence, and personal use programs in PWS and across large regions of Alaska. **The harm caused by passing this proposal is staggering, known, and quantifiable. There is no empirical or mechanistic evidence suggesting that reducing hatchery production of chum and pink salmon would lead to positive change for other species in or outside Prince William Sound Alaska.**

Proposal 171 –5 AAC 40.XXX New Regulation.

Proposal 171 looks to reduce Prince William Sound hatchery pink salmon eggtakes in a manner sufficient to reduce straying into Lower Cook Inlet streams to levels specified in the Prince William Sound/Copper River Comprehensive Salmon Plan.

The proposal relies on a misinterpretation of Alaska Department of Fish and Game Special Publication 18-11 (Otis et al. 2018) and seeks regulatory action that is unsupported by science, offers no measurable action, no implementation standard, and no enforceable metric.

The Lower Cook Inlet observation report was explicitly designed as a pilot, baseline study to document the presence of hatchery origin pink salmon in selected Lower Cook Inlet escapements following the reopening of local hatcheries. The authors are clear that the observations did not evaluate biological impacts, did not assess productivity or fitness effects, and did not establish acceptable or unacceptable levels of straying. Presence alone, as documented in the report, is not evidence of harm.

From the observations the authors state that *“it is not clear what level of straying is benign and what levels should be prevented to avoid potentially negative impacts,”* and further acknowledges that if straying thresholds exist, they are species, population, and habitat specific. The publication emphasizes that few

DEVELOPING SUSTAINABLE SALMON FISHERIES FOR ALASKA AND THE WORLD

P.O. Box 1110 · Cordova, Alaska 99574
P. 907 424 7511 · F. 907 424 5508

www.pwsac.com

studies have measured actual effects of hatchery strays on wild pink salmon populations. Proposal 171 disregards these conclusions and instead presumes harm where none has been demonstrated.

The proposal further misapplies the 2% straying reference from the Prince William Sound/Copper River Comprehensive Salmon Plan. As the Lower Cook Inlet report and the plan itself acknowledge, this value is not well supported by empirical evidence, was never intended as a regulatory limit, and predates much of what is now known about natural pink salmon straying rates, which commonly exceed 2% even among wild stocks.

The department, hatchery operators, and industry members have invested substantial time and resources into the ongoing Alaska Hatchery-Wild Interaction study to address questions about genetic and ecological interactions between hatchery and wild stocks after 40-50 years of hatchery existence. Hatchery operators and processors alone have contributed more than **\$8.4 million** to this more than decade long research. Proposal 171 prejudices the outcome of this work and seeks to impose regulatory changes without scientific consensus.

Proposal 172 –5 AAC 40.XXX New Regulation.

Proposal 172 asks for a board generated regulation to place a moratorium on pink and chum hatchery production.

Proposal 172 is unnecessary and would undermine Alaska’s long-standing, science-based hatchery permitting framework. Hatchery operations are already subject to extensive oversight by the Alaska Department of Fish and Game through permitting, annual management plans, regional comprehensive planning, and adaptive management measures specifically designed to prevent adverse impacts on wild stocks. Where concerns arise, the Commissioner already has clear authority to amend permits or impose restrictions based on biological need. A blanket moratorium adds no new conservation protection beyond what already exists.

The proposal is premised on “uncertainty” in hatchery-wild interactions, yet uncertainty alone is not a sufficient basis for freezing department critically reviewed and evaluated permitted activities that provide demonstrable economic, social, and food-security benefits across Alaska. Importantly, major hatchery-wild interaction studies are currently underway, and as stated earlier, funded in significant part by hatchery operators themselves. Proposal 172 prejudices the outcome of this work and imposes restrictions before science is complete, contrary to Alaska’s tradition of adaptive, data-driven fisheries management.

Prince William Sound Aquaculture Corporation believes these proposals are outside the Board’s authority as Alaska statutes clearly and comprehensively assign hatchery permitting, egg-take limits, release numbers, and production decisions to the Commissioner of the Alaska Department of Fish and Game, not the Alaska Board of Fisheries. If any version of these proposals were passed at Board of Fisheries, it would bring uncertainty to hatchery programs and permitting both in terms of cuts and additions to hatchery programs. This alone is reason enough to maintain Alaska’s long standing iterative process of department and commissioner hatchery permitting coupled with the public regional planning team (RPT) process. The RPT has an advisory role to the commissioner allowing users of the resource within each region to determine

DEVELOPING SUSTAINABLE SALMON FISHERIES FOR ALASKA AND THE WORLD

P.O. Box 1110 · Cordova, Alaska 99574
P. 907 424 7511 · F. 907 424 5508

www.pwsac.com

what fishery enhancement is desirable. The commissioner is then able to determine what is appropriate within the department mandate to protect natural production. PWSAC urges the Board of Fisheries to continue with the Department's established permitting, monitoring, and adaptive management processes to continue doing exactly what they were designed to do—protect wild salmon while supporting sustainable fisheries that benefit all Alaskans.

PWSAC hatchery operations are permitted, monitored, and adjusted by ADF&G under regulations (5 AAC 39.222) explicitly designed to ensure no adverse impacts to natural stocks. Where risks are identified, adaptive management tools including release timing, marking, harvest controls, and broodstock limits are already employed. None of these proposals identify a documented failure of this regulatory system in Prince William Sound or elsewhere in the State.

The Alaska Department of Fish and Game has opposed proposals 170, 171, and 172 concluding they are unsupported by scientific evidence and outside the Board's appropriate role.

PWSAC continues to support constant scientific review and evaluation of the Alaska Salmon Hatchery Program and supports the current laws and regulations that guide it. PWSAC also supports the iterative process involving department staff, hatchery operators, stakeholders, and the public. In the absence of compelling data or analysis supporting a reduction for conservation reasons, any significant changes need to be thoroughly examined by hatchery board members for hatchery needs and consider stakeholder input to ensure a well-informed decision.

For these reasons, **PWSAC opposes Proposal 170, 171, and 172.** PWSAC urges **the Board of Fisheries to reject Proposal 170, 171, and 172** and any similar requests to reduce hatchery production that are scientifically unsupported, and procedurally indefensible in a manner that would destabilize the proven benefits PWSAC and Alaska salmon hatchery programs have provided for nearly five decades.

Sincerely,



Geoff Clark
General Manager/CEO

**DEVELOPING SUSTAINABLE SALMON FISHERIES
FOR ALASKA AND THE WORLD**

P.O. Box 1110 · Cordova, Alaska 99574
P. 907 424 7511 · F. 907 424 5508

www.pwsac.com

Submitted by: Kristin Smith

Prince William Sound Economic Development District

Community of Residence: Cordova

On behalf of the PWS Economic Development District, I am writing to urge that the Board of Fisheries reject proposals 170 - 172. See attached letter to the Alaska Board of Fisheries for more detail.

Thank you for the opportunity to comment,

Kristin Smith, Executive Director, PWSEDD



March 2, 2026

Marit Carlson-Van Dort, Chair
Alaska Board of Fisheries, ADFG
P.O. Box 115526
Juneau, AK 99811-5526

Dear Chair Carlson-Van Dort,

On behalf of the Prince William Sound Economic Development District, I am writing to express our strong opposition to Proposals 170, 171 and 172 made to the Board of Fisheries. Such a decision calls for careful scientific analysis, and I note that Department of Fish & Game staff opposed a similar proposal in 2023, commenting:

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 (ADF&G, Staff Comments, Lower Cook Inlet Finfish Board of Fish Meeting, 2023).

The drastic change in hatchery production proposed by Proposal 170 would adversely affect *all* the fisheries of Prince William Sound: subsistence, sport, seine, drift gillnet and personal use.

Even those without direct ties to seafood benefit from hatcheries as drivers of economic opportunity. Recent analysis by McKinley Research Group highlights the impacts that hatcheries have on economic outcomes throughout Alaska. Each year, Alaskan hatcheries account for roughly 4,200 jobs, \$219 million in labor income, and a total of \$576 million in economic output (MRG 2024). In Prince William Sound alone, hatcheries generate roughly 2,200 jobs, \$104 million in labor income, and a total economic output of \$315 million each year. Hatcheries drive economic impacts far beyond direct labor and income by benefiting thousands of fishermen, processing employees, and hatchery workers, not to mention thousands more support sector workers, and even sportfish charter operators and guides, who likely rely on hatchery production for some portion of their income.

Alaska's hatchery system was established by legislation and is managed within careful regulatory and permitting constraints. Proposal 172 disregards this system and bypasses the science-based permitting process and commissioner oversight. This proposal would eliminate

...

the processes set up to facilitate public participation in the deliberations of managing our PWS fisheries.

It's hard to overstate the far-reaching impacts of Alaska's hatcheries, especially when it comes to additional tax revenue. Hatcheries and the fish they produce generate local revenue through taxes on raw fish, property, and sales paid by commercial and charter fishermen, seafood processors, hatchery associations, and support sector businesses and employees. These tax revenues help Alaskan communities to survive in the challenging years and thrive in the good years across the state.

More directly, hatchery-produced salmon contribute to the State of Alaska Fisheries Business Tax, which ranges from three percent to five percent and is levied on ex-vessel values of harvested hatchery salmon. The revenue from this tax is split evenly between the state and the community where the salmon are landed. Thanks to enhancement taxes paid by commercial fishermen and cost recovery activities, Alaska's nonprofit hatcheries are a major driver of south central Alaska's economy, ensuring that they contribute much more to the state's economy than they pull out of it.

Because Prince William Sound salmon hatcheries are a resource that benefit all fishing user groups, generate revenue for the State and for our fishing communities, and are one of our region's bigger employers, we oppose the approach put forward in Proposals 170, 171 and 172 and urge the Board of Fisheries to reject these proposals.

Thank you for your consideration,



Kristin Smith
Executive Director



2026 Statewide BOF Public Comment

Madam Chair and Members of the Board,

Thank you for the opportunity to comment prior to the upcoming 2026 Statewide Board of Fish Meeting in Anchorage. My name is Forest Jenkins and I am an Alaskan resident. I am the current president of the Prince William Sound Setnetters' Association, which has been in existence since 1993. I hold seats on both the CDFU and PWSAC Boards. I have been participating in the Eshamy District setnet fishery since 2008, and I am an active permit holder in the Prince William Sound commercial drift gillnet, setnet, and shrimp fisheries.

Proposals 170, 171, 172-OPPOSE

Before we can start discussing these proposals, we have to ask ourselves what is the real goal of these proposals and what is driving the proposers to push for such drastic and destructive change? We see two potential arguments here. One centered on the interaction between wild and hatchery stray pink salmon that is built on incomplete and insufficient research on relative fitness and concerns about competition in spawning habitat. The second, which is centered on the assumed interactions between wild king salmon and hatchery stray pink salmon and is built on strong reactionary emotions and an agenda to save specific struggling king stocks in this state, is not representative of the proposals or the hatchery stray data that is currently available.

The majority of the research is being conducted on wild and hatchery stray interaction between hatchery and wild pink salmon and not on the interactions between wild king salmon and hatchery stray pink salmon. If the Board is going to make any movement at all related to pink and chum salmon egg take based on king salmon concerns, they will do so solely with the effort to "do something." We are in a tough spot in this world today and a lot feels out of our control. The Board of Fish doesn't have instantaneous solutions to the complexities of climate change, permafrost melting and leaching heavy metals into fragile spawning habitat, receding ice pack and rising water temperatures, increased predation and selective predation from pinnipeds and whales, changing populations of important prey species that are sensitive to rising ocean temperatures—such as capelin that have made up the majority of king salmon gut content at times in the past—and therefore the board doesn't have a simple solution to the king salmon concerns across our state. There is no substantial evidence linking the decline of king salmon stocks with hatchery pink salmon. That said, some may be feeling the need and panic to dismantle these hatchery programs and curtail the livelihood of our coastal communities in the effort to save the king salmon, because it's something you believe you can change. But without clear evidence and justification, this should not be an option.

The Board should be making decisions based on good science and stakeholder input that justifies their decisions and backs up the data. The Board should be seeking long-term solutions and recommending further research to enable them to make informed decisions in an attempt to solve the complex and challenging issues. Undermining

hatchery programs in the Prince William Sound or across the state without the science to back it up will come back to bite us all. We need more science and we need more answers before we kick out the stool from under one of the most significant scientific backbones in this state. There is a great deal of current research being done within PNPs to increase fidelity of hatchery stocks and minimize effects on wild stocks. Alaska hatchery programs are designed to enhance Alaska salmon fisheries while taking pressure off wild stocks. If we want to try to save king salmon and protect our wild salmon stocks in general, viable hatchery programs will be a cornerstone in this research and conservation effort. Disabling these programs just in an effort to 'do something' is very irresponsible and nearsighted.

The proposals and the appropriate associated discussions should be centered on the interactions between wild pink salmon and hatchery stray pink salmon. We will address these concerns here and clarify that the solutions still do not lie in these proposals, but rather in further research and collaboration with hatchery programs across the state.

First, we would like to address the fitness studies that are being used in the proposers' argument to reduce hatchery production. With the second generation data just recently being presented at the AMSS (Second generation fitness consequences of Pink Salmon hatchery-origin strays in Prince William Sound, Shed et al., 2026), we see the fitness already improving back toward the original wild fitness. This is encouraging data and it is clear that we need to understand what happens in the third generation and maybe beyond. Through natural selection and adaptation it appears that these lower fitness genetics will already be worked out of the population by the third generation. This might help explain why after decades of hatchery production in Alaska, we still have prolific genetically distinct wild pink salmon stocks all over the state. If the lower relative fitness of hatchery fish was negatively impacting the fitness of wild pink salmon stocks, how are we still seeing such genetically diverse and unique pink salmon stocks thriving all over the North Pacific? Although we only have data for the first two generations of this study, we have decades of data naturally recorded in the genetically distinct wild pink stocks, clearly suggesting that over time, hatchery stray pink salmon are not reducing the fitness of wild pink salmon stocks.

Second, we would like to address the straying concerns related to competition for spawning habitat. Based on the data presented, it appears that the majority of these hatchery strays are showing up late to wild streams that are already fully occupied by wild pink salmon. When this is the case, less productive hatchery strays are assumed to have little success competing for spawning habitat late in the game. We also have to remember that wild pink salmon have a high level of straying in their populations, and we don't know exactly what that percentage is. This makes it really difficult to scrutinize hatchery stray rates when we don't know what baseline is. Also, straying is a genetic advantage to expand the species and occupy new, optimal habitat when natal streams are at capacity or when more ideal habitat emerges from watershed changes or glacial recession.

When you combine the relative fitness data with the natural straying phenomena, it appears that there is no current issue warranting these drastic shifts in hatchery production. One potential concern with hatchery straying is the long-term risk to wild stock genetics, but when straying is a natural occurrence and wild fitness appears to prevail through generations of interbreeding, we are struggling to see any concern here. All of the research that has been done concludes with the request for more funding and more time for further research; it is clear that more research is needed to make any decisions at this level. We fully support further research regarding what happens to the third and potentially fourth generations, and we also fully encourage the continued research from the Department and the PNPs to continue fine tuning the most sustainable hatchery system in the world that we are all so fortunate to have in our backyard.

Lastly, there is a misconception around the state that hatchery fish, and specifically pink and chum salmon, are for the benefit of commercial fishermen only. However, these two species are a significant economic driver that help make it possible to fund other smaller programs and partnerships that offer access to all five species of salmon to all Alaskans. Without sufficient pink and chum production to maintain economically viable hatchery programs, how do we expect to have the capacity to provide sport and subsistence opportunities for all Alaskans while also taking pressure off wild stocks? ADFG Sport and Subsistence programs around the state already significantly partner and even lean on PNPs for their increased capacity and expertise. ADFG stocking programs around the state are at capacity and have no more space for further rearing expansion, all while people are asking the stocking program to stock more kings and silvers for sport and subsistence needs. ADFG Sport Fish has a healthy, collaborative relationship with these hatcheries and they see the necessity for them moving forward. PWSAC will resume rearing for 250,000 king salmon for release in Chenega, Cordova, and Whittier. In addition, they are currently working through the permitting process for a requested 20,000 kings for Tatitlek. With ADFG stocking programs at capacity, future stock restoration projects and expanded harvest opportunities for all Alaskans depend on collaboration with PNPs.

Any reduction or moratorium on hatchery production would indefinitely handcuff us from taking action to restore struggling wild salmon stocks. This is an opportunity for us to nurture our relationship with Alaskan hatcheries to ensure we have all the tools available to respond and sustainably manage salmon stocks across our state, meanwhile providing food security and supporting healthy coastal communities.

Proposals 164 and 165-SUPPORT

We fully support both of these proposals that simply intend to clean up the pelagic trawl fishery and bring it into compliance. Transparency and regulatory compliance from the trawl fleets are essential for the long-term viability and sustainability of this fishery.

Pelagic trawlers in state waters are not allowed to touch bottom, but this is currently not enforceable without bottom-monitoring technology. Requiring bottom-monitoring in this

fishery would bring fishing practices within regulation while protecting the fragile and ecologically important benthic habitats in state waters.

We also believe that the addition of salmon excluders to pelagic trawl gear in state waters is another great step in reducing our unintended impact on wild salmon populations. The current climate around salmon bycatch in Alaska combined with concerns about salmon stocks around the state demands conservation efforts and clarity in this fishery.

We encourage the Board to pass both of these proposals, as they do not intend to impede success in this fishery, but simply ask for conservation and regulatory compliance.

Proposal 175-SUPPORT

We fully support this proposal to reduce the dip net mesh size in order to help reduce incidental catch-and-release mortality of Chinook salmon.

Proposal 180-SUPPORT

We support this proposal that would set an annual statewide limit of 5 king salmon in the sport fishery. During times when all of us are being restricted to protect king salmon populations around the state, it is irresponsible not to have an annual limit on king salmon in the sport fishery. ADFG recently reduced the daily limit to 1 king salmon from April 1st to September 15th in the Gulf of Alaska. With obvious concerns around multiple king stocks in our state, we should not be allowing such a liberal winter king fishery to be executed. It seems counterintuitive to only restrict a sport fishery for part of the year if we are trying to protect king stocks.

Proposal 187-OPPOSE

We strongly oppose the proposal to close the Tsiu, which is a completely allocative grab attempting to remove a historic commercial setnet gear group from the fishery when there is no biological concern or allocation concern. In our opinion, this proposal should never have made it past an ACR; natural stream bed fluctuations at the mouth of a river located on a violent, exposed stretch of coastline are not unforeseen and should not qualify as an out-of-cycle emergency, particularly for a stock with no biological concern.

This proposal would essentially push the setnet fleet out of the Tsiu River and establish a private fishery for the sport fish lodges. Commercial users would be forced to fish only in the Kaliakh and outside of the mouth of the Tsiu River. Currently, every user group along this system is getting their fish throughout the two seasons since the river changed its course. So why are we here to discuss this? How is a change in a naturally ever-changing mouth of a river considered unforeseen?

Further, this fishery is the only alternative for setnet permit holders in the Eshamy District. Historically, setnet fishermen generally targeted coho stocks in the fall, often relocating to different river systems to target these fish. This is part of the reason why

our CFEC permits allow us to fish the sockeye run in Eshamy and the silver run in the Tsiu. There are 29 active permits in my fishery. When there are weak returns in the small 12-mile Eshamy District, this is the only place we are legally allowed to fish besides the Eshamy District. If this proposal were to be adopted, we would lose significant access to the already small area we are granted to fish with a PWS Setnet Permit.

Eliminating this area from our fishery would be extremely allocative, could lead to a further drop in permit value and economic stability, and is absolutely uncalled for. We advise the Board to reject this proposal, as a changing river channel is clearly not an unforeseen situation, it is a blatant allocation grab by the sport user group, and there is currently no biological concern in this fishery.

Thank you,

Forest Jenkins
Prince William Sound Setnetters' Association 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 William Prisciandaro, and I am the owner and operator of the fishing vessel Lori Ann, based out of Haines, Alaska, fishing in the northern Southeast area of Alaska. I have actively fished a Southeast Alaska gillnet permit for the last 17 years.

I am writing to urge the Board to reject Proposals 170, 171, and 172. If these proposals are passed, my livelihood and income would be drastically affected. I have fished on hatchery fish every year of my fishing career, and they represent about half of my income for the year. Reducing their production would change my family's stability greatly.

With reduced production of hatchery fish, our communities in Southeast Alaska and other areas of the state will see a reduced trickle-down effect from the earnings of fishermen who live in the area.

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,



PSVOA

PURSE SEINE VESSEL OWNERS' ASSOCIATION

1900 W Nickerson St., Ste. 320 ■ Seattle, WA 98119 ■ Tel: (206) 283-7733 ■ Fax: (206) 283-7795 ■ www.psvoa.org

March 2, 2026

SUBMITTED ELECTRONICALLY

Alaska Board of Fisheries
P.O. Box 115826
Juneau, AK 99811

Re: Oppose Anti - Hatchery Proposals 170, 171, and 172

Dear Board of Fisheries Members:

The Purse Seine Vessel Owners Association (“PSVOA”) respectfully submits the following comments opposing the above-referenced anti-hatchery proposals which are before the Board at the upcoming March 17 – 20, 2026, Statewide Finfish and Supplemental Issues meeting. PSVOA is a commercial fishing organization having members that participate salmon purse seine fisheries throughout the state.

PSVOA strongly opposes the above-referenced anti-hatchery proposals. In general, these proposals are nearly identical to other anti-hatchery proposals which the Board has consistently and correctly rejected in the recent past. In permitting hatchery operations, the Alaska Department of Fish and Game (ADF&G) already considers many of the concerns raised in these proposals, including the need to minimize interactions between hatchery origin and wild salmon and the need to ensure harvest practices targeting hatchery produced salmon do not negatively impact wild fish.

Proposal # 170: OPPOSE

PSVOA is opposed to proposal 170. PSVOA opposes proposals that seek to reduce hatchery production and has opposed this proposal in its previous forms. Proposal 170 is merely another attempt to simply reorder the words of proposal 156 and proposal 78, which were previously rejected during the 2024/2025 board cycle in Southeast and Prince William Sound, respectively. This proposal fails to consider the economic impacts a 25% reduction in pink and chum production would have on all statewide salmon harvesters. Moreover, the proposal lacks any newly discovered scientific evidence linking hatchery production with a decline in other wild salmon stocks.

Proposal #171: OPPOSE

PSVOA is opposed to proposal 171. Again, PSVOA is opposed to proposals that seek to reduce hatchery production. Proposal 171 requests changes to PWS hatchery production sufficient to reduce straying to achieve a 2% stray rate as stated in the 1995 *PWS/Copper River Comprehensive Salmon Management Plan* (PWS plan). The 2% stray rate is limited to the PWS

March 2, 2026

Page 2

plan, it is not incorporated into any other regional salmon management plan, and it was a **recommendation** for the consideration of optimizing hatchery production. As stated in the PWS plan, inclusion of the 2% threshold was not well supported by members of the RPT at that time, which recommended ongoing research be used to determine the effects of hatchery straying on wild salmon populations. Such research is currently being conducted on a broad scale through the Alaska Hatchery Research Project. The ADF&G pilot study for Lower Cook Inlet (LCI) streams referenced in the proposal does not support the proposition that PWS hatchery strays are negatively affecting the productivity or sustainability of LCI pink salmon. In fact, there are no stocks of concern currently listed for LCI pink salmon.

Proposal # 172: OPPOSE

PSVOA is opposed to proposal 172. PSVOA does not support any board-generated regulation that caps or limits hatchery production by the Alaska Board of Fisheries. The authority to issue hatchery permits and to regulate hatchery production rests solely with the ADF&G Commissioner. When exercising its regulatory authority over hatchery production, ADF&G considers available science and the precautionary principle, economic need, and program viability. The board lacks the legal authority to set hatchery production through regulation. Instead, the board's role beyond the consideration of the original hatchery permit request is limited to the allocation of hatchery produced salmon among competing user groups. The board lacks the authority to adopt regulations that limit or condition a hatchery permit through a moratorium because it conflicts with the authority of the Commissioner and removes the Regional Planning Team's role in defining regional production as set forth in 5 AAC 40.340. Moreover, the proposed moratorium would prohibit future hatchery production until the "resolution of uncertainty in the science regarding hatchery-wild effect" can be determined. It is currently unknown when the "uncertainty" will be fully resolved.

The board has consistently deferred decision-making and oversight of hatchery programs to the Commissioner and ADF&G. PSVOA encourages the board to continue in this vein by rejecting proposals 170, 171 and 172.

In closing, PSVOA supports the ongoing efforts of the Alaska Hatchery Research Project to better quantify hatchery-wild interactions. Until that research is concluded, its findings are put into perspective and evaluated against existing hatchery policy by ADF&G, the board should refrain from taking any of the above requested actions.

Thank you for your careful consideration of PSVOA's comments.

Very truly yours,



Robert Kehoe, Executive Director
Purse Seine Vessel Owner's Ass'n

Submitted by: Stephanie Rathert

Community of Residence: Eagle River,AK

Mid-water and bottom trawling are destroying not only our Alaskan sea floors, but the important habitat that helps keep our local fisheries strong and healthy.

Please consider saving our fishing grounds. Your decision on Proposal 11, will effect generations of Alaskans.

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 Ryan Reeves, and I am a commercial fisherman and processor in Alaska. I own and operate the F/V Satsuma and work as a gillnetter, troller, longliner, crabber, and shrimper. I am also a subsistence user who mostly eats game meat and fish that I process myself, and when I am not commercial fishing, I enjoy sport fishing and hunting.

I am writing to urge the Board to reject Proposals 170, 171, and 172. I depend on hatcheries for the bulk of my income. If we start to cut production at our hatcheries, we would be forced to start cutting other production like coho and king salmon programs, which are paid for by chum production. Hatcheries are already struggling with increasing operational budgets and infrastructure demands. The result of a boilerplate 25 percent reduction across all hatcheries is unsustainable for hatcheries, fishermen, and sport fishermen who rely on these fish to feed their families.

Specifically in Southeast Alaska, these communities were built on commercial fishing, so you can imagine the impacts from fishermen all the way to the hardware stores, groceries, harbor departments, and boat yard businesses. Personally, I can tell you that maintaining a boat takes a lot of money that gets distributed through the communities and through the businesses. These hatcheries are a self-sustaining economic engine that pays for itself. If we start entertaining out-of-touch proposals, this industry is in dire straits. We have an excellent Department of Fish and Game, and scapegoating hatcheries for ocean conditions or poor survivals is the last thing we need to be doing. It undermines the officials that we put our faith in to manage us.

The very expensive king and coho programs that hatcheries offer, which are paid for by chum production, would be the first to get cut. Sport and charter users rely heavily on coho and king production. This is free opportunity — they are not charged in any way to access these fish. These fish are extremely valuable, and there are businesses that thrive on them.

The reality is that these hatcheries need help, not harm from repeat proposals each cycle. We just finished a regional Board of Fish meeting with overwhelming opposition to these proposals. We are willing to fight again in a different area because these fish are worth it.

We need to start seeing hatcheries as a solution instead of trying to put them out of business. We would not have sustainable fisheries without hatcheries. We would not have access as subsistence users, and we would not have opportunities for sport fishing. The Department should be trying to use the hatcheries to rehabilitate some of the stocks of concern.

I sit on the SSRAA board, and the Board needs to know that we are not trying to put more fish in the water. We are trying to optimize what we have, whether it is hatching fewer fish for better returns or maintaining current levels to increase what comes back. We are always looking at the most recent data and evaluating each program to do what is best for all user groups who use the resource.

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,

Ryan Reeves
Alaska



Submitted by: Patrick Reilly

Community of Residence: Fairbanks

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 Alaskas 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.
-