Re: Response to Fairbanks AC's Submission Regarding Proposal 43 (RC-21)

Board of Fisheries Members:

We appreciate the opportunity to respond formally to the concerns and recommendations raised by the Fairbanks Fish and Game Advisory Committee (Fairbanks AC) in their submission, RC-21, regarding Proposal 43 and other issues. It should be noted that RC-21 is a draft and has not been formally adopted by the AC itself, but was submitted by a member of the AC.

As representatives of the PNP hatcheries, it is essential to address the allegations and arguments put forth by the Fairbanks AC, RC-21, and provide a comprehensive response.

INTRODUCTION

The Fairbanks AC expresses concerns in Proposal 43, primarily related to hatchery pink salmon production reduction and its potential impact on wild salmon stocks. While we respect the Fairbanks AC's dedication to conservation, their submission contains several unfounded claims that require clarification and a more nuanced understanding of the issue.

HATCHERIES AND THEIR ROLE

Alaska's salmon hatcheries play a pivotal role in preserving the state's salmon populations by reducing the directed harvest of wild stocks, supporting diverse user groups, and bolstering local economies. These hatcheries are a testament to sustainable economic development, providing vital income and sustenance for thousands of Alaskans while coexisting harmoniously with wild salmon stocks. They are a critical part of Alaska's rich fishing heritage, promoting the responsible management of our fisheries and ensuring the enduring legacy of salmon for generations to come.

The following sections will address specific allegations or statements made in RC-21.

RESOURCE COMPETITION

The Fairbanks AC's Argument: The Fairbanks AC emphasizes the importance of wild salmon stocks over hatchery-produced salmon and raises concerns about resource competition in the North Pacific.

Salmon Hatcheries for Alaska Response: We acknowledge the importance of wild salmon stocks in Alaska’s history and that they must be protected. Hatcheries can and do play a crucial role in supporting the overall health of wild salmon populations. They have successfully coexisted with wild stocks for decades, throughout which time, Alaskans have witnessed dozens of record wild stock return years. Alaska's hatchery program is designed to supplement wild

stock harvest, not replace them. This mission is clearly stated throughout the Department's literature on hatchery programs.

Alleging that Alaska hatchery pinks are impacting other salmon populations to the extent that is alleged is not supported by the data. The PNP hatcheries in Alaska know the importance of carrying capacity and competition; this topic is discussed frequently with research colleagues and among the PNPs. ADF&G also considers this concern in the determination of requests for changes to permitted egg capacity.

According to research estimates, hatchery-produced pink salmon (from all countries) represent 15% of total pink salmon biomass in the North Pacific. Alaska hatchery-produced pink salmon make up 10% of total pink salmon biomass. Alaska hatchery-produced pink salmon make up less than 1% of total nektonic biomass in the North Pacific according to the research estimates cited in the Ruggerone and Irvine (2018) publication, which references data from the years of 1990-2015.

Definition of Nekton: The collection of marine and freshwater organisms that can swim freely and are generally independent of currents, ranging in size from microscopic organisms to whales.

With regard to competition in the ocean, please see RC-45 submitted by Valdez Fisheries Devleopment Association. RC-45 is an excerpt of a larger paper on high ocean biomass of salmon and ocean trends.

As the board members are well aware, topics such as ocean biomass involve a significant amount of data, research, and scientific analysis. This topic is covered in many publications that contain a diverse array of scientific conclusions and evidence. It is important to take that diversity into account and consider publications of many conclusions when it comes to a topic as large as ocean biomass and North Pacific salmon.

Please find below references to a number of journal articles that provide a narrative on ocean productivity that does not include competition with pink salmon as a primary driver. The references below include a brief overview of each article's focus with the citation reference. We will provide the full publication copies to the board members prior to the Kodiak Board of Fisheries meeting in January 2024.

- An in-depth look at phytoplankton, including diatoms, and zooplankton abundance, biomass, and control during recent cold years (2008-2010) in the eastern Bering Sea did not mention top-down control of pink salmon on plankton (Baumann et al. 2014).
- Juvenile salmon, including pink salmon, were not creating a top-down zooplankton resource bottle neck in the Gulf of Alaska (Daly et al. 2019)
- Temperature and ice retreat timing, bottom up forces, drive the Bering Sea marine ecosystems (Hunt and Stabeno 2002).

- Oscillating control hypothesis; zooplankton blooms are tied to water temperature, and bloom timing related to late (ice-associated) and early ice retreat (Hunt and Stabeno 2002).
- During recent anomalously warm conditions, when top-down pressures are thought to have controlled forage fish abundance in the northern Gulf of Alaska, salmon were not the suspected predators (Arimitsu et al. 2021).

POTENTIAL IMPACT OF PROPOSAL 43

Fairbanks AC's Argument: The Fairbanks AC expresses concerns about the potential consequences of Proposal 43, including job loss and reduced revenue.

Salmon Hatcheries for Alaska Response: While we share concerns about the economic impact, the Fairbanks AC is grossly underestimating the broader consequences of Proposal 43. Proposal 43 threatens jobs and jeopardizes the stability of coastal communities from Ketchikan to Kodiak and the livelihoods of thousands of Alaskans who depend on hatcheries for food in their freezer to operating a small business. This applies to all user groups, especially those of personal use and sport fishermen who testified before the Board this week in Homer at the Lower Cook Inlet meeting.

SCIENTIFIC RESEARCH SUPPORTING CONCERNS

Fairbanks AC's Argument: The Fairbanks AC references peer-reviewed research indicating the increase in pink salmon production and its potential impact on wild stocks.

Salmon Hatcheries for Alaska Response: We acknowledge the importance of scientific research in informing policy decisions. That is the exact process the State of Alaska implemented for the PNP hatcheries when they were first established. Furthermore, this is the driving force behind the Alaska Hatchery Research Project, which focuses on Alaskan Hatcheries and their potential impacts. ADF&G has evaluated new data, collected reports from all PNPs, reviewed permits, and more. This process is thorough and also includes the public. However, there is diverse research on this topic, and not all studies reach the same conclusions. The Department of Fish and Game has not found compelling evidence to support the proposed reduction in hatchery production. The Department provided lengthy commentary on Proposal 43 in their staff comments. See page 103 of RC-2.

COMPREHENSIVE ASSESSMENT

Fairbanks AC's Argument: The Fairbanks AC argues that a comprehensive assessment of Alaska's hatchery program is necessary and implies that the evaluation is lacking or does not exist in all instances.

Salmon Hatcheries for Alaska Response: We support comprehensive assessments to ensure the responsible management of hatcheries and annual evaluations, and year-long cooperation with the Department is already well established. Hatcheries are overseen and reviewed by ADF&G which conducts these assessments based on data and scientific rigor. We agree that involving all stakeholders in this process is essential, including those who depend on hatcheries for their livelihoods and harvests. This is precisely what happens through evaluating program contributions within the diversity of aquaculture boards and the public regional planning team (RPT) process. The process includes comprehensive salmon updates, PRT review, and stakeholder engagement.

BOARD OF FISHERIES INVOLVEMENT

Fairbanks AC's Argument: The Fairbanks AC emphasizes the role of the Board of Fisheries in addressing hatchery-related issues.

Salmon Hatcheries for Alaska Response: We agree that the Board of Fisheries plays an important role. However, we recognize that previous decisions to defer hatchery-related action to the ADF&G Commissioner have been proper and highlight the need for a more thorough review. We encourage the Board to address these issues with an open and inclusive approach within the existing regulatory structure and in clear communication with ADF&G. We also welcome all opportunities to tour board members through any hatchery location.

CONSERVATION AND REFERENCES TO THE 2000 AGREEMENT

Fairbanks AC's Argument: The Fairbanks AC suggests that Proposal 43 is rooted in conservation efforts and holding hatcheries accountable to an agreement set between the state and the hatcheries in 2000.

Salmon Hatcheries for Alaska Response: Conservation is a shared goal, and we all want to ensure the health of wild salmon stocks. However, the inferences to the 2000 agreement are vague and conflict with statements made on the record by ADF&G. Please see RC-39 submitted by Steve Reifenstuhl who was present at the board of fish meeting in 2000, upon which the Fairbanks AC predicates their argument. In short, RC-39 states: “No agreement was signed or otherwise agreed upon to cut pink and/or chum production by 25% or any other

amount. Some people wanted that outcome, but it was not the result. Repeating something that is incorrect over and over is a strategy, not the fact-based reality at the 2000 BOF meeting."

CONCLUSION

A comprehensive and balanced approach, rooted in verifiable scientific principles and data, is necessary to review or evaluate Alaska's salmon hatcheries. We call upon the Board of Fisheries to consider the long-term sustainability of salmon runs, the impact on local economies, and the potential consequences of Proposal 43.

We are committed to collaborative efforts that benefit all Alaskans and ensure the responsible management of our fisheries. We look forward to continued discussions and working together to protect the legacy of Alaska's fisheries heritage. The PNP hatchery associations are standing by to work closely with board members and the Department to ensure transparent, effective, and thoughtful processes and dialogue can occur now and long into the future.

Submitted by Salmon Hatcheries for Alaska leaders present at the Homer Board of Fisheries meeting: Tina Fairbanks of KRAA, Mike Wells of VFDA, and Geoff Clark of PWSAC.