Submitted By
Ronald Samber
Submitted On
11/2/2021 7:13:36 PM
Affiliation

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Anchorage, Alaska 99508

Regarding proposal 39 to limit fishing on Ibeck from the current limit 3 miles above the road down to 1/4 mile above the road. Please do not do that. In so doing you will ruin the appeal of fishing in Cordova for me and several dozen other like minded people.

I have fished Ibeck every year since 2001. I have met, talked to and I believe I speak for several groups of anglers from all over the country and a few groups from other countries who have visited Cordova to fish Ibeck for 10,15, and 20 or more years in a row. We share a love fishing Ibeck. For many of us this is the best trip of our year. None of us fish the first half mile of the river. Most of us fish between the first mile and the 3 mile limit. We cherish the opportunity to fish in that incredibly beautiful place and to be able to fish it in relative solitude. The vast majority of those of us that fish the upper 2 miles do not fish with other groups. If one or more people are fishing it is normal for the next group to say howdy, hows the fishin? and move on in search of an unoccupied stretch of river. That will be impossible if you confine us to anything like the first mile of river. You will create a combat fishing atmosphere and in so doing you will cause many of us to abandon our annual Cordova trips. We don't go to Cordova for the fish so much as for the incredible fishing experience. The thrill of catching fresh Silvers on a fly rod. The scenery. The opportunity to fish in relative solitude. The fly fishing friendly nature of that river. There is a significant number of us who have no interest in yanking our winter supply of fish out of the river standing shoulder to shoulder as is done within sight of the bridge. If this becomes the norm, many of us will stop coming to Cordova. We will long for the good old days of fishing in the wilds of Cordova. Several participants in Cordova economy will suffer along with us...

I have fished Ibeck as early as August 25th and as late as early October. Sometimes both. My observation is that there are plenty of spawning fish throughout the three miles of river above the bridge in any given year. Once a fish finds its spot in the river it begins to change color and for the most part if it is caught it will be released. Most of us prefer fresh fish with sea lice and here on Ibek we can be that choosy. It has been my experience time and again that the fresh fish are more aggressive than the ones that have settled in. That helps. And let us not forget the fish that get past the 3 miles and spawn throughout the remaing several miles of habitat. I suspect that the ADFG data will support my contention that the fishery is not in danger.

What problem does this solve? I do not believe there is a shortage of fish. I am certain that we are not damaging the habitat. The trail after the first mile and on up to the 3 mile limit is less usable (more primitive) than it was 10 years ago. Mother nature is reclaiming the upper portions of the trail faster than our annual trampling. There are no camps on the 3 miles of river. No fires. No vehicle access. It's still a wild and beautiful place to fish. It aint broke. Please don't "fix" it.

Thank You for your time

Ron Samber. Anchorage resident 40+ years and 20+ years fishing in Cordova

Submitted By
Rory O'Hanrahan
Submitted On
11/15/2021 11:01:55 AM
Affiliation

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Please don't allow the harvest of rainbow trout in the Gulkana.

Submitted By
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Submitted On
11/7/2021 10:04:46 AM
Affiliation

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EIELSON AFB, Alaska 99702

Dipnetting salmon in the copper river has been an annual event for me, my wife, our eight kids, and our friends. I am so glad we have the ability to pay someone to take us out on the water. Fishing from the safety of the boats and having skilled captains who know how to navigate that crazy river removes a lot of stress from my shoulders. We allways get some fish, some years are better than others but we allways have fun. Please don't eliminate this oportunity for us.

Submitted By
SAE NA
Submitted On
11/15/2021 9:47:20 PM
Affiliation

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Anchorage, Alaska 99501

i love living alaska and one of the best part is having the ability to dip net on the copper river so I a, totally against prop 9. Thank you for reading my suggestion

SALMON HATCHERIES
FOR ALASKA

November 15, 2021

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

To the Members of the Board of Fisheries:

As representatives of Alaska's hatchery program and the private nonprofit hatcheries, we submit our full support for Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA) and the critical programs these entities support for the entire Prince William Sound region and its user groups. We urge the Board of Fisheries to reject Proposals 49 - 55 due to the damage they would inflict on salmon fisheries across the southcentral region and the decreased hatchery production that would result if these proposals were implemented.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefit the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall. Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and many more stakeholders who travel to the region for harvest opportunities. Any reduction in this opportunity would

impact the stakeholders, communities, and user groups significantly, but would be especially hard-hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries and introduce scientifically unsupportable directives into regulation governing hatchery programs. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence, and commercial harvests of hatchery fish statewide.

The points at issue in Proposals 54 and 55 were addressed by the Board of Fisheries when they took up an Emergency Petition and ACR's in 2018 which aimed to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action then and failed to substantiate claims of negative effects of hatchery salmon on natural stocks.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova. Please reach out to us if we can answer questions or provide any additional information whatsoever.

Respectfully,

Dean Day
Executive Director
Cook Inlet Aquaculture Association

Tina Fairbanks
Executive Director
Kodiak Regional Aquaculture Association

Mike H. Wells
Executive Director
Valdez Fisheries Development Association, Inc.

Geoff Clark
Interim General Manager
Prince William Sound Aquaculture Association

Scott Wagner
General Manager
Northern Southeast Regional Aquaculture Assoc.

David Landis
General Manager
Southern Southeast Regional Aquaculture Assoc.

ECONOMIC IMPACT OF ALASKA'S SALMON HATCHERIES

OCTOBER 2018

PREPARED FOR

- Southern Southeast Regional Aquaculture Association
- Armstrong-Keta
- Douglas Island Pink and Chum, Inc.
- Northern Southeast Regional Aquaculture Association
- Prince William Sound Aquaculture Corporation
- Valdez Fisheries Development Association, Inc.
- Cook Inlet Aquaculture Association
- Kodiak Regional Aquaculture Association

PREPARED BY
McDowell GROUP

Economic Impacts of Alaska's Salmon Hatcheries

Prepared for:

Southern Southeast Regional Aquaculture Association
Armstrong-Keta
Douglas Island Pink and Chum, Inc.
Northern Southeast Regional Aquaculture Association
Prince William Sound Aquaculture Corporation
Valdez Fisheries Development Association, Inc.
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October 2018

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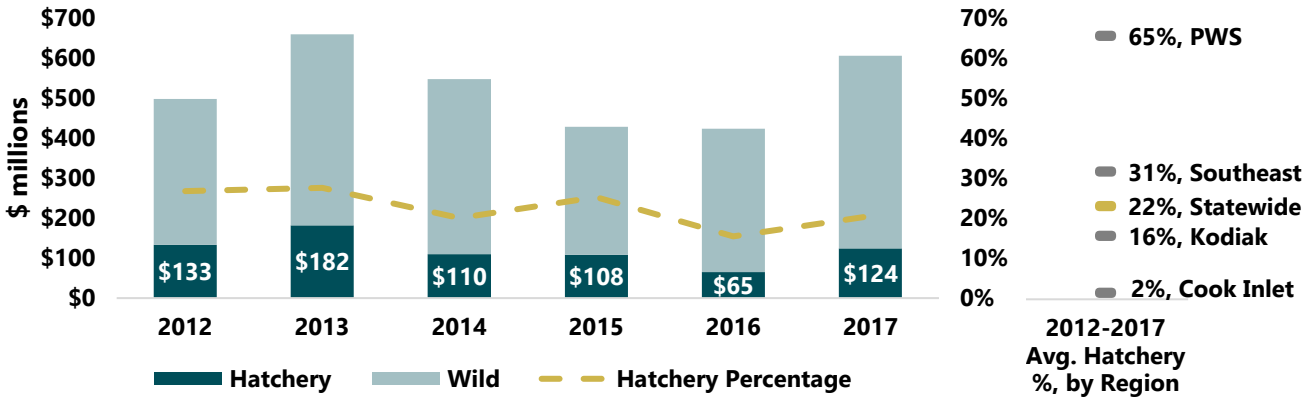
Executive Summary

Alaska's salmon hatcheries contribute nearly a quarter of the value of our state's salmon harvests and generate $600 million in economic output, with impacts throughout the economy. The scope of this report includes Alaska's eight private, nonprofit hatchery associations, including impacts resulting from hatchery-produced salmon as well as hatchery operations. Data sources include ADF&G, hatcheries, CFEC, DOLWD, and IMPLAN. Commercial harvest and processing data presented reflect annual averages across the six-year period 2012-2017. Sport harvest and related data reflect 2012-2016 averages due to a lag in ADF&G data availability.

Common Property Ex-Vessel Volume and Value

- Over the study period, commercial fishermen harvested an annual average of 222 million pounds of hatchery-produced salmon worth $120 million in ex-vessel value.
- Chum and pink salmon are the most important species – responsible for 39 and 38 percent of ex-vessel value, respectively – followed by sockeye (16 percent), coho (4 percent), and Chinook (2 percent).
- More than half of hatchery salmon ex-vessel value went to seiners (57 percent). Gillnetters pulled in 38 percent, while trollers caught 5 percent of hatchery ex-vessel value over the study period.
- Regionally, Prince William Sound (PWS) harvests of hatchery salmon generated $69 million in ex-vessel value annually. Southeast harvests earned fishermen $44 million on average, followed by Kodiak ($7 million) and Cook Inlet ($0.5 million) harvests. It should be noted that Cook Inlet Aquaculture Association (CIAA) is currently building up their pink production and the full impact of these additional investments will not be seen for several more years. In addition, CIAA maintains several flow control structures and a fish ladder – efforts that lead to additional (though unquantifiable) salmon production.
- As a percentage of statewide harvest value, hatchery-derived salmon represents 22 percent of total salmon ex-vessel value over the study period. This percentage ranged from a high of 28 percent in 2013 to a low of 15 percent in 2016. Hatchery contribution was highest in PWS (65 percent) over the study period, followed by Southeast (31 percent), Kodiak (16 percent), and Cook Inlet (2 percent).

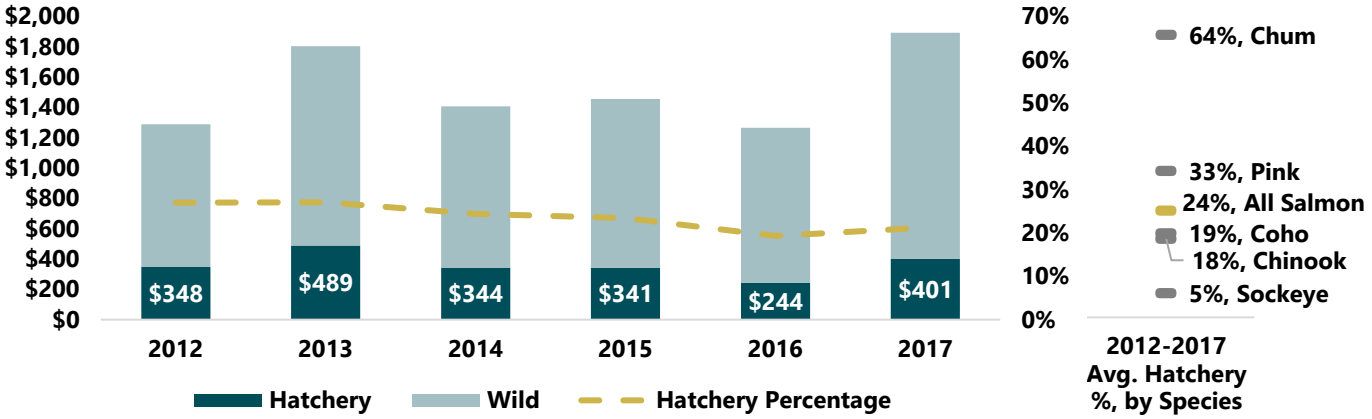
Hatchery Contribution to Ex-Vessel Value of Alaska's Salmon Harvests, 2012-2017



First Wholesale Value

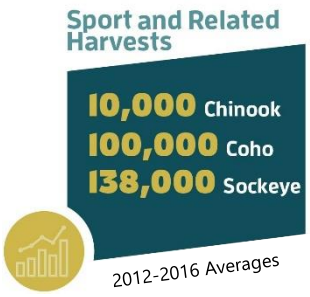
- The first wholesale value – the value of raw fish plus the value added by the first processor – of hatchery-produced salmon averaged $361 million annually across the study period.
- Nearly four-fifths (79 percent) of hatchery-produced first wholesale value is estimated to come from common property fisheries, with the remainder going to cost recovery harvests.
- Hatchery-derived first wholesale value represents 24 percent of total statewide salmon first wholesale value over the study period. By species, nearly two-thirds of chum, one-third of pink, and close to two-fifths of coho (19 percent) and Chinook (18 percent) wholesale production value was derived from hatchery salmon over the study period.

Hatchery Contribution to First Wholesale Value of Alaska Salmon Products, 2012-2017



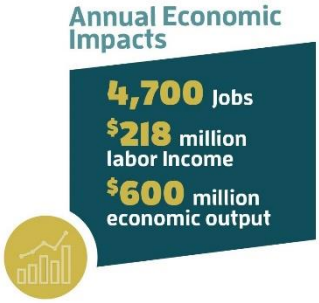
Sport/Personal Use/Subsistence

- Coho, Chinook, and sockeye salmon are the most important hatchery-produced species for sport, personal use, and subsistence harvests. These species are produced in smaller numbers compared to pink and chum but are much more valuable on a per fish basis.
- On average, about 10,000 hatchery-origin Chinook, 5,000 chum, 100,000 coho, 19,000 pink, and 138,000 sockeye salmon were harvested annually in sport and related fisheries over the study period. These numbers are considered conservative due to limited sampling of sport and related harvests for origin (hatchery/non-hatchery), among other factors.



- Sport harvests accounted for over 99 percent of the sport/personal use/subsistence harvest of hatchery-produced coho and Chinook. By contrast, most non-commercial hatchery sockeye were harvested by personal use and subsistence fishermen (80 percent), with only 20 percent caught by sport fishermen.
- As a percentage of statewide sport-caught fish, hatchery-origin salmon accounted for 17 percent of sport coho harvests, 5 percent of sport sockeye harvests, and 8 percent of sport Chinook harvests.

Economic Impacts



- Alaska's salmon hatcheries account for the annual equivalent of 4,700 jobs and $218 million in total labor income, including all direct, indirect, and induced economic impacts. A total of $600 million in annual economic output is connected to Alaska salmon hatchery production.
- The employment impact of 4,700 jobs is an annualized estimate. The number of people who earn some income from the harvest of hatchery-produced salmon is several times the annual average. More than 16,000 fishermen, processing employees, and hatchery workers can attribute some portion of their income to Alaska's salmon hatchery production. Thousands of additional support sector workers earn wages connected to Alaska hatchery production.
- The economic footprint of Alaska's hatcheries includes $95 million in labor income associated with commercial fishing, $82 million in labor income associated with processing, and $25 million connected to hatchery operations.
- Non-resident sport harvest of hatchery salmon accounts for $16 million in annual labor income created directly or indirectly by Alaska's hatcheries. This number is limited to impacts resulting from non-resident sport harvest of hatchery salmon and should be considered conservative. Clearly, resident sport/personal use/subsistence harvests of hatchery salmon have additional economic impacts as well as very significant social and cultural impacts in Alaska.
- Southeast Alaska hatcheries account for 2,000 jobs (annualized), $90 million in labor income, and $237 million in total annual output, including all multiplier effects.
- Prince William Sound hatcheries account for 2,200 jobs, $100 million in labor income, and $315 million in total annual output, including all direct, indirect, and induced effects.

Total Annual Statewide Economic Impact of Alaska Salmon Hatcheries

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Commercial Fishing			
Employment	1,040	500	1,540
Labor Income	$70.9 million	$23.6 million	$94.5 million
Seafood Processing			
Employment	1,360	820	2,180
Labor Income	$52.2 million	$29.6 million	$81.8 million
Hatchery Operations			
Employment	345	270	615
Labor Income	$15.5 million	$9.4 million	$24.9 million
Non-resident Sport Fishing			
Employment	285	90	375
Labor Income	$10.5 million	$5.7 million	$16.2 million
Total Economic Impact			
Employment	**3,030**	**1,680**	**4,710**
Labor Income	**$149.1 million**	**$68.3 million**	**$217.5 million**
Output	**$386.1 million**	**$216.0 million**	**$602.1 million**

Introduction and Methodology

Hatchery-produced salmon are caught in commercial, sport, personal use, and subsistence fisheries throughout Southeast, Southcentral, and Kodiak – totaling more than 68 million fish annually in recent years. This study is the first comprehensive report detailing the economic impacts of these harvests and the hatchery activities that support them.

Alaska's salmon hatchery program was developed by the Alaska Department of Fish & Game (ADF&G) to enhance fisheries while protecting wild stocks. Since the 1970s, Alaska's salmon hatcheries have been increasingly operated by private non-profit (PNP) corporations that fund their operations through cost recovery harvests and other sources. ADF&G still operates two sport fish hatcheries (in Anchorage and Fairbanks) and remains involved in PNP hatchery operations in an oversight role to ensure that wild stocks are protected, among other goals.

Scope of Work

This study estimates and describes the economic impacts of Alaska's eight non-profit salmon hatchery associations (listed below along with the acronyms used in this report). Educational, research, ADF&G-run sport fish, and other small hatcheries fall outside the scope of this report.

- Southern Southeast Regional Aquaculture Association (SSRAA)
- Armstrong-Keta (AKI)
- Douglas Island Pink and Chum, Inc. (DIPAC)
- Northern Southeast Regional Aquaculture Association (NSRAA)
- Prince William Sound Aquaculture Corporation (PWSAC)
- Valdez Fisheries Development Association, Inc. (VFDA)
- Cook Inlet Aquaculture Association (CIAA)
- Kodiak Regional Aquaculture Association (KRAA)

This report concentrates on five primary subjects:

1. ***Commercial Harvest*** – The overall economic benefits of commercially caught, common property hatchery salmon are presented using ex-vessel value – the price paid to fishermen for their catch. The geographic distribution of these earnings is also reported.

2. ***Seafood Processing*** – The overall economic impact resulting from processing hatchery salmon in Alaska (including common property and cost recovery harvests) is estimated using first wholesale value data from ADF&G. First wholesale value represents the first sale of fish by a processor to a buyer outside their affiliate network.

3. ***Sport/Personal Use/Subsistence Harvest*** – Contributions of hatchery salmon to regional sport, personal use, and subsistence harvests are addressed, including impacts resulting from guided and unguided non-resident harvests.

4. ***Economic Impacts*** – This section summarizes the total economic impacts of hatch various sectors described above, along with the economic impacts resulting from the operations of Alaska's eight hatchery associations.

5. ***Tax Revenue*** – Hatchery salmon support a variety of economic activities that are taxed, providing revenue to the State and local governments throughout Alaska.

Methodology

Hatchery contributions to Alaska's salmon fisheries are tracked via ADF&G and hatchery-run sampling programs that collect salmon heads at seafood processors, on board fishing vessels, at docks and harbors frequented by sport fishermen, and at other locations. Otoliths and coded wire tags are collected and reviewed to determine the percentage of harvests attributable to hatchery production.[1] ADF&G uses this and other data to estimate the number of hatchery-produced salmon contributed by each hatchery association to various fisheries – data that form the basis of the annual enhancement reports produced by ADF&G.[2] For this report, hatchery associations were given the opportunity to update tables based on the enhancement report data described above. All data updates/edits provided by hatchery associations were minor in scale.

In general, data presented in this report are based on **six-year (2012 to 2017) averages** to avoid results influenced by particularly good or bad years for salmon survival. The exception is data related to sport/personal use/subsistence which is based on 2012 to 2016 averages due to a lag in data availability from ADF&G. Economic impact modeling is based on a combination of averages over the study period and 2017 financial data, as described in more detail below.

Ex-vessel and first wholesale value data are not adjusted for inflation in the report, due to the short time spans presented.

Ex-Vessel Volume and Value Calculations

Hatchery contribution data (numbers of fish) were combined with average weight per fish and price per pound data obtained from the Commercial Fisheries Entry Commission (CFEC) to calculate ex-vessel value, as follows:

*ex-vessel value = number of fish * average weight per fish * average price per pound*

Number of fish, average weight, and average price data were broken down by species, area of harvest (Southeast, Prince William Sound, Cook Inlet, and Kodiak), and gear type (seine, gillnet, and troll).

First Wholesale Value Calculations

Data available at the processing level – ADF&G Commercial Operator Annual Report or COAR data – is less detailed than data available at the ex-vessel level. Notably, it is not possible to specifically trace hatchery salmon through the processing stage. The simplifying assumption is made that, for each species in each region,

[1] Information contained in otoliths and coded wire tags indicate the species/variety, hatchery that produced the fish, and release year.
[2] Stopha, M. 2018. Alaska salmon fisheries enhancement annual report 2017. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J18-02.

hatchery salmon (including both common property and cost recovery harvests) are proces similarly as non-hatchery salmon.

Estimates of first wholesale value attributable to hatchery salmon are calculated by applying a price multiplier to hatchery ex-vessel volumes. The multipliers vary by region and species and are based on first wholesale value divided by ex-vessel volume calculated from ADF&G data. These multipliers introduce a potential source of noise because they combine different datasets created for different purposes. The degree of noise is judged to be minimal by the project team.

Sport/Personal Use/Subsistence

Data from ADF&G's annual enhancement reports provide estimates of the number of hatchery salmon, by species and hatchery association, caught by sport, personal use, and subsistence fishermen in Alaska. Harvest numbers reported in this section are considered conservative due to limited sampling of sport and related harvests for origin (hatchery/non-hatchery), among other factors.

Overall hatchery-produced sport harvest numbers presented in this report include hatchery salmon produced by ADF&G's sport fish hatchery in Anchorage, as these fish are caught alongside PNP hatchery salmon throughout Southcentral Alaska. However, all economic impact numbers consider only the contributions of Alaska's eight PNP hatchery associations.

Sport and related data presented in this report are generally based on 2012 to 2016 averages. Data from 2017 are not used due to a lag in reporting by ADF&G. This lag is due in part to anglers not returning personal use and subsistence harvest surveys in a timely fashion. In addition, the process to develop the state's estimates of sport harvests is complex – based on a statewide harvest survey. As of the writing of this report, 2017 sport harvest data is not available on ADF&G's website.

While not discussed in detail in this report, ADF&G charter logbook data (only available through 2014) was analyzed, along with various other sources of sport fish data, to inform the economic impact analysis.

Economic Impact Modeling

Employment and labor income are estimated for four aspects of Alaska's salmon hatchery program: commercial fishing, seafood processing, hatchery administration and operations, and sport fishing. Annual average (2012 to 2017) ex-vessel value forms the basis of the commercial fishing analysis. Models were developed for the seine, gillnet, and troll fisheries, where standard crewing and crew compensation practices were used to estimate labor participation, annualized employment, and total earnings (labor income). Assumptions about in-state spending on goods and services in support of fishing operations were made to estimate indirect effects. Analysis of induced effects (those stemming from fishermen spending their labor income in Alaska) includes adjustment for non-resident permit holder and crew participation in the various fisheries.

Employment and labor income related to processing of hatchery-produced salmon were based on the labor cost component of total first wholesale value (again measured for the period 2012 through 2017). Annual average employment was calculated by dividing total labor income by average annual wages in the seafood processing industry, as measured by the Alaska Department of Labor and published in the Quarterly Census of

Employment and Wages. With methods similar to those used in the commercial fishing analys participation in seafood processing was factored into the analysis of induced economic impacts.

Direct, indirect, and induced employment and labor income estimates associated with hatchery management and operations were based on financial statements and employee counts provided by each hatchery associations. The estimates are based on 2017 data alone.

Estimates of employment and labor income related to sport harvest of hatchery produced salmon are based on a variety of harvest data, non-resident visitor spending data, and previous McDowell Group research on the economic impacts of individual hatchery associations. Further discussion of sport fish methodology is provided in the body of this report.

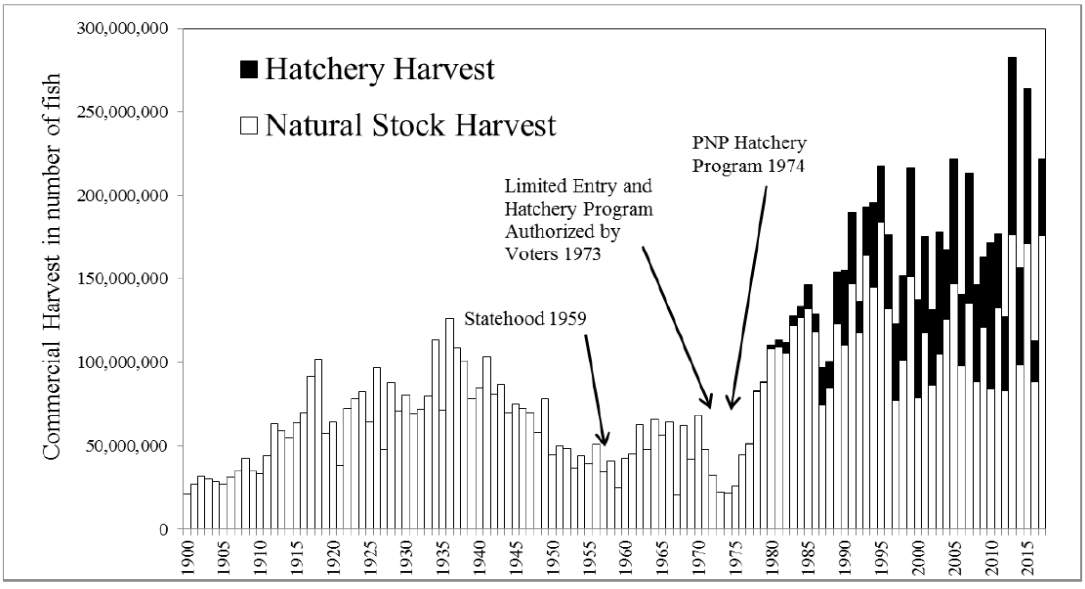
History

ADF&G's 2017 Alaska Salmon Fisheries Enhancement Annual Report describes the genesis and early history of our state's hatchery program:

> *Alaska's salmon hatcheries were developed in response to historically low salmon abundance in the early 1970s. 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 salmon hatchery program developed under this authority and was designed to supplement – not replace – sustainable natural production.*

The ADF&G report also includes the following chart of wild and hatchery-origin commercial salmon harvests in Alaska, making the point that development of Alaska's hatchery program has coincided with the rebounding of Alaska's wild salmon populations and harvests to all-time highs.

Figure 1. Commercial Salmon Harvests in Alaska, Wild versus Hatchery-Origin, 1900-2017



Source: ADF&G 2017 Annual Enhancement Report.

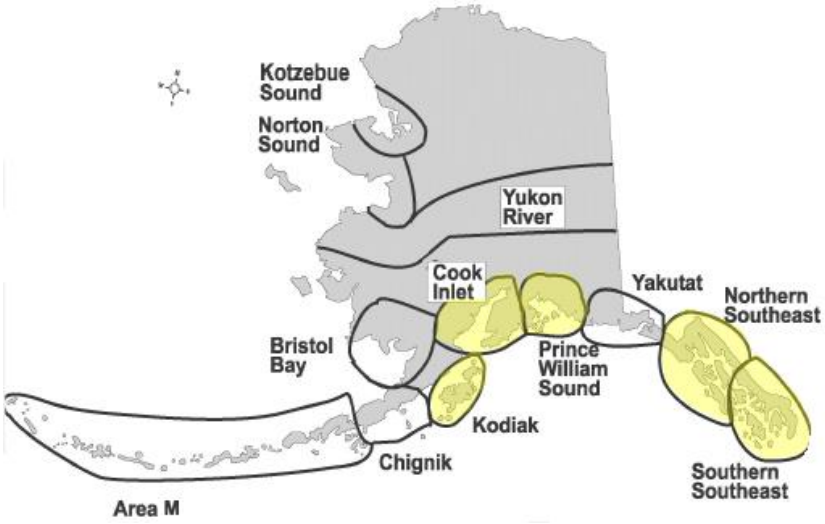
Controls

Alaska's salmon hatcheries are required to be located away from major natural salmon stocks, to use local sources of broodstock, and to mark their releases so that fishery managers can distinguish wild stocks and manage them conservatively. Alaska's genetic policy for hatcheries also forbids breeding of hatchery fish for size or other specific traits and requires the use of large numbers of broodstock to maintain genetic diversity in hatchery-produced salmon. These controls are a hallmark of Alaska's approach to salmon hatcheries and are an essential component of the overall program's success.

Current Hatchery Operations

Alaska's eight private nonprofit (PNP) hatchery associations operate a total of 25 hatcheries throughout Southeast Alaska, Southcentral Alaska, and Kodiak. As shown in Figure 2 below, hatcheries are active in five of Alaska's twelve major salmon regions. More detail on the production of these hatcheries is provided below, including key species and total releases. Hatchery associations also provide a variety of other benefits to their communities through educational, tourism, and restoration activities.

Figure 2. Regions of Alaska with Salmon Hatchery Programs (in yellow)



Source: ADF&G.

Production and Releases

Alaska's PNP hatchery associations operated a total of 25 hatcheries and 88 release sites in 2017. Each hatchery is typically associated with an adjacent release site, but smolts are also transported to remote release sites by boat, road, or plane.[3]

The map on the next page shows the location of hatchery release sites, color-coded by association. The size of the circles correspond to the number of smolts (all species) released at each site in 2017. A total of 1.7 billion salmon smolts were released in 2017 by Alaska's PNP hatchery associations.

Key Hatchery Terms

Hatchery: a facility in which salmon eggs are incubated and reared to early juvenile stage.

Release Site: location where smolt are released. Smolts are typically held for a short period of time in net pens to imprint to location, followed by release.

Raceway: salmon returning to hatcheries enter raceways – concrete swimming pools – for sorting and holding until needed for eggtake or other uses.

Broodstock: Salmon used to produce the next generation.

Eggtake: The process of collecting eggs from female salmon for incubation in the hatchery. Milt is also taken from male salmon.

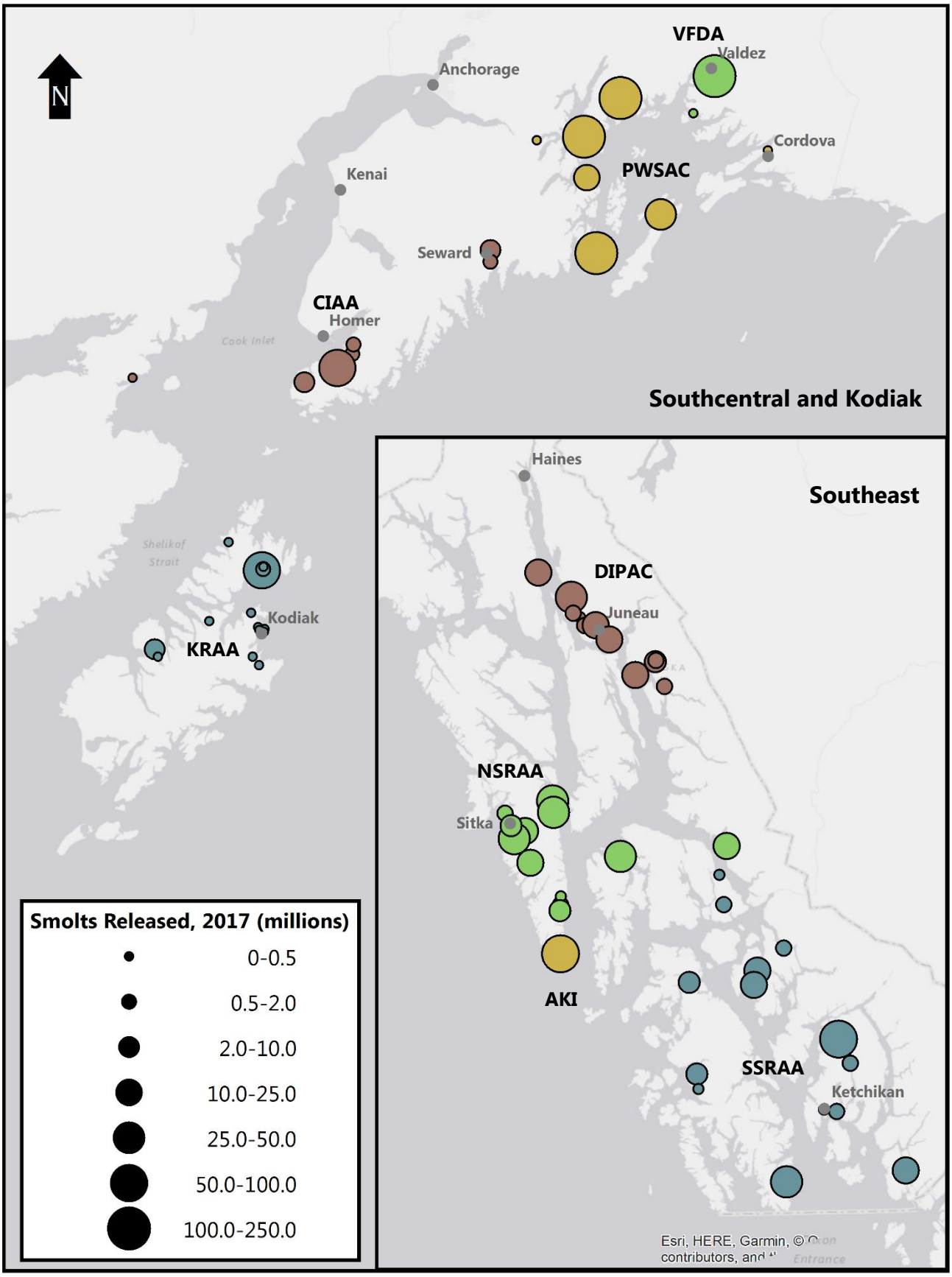
Smolt: early stage juvenile fish that are ready to enter the ocean.

Common Property: fish available to all permitted harvesters in a fishery.

Cost Recovery: Salmon harvested for the purposes of generating revenue to cover hatchery operations.

[3] Transfers are tracked by ADF&G to ensure accountability to annual management plans developed for each hatchery.

Figure 3. Release Sites by Association (color) and Number of Smolt Released (size of c



Source: ADF&G and hatchery associations. Note: Some release sites combined if located in close proximity.

Species Produced

A total of 841 million **pink** smolts were released in 2017, representing more than half of Alaska hatchery releases in 2017 (53 percent). Pink salmon, with a short two-year life cycle, are the smallest of Alaska's salmon species. Odd and even-year populations are genetically distinct and survival rates and harvests are typically higher for odd-year populations. Over the study period, more than three-quarters (78 percent) of pink salmon releases occurred in PWS. Pink salmon are also produced in Kodiak, Cook Inlet, and Southeast Alaska. Cook Inlet pink production is expected to increase in the near future, as CIAA builds up their pink program. In Southeast Alaska, pink salmon are produced at just one hatchery (AKI's Port Armstrong hatchery).

Chum salmon accounted for 41 percent of hatchery releases in 2017, with more than three-quarters of those releases occurring in Southeast Alaska. Nearly 650 million chum smolts were released in 2017, including 503 million in Southeast Alaska, 131 million in PWS, and 14 million in Kodiak. Chum salmon return 2 to 4 years after release.

Sockeye, coho, and **Chinook** salmon made up just 3, 2, and 0.4 percent, respectively, of total hatchery releases in 2017. Whereas chum and pink salmon can be moved to release sites the spring following eggtake, sockeye, coho, and Chinook require another year of rearing to develop into smolts ready to be released into the wild. This adds greatly to the expense of raising these species, requiring subsidies from pink and chum production or other sources.

Sockeye are produced in all four of Alaska's hatchery regions, with a total of 50 million smolts released in 2017. Hatchery production in Cook Inlet is currently dominated by sockeye production, the only region where the species dominates. In addition to CIAA's Trail Lakes Hatchery, DIPAC's Snettisham Hatchery in Southeast Alaska, PWSAC's Main Bay and Gulkana hatcheries, and KRAA's Pillar Creek Hatchery are important producers of sockeye.

As shown in Table 1, Southeast Alaska dominates Chinook production, though this table does not include production at ADF&G's Anchorage sport fish hatchery, which produced and released 1.3 million Chinook in 2017. See additional discussion of Chinook and coho production in the sport/personal use/subsistence section of this report.

Table 1. Smolts Released in 2017, By Species and Region

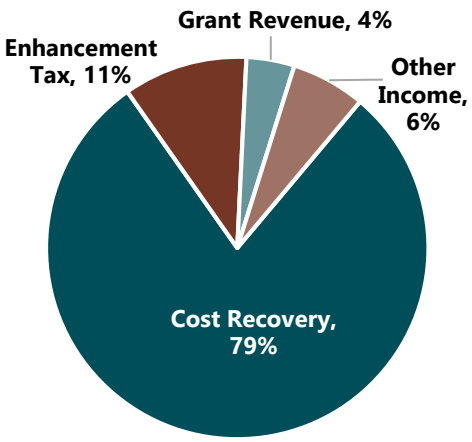
	Chinook	Sockeye	Coho	Pink	Chum	All Species Combined
Number of Smolts Released (thousands), By Region						
Southeast	6,871	13,096	22,660	55,327	502,580	**600,534**
PWS	32	26,194	3,175	658,943	131,100	**819,444**
Cook Inlet	0	7,207	155	60,305	0	**67,667**
Kodiak	73	3,746	1,293	66,579	14,193	**85,884**
Statewide	**6,976**	**50,243**	**27,283**	**841,154**	**647,873**	**1,573,529**
Percent of Total	**0.4%**	**3.2%**	**1.7%**	**53.5%**	**41.2%**	**100%**

Note: Does not include releases of fish reared in ADF&G, research, and other hatcheries outside the scope of this report.
Source: ADF&G 2017 Annual Enhancement Report.

Funding Sources

Alaska private nonprofit hatcheries are financially self-sufficient, funding their operations largely through cost recovery activities and enhancement taxes paid by commercial fishermen. These two sources make up 79 percent and 11 percent, respectively, of the $57 million in combined income collected in 2017, according to financial statements reviewed for this report. Other sources of funding include state and federal grants, tourism activities, and other miscellaneous sources.

Figure 4. Alaska PNP Hatchery Association Funding Sources, 2017



Cost Recovery Operations

Alaska's hatchery program was designed to allow hatchery associations to allocate a certain amount of the salmon they produce to fund their operations. A variety of cost recovery approaches are employed to this end, most commonly competitive contracts with processors (under this model processors subcontract fishermen to harvest the fish and pay a royalty to hatchery associations). Other cost recovery models include direct sales of fish harvested by fishing vessels working for the hatchery association and direct sales of fish (including roe) that return to hatchery sites but are not required as broodstock.

On average over the 2012 to 2017 period, 14 percent of the total hatchery-produced salmon returns were used for cost recovery activities. Most returns were used to supply common property commercial and sport fisheries (80 percent), with the rest used as broodstock (4 percent), and for other uses (1 percent).

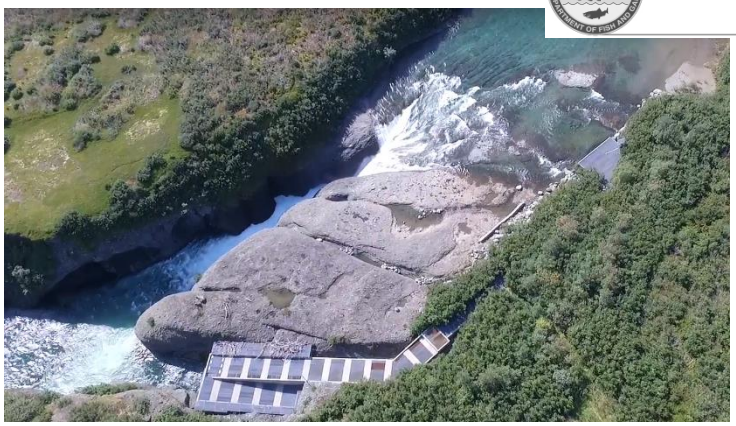
Enhancement Taxes

In regions of the state where commercial fishermen have elected to tax themselves, a salmon enhancement tax of 1, 2, or 3 percent is collected on the ex-value of all salmon harvested by commercial fishermen in the region (except cost recovery harvests). Tax revenues are collected by the Alaska Department of Revenue and then dispersed by the legislature to qualified regional aquaculture associations.

Of Alaska's eight private nonprofit hatcheries, five are organized as regional aquaculture associations (SSRAA, NSRAA, PWSAC, CIAA, and KRAA) and receive enhancement tax revenue. Two additional associations operate in Alaska (in the Chignik and Yakutat areas) but currently do not operate hatcheries and use the funds for salmon research and other related purposes.

Grants

Alaska's PNP hatchery associations receive grants from local, state, federal, and other sources. State grant funds – primarily from the Legislature's capital budget - typically support improvements to state-owned hatchery facilities operated by PNP's, but state funds also support production of sport fish, and other miscellaneous projects.



The Paint River fish ladder installed by CIAA with federal grants and association funds. The remote ladder (near Katmai National Park) has allowed pink, coho, and chum salmon to start colonizing Paint River. Photo credit: CIAA

Examples of other grant funds include federal disaster relief funds and funds from various sources supporting salmon habitat enhancement activities.

Tourism Activities and Other Sources of Income

Nearly all hatcheries provide tours to locals and visitors interested in learning more about the salmon life cycle, hatcheries, and Alaska's marine and freshwater environments. Salmon returning to hatchery raceways and fish ladders provide up-close viewing opportunities and are timed well to match the peak of Alaska's visitor industry.

Hatcheries that have invested heavily in their ability to host visitors include DIPAC's Macaulay Salmon Hatchery in Juneau. In addition to salmon viewing opportunities (see photo below), the Ladd Makaulay Visitor Center offers guided tours of hatchery facilities and maintains a large aquarium, touch tanks, and a salmon-themed gift shop. Approximately 67,000 visitors paid to visit the Macaulay hatchery in 2017.

Hatcheries in remote locations receive fewer visitors but play an important role in providing unique tour opportunities for Alaska's visitor industry. Alaska's PNP hatchery associations regularly work with small cruise ship and other tour companies to meet visitor industry needs in locations with few other tour options.

Other sources of funds include investment income, rental income, and other miscellaneous sources.

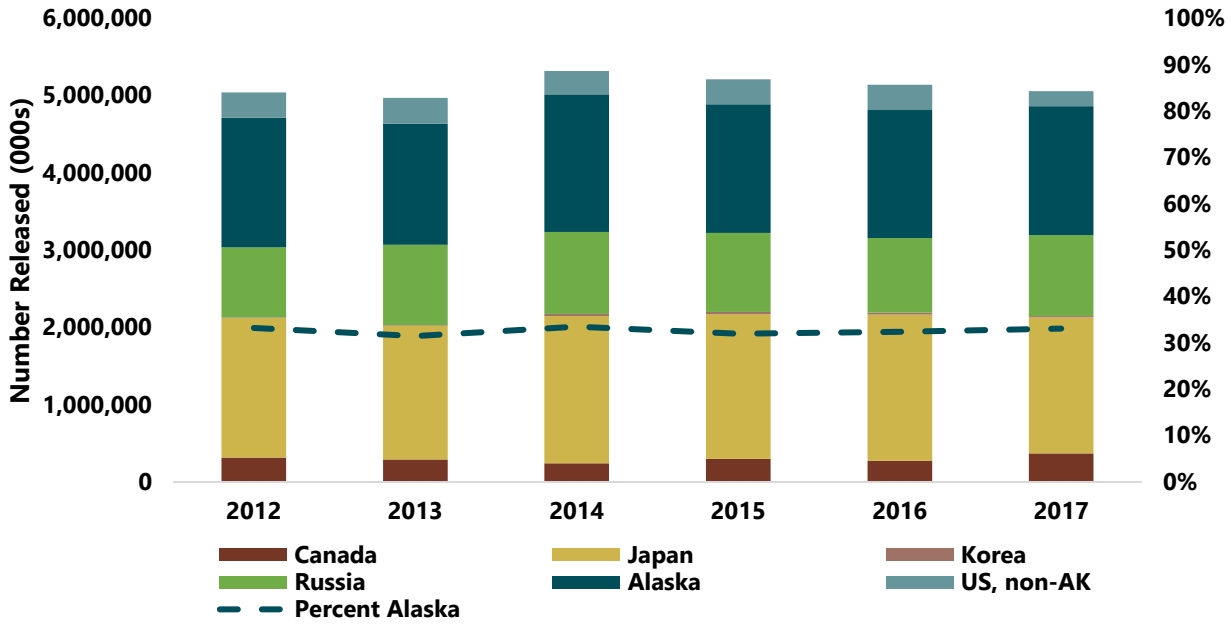
Photo credit: DIPAC

Other North Pacific Hatchery Releases

In addition to production in Alaska, major salmon hatchery programs operating in the North Pacific include those in other US states, Canada's British Columbia, Russia, South Korea, and Japan. As show in the chart below – based on data from the North Pacific Anadromous Fish Commission and ADF&G – Alaska consistently produces one third of total North Pacific hatchery salmon releases.

By species, Alaska dominates pink salmon production (67 percent of North Pacific releases in 2017), but other regions/countries dominate production of all other species. In 2017, Japan and Russia were responsible for 50 and 23 percent of chum releases (Alaska produced 22 percent). Other US states dominate production of Chinook and coho. Canada had the largest production of sockeye with 72 percent of North Pacific releases of the species in 2017.

Figure 5. Hatchery Salmon Releases in the North Pacific, by Country, 2012-2017



Source: North Pacific Anadromous Fish Commission (country level releases) and ADF&G (Alaska releases).

Hatchery Contributions to Commercial Harvests

On average, 52 million hatchery-produced salmon are caught annually in **common property** commercial fisheries throughout Alaska. This section details the fishing fleets that catch these fish, the value of hatchery-produced salmon to these fishermen, and the percentage of overall harvests attributable to hatchery production. The data presented reflect annual averages over a six-year study period (2012 through 2017).

Hatchery-Impacted Commercial Salmon Fishing Fleets

Hatchery-produced salmon are caught by nearly all commercial salmon fishermen operating in Southeast Alaska, Prince William Sound, Kodiak, and Cook Inlet. Over the study period an annual average of 3,840 permit holders and an estimated 4,860 crew – for a combined 8,700 fishermen – benefited from hatchery production.[4] These fishermen pulled in annual catches of more than 538 million pounds worth $322.8 million, on average.

Some fishermen rely more on hatchery-produced salmon than others. For example, PWS seiners generally source most of their annual harvest from hatchery fish while Kodiak set gillnet fishermen have a much weaker direct connection to hatchery salmon.

Table 2. Hatchery-Impacted Salmon Fisheries in Alaska, 2012-2017 Average

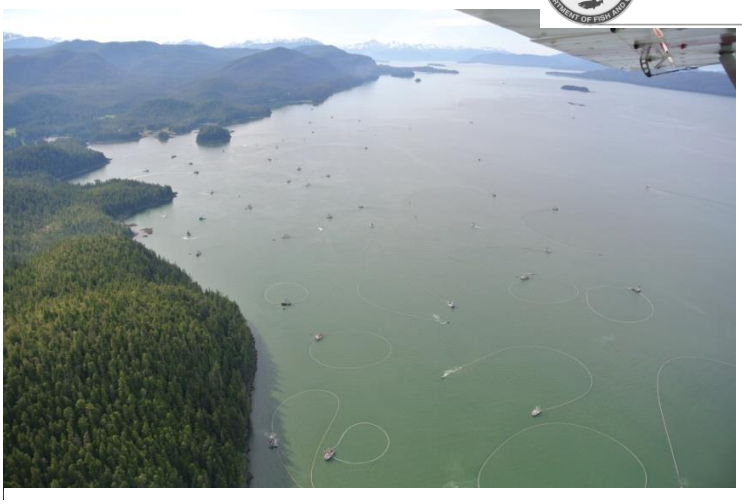
	Permits Fished	Pounds Harvested (million lbs.)	Ex-Vessel Value ($ millions)	Ex-Vessel Value per Active Permit
Southeast				
Drift Gillnet	432	37.8	$28.2	$65,000
Purse Seine	261	167.5	$75.5	$290,000
Power Troll	738	18.7	$33.4	$45,000
Hand Troll	317	0.9	$1.9	$6,000
Prince William Sound				
Drift Gillnet	519	35.0	$46.5	$90,000
Purse Seine	219	165.9	$57.9	$265,000
Set Gillnet	29	1.6	$2.6	$92,000
Cook Inlet				
Drift Gillnet	483	12.7	$18.7	$38,500
Purse Seine	17	5.9	$2.3	$133,500
Set Gillnet	506	6.6	$10.8	$21,500
Kodiak				
Purse Seine	170	76.1	$37.3	$218,000
Set Gillnet	149	9.5	$7.7	$51,000
Total	**3,840**	**538.2**	**$322.8**	**$84,000**

Source: CFEC.

[4] Crew estimates based on the conservative assumption that drift gillnet, power troll, and set gillnet operations have one crew while seiners hire three crew members. No crew are assumed for hand troll operations.

Average earnings (from all salmon harvests) were highest in Prince William Sound, Southeast, and Kodiak – while earnings in Cook Inlet were considerably lower.

Overall, the average active salmon permit holder across these regions earned $84,000 annually from harvest of wild and hatchery-produced salmon.



Seine opening near Juneau. Photo credit: DIPAC

Seiners earned considerably more – averaging $290,000 per boat in Southeast, $265,000 in Prince William Sound, $218,000 in Kodiak, and $133,500 in Cook Inlet. In general, drift gillnetters earned more than set gillnet and troll operations. Prince William Sound set gillnetters, though, earned an impressive $92,000 annually – more than drift gillnetters in all other hatchery-influenced regions.

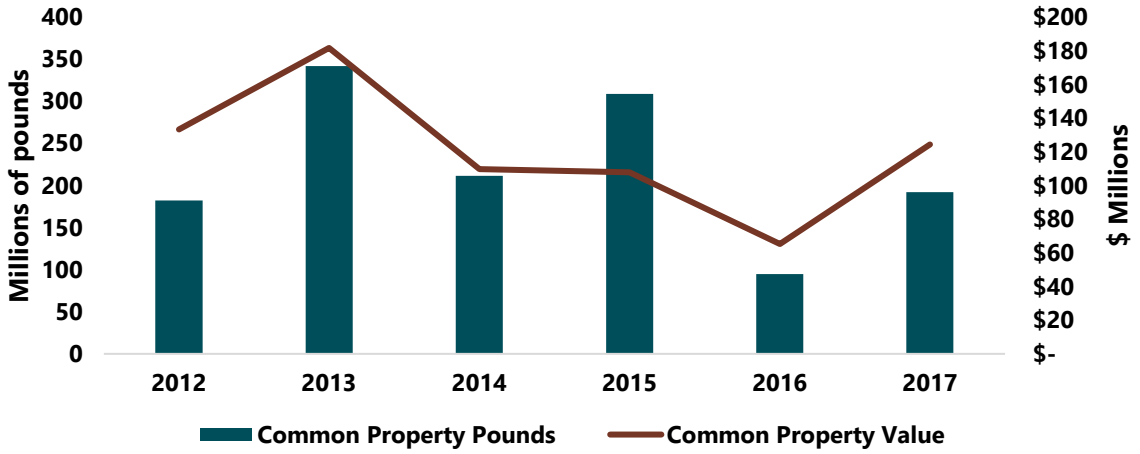
It should be noted that, due to data limitations, subsequent discussions of gear type will lump set and drift gillnetters into a gillnet category as well as power and hand trollers into a troll category.

Commercial Harvest of Hatchery-Produced Salmon

Hatchery production adds to the total salmon catch, as well as helps insulate fishermen and processors from dramatic swings in wild salmon production. From 2012 through 2017, hatcheries contributed a total of 1,332 million pounds worth an ex-vessel value of $722 million to common property fisheries.

An average of 222 million pounds of hatchery salmon – worth $120 million – were caught by common property commercial fishermen annually over the study period. The value of these harvests varied from $65 million in 2016 to more than $180 million in 2013. The even-year average was $103 million, while odd-year harvests averaged $138 million in value over the study period.

Figure 6. Hatchery-Produced Salmon Harvest Volume and Value, 2012-2017



Source: McDowell Group estimates based on data from ADF&G, CFEC, and hatchery associations.

Chum and pink salmon are the most important species – responsible for 39 and 38 percent of respectively – followed by sockeye (16 percent), coho (4 percent), and Chinook (2 percent). Especially large pink harvests in 2013 led to a peak of $182 million in hatchery-produced ex-vessel value. That year, pinks made up over half (52 percent) of the value of hatchery harvests.

Pink salmon dominate hatchery production volumes – accounting for nearly two-thirds (62 percent) of ex-vessel volume – but are the least valuable per pound ($0.34/pound on average across the study period). The most valuable hatchery-produced species are Chinook ($3.56/pound), sockeye ($2/pound), and coho ($1.20/pound). As mentioned previously, these more valuable species are produced in lower numbers due to greatly increased costs of production. Chum value averaged $0.67/pound from 2012 through 2017.

Table 3. Hatchery-Produced Harvest Volume and Value (millions), 2012-2017

	2012	2013	2014	2015	2016	2017	2012-2017 Average	2012-2017 Percent of Total
Ex-Vessel Volume (millions of pounds)								
Chinook	0.6	1.0	0.8	1.0	0.5	0.4	0.7	**0.3%**
Chum	76.5	89.4	47.0	67.0	56.6	86.3	70.5	**32%**
Coho	2.3	6.5	8.5	3.5	3.5	2.7	4.5	**2%**
Pink	89.6	235.6	143.9	227.2	27.3	96.3	136.6	**62%**
Sockeye	13.5	9.6	11.3	10.3	6.9	6.5	9.7	**4%**
Total	**182.5**	**342.1**	**211.5**	**309.0**	**94.8**	**192.2**	**222.0**	
Ex-Vessel Value ($ millions)								
Chinook	$2	$3	$3	$3	$2	$2	$2	**2%**
Chum	$61	$54	$30	$36	$34	$66	$47	**39%**
Coho	$3	$9	$10	$3	$5	$4	$5	**4%**
Pink	$43	$95	$42	$48	$10	$38	$46	**38%**
Sockeye	$23	$21	$25	$18	$14	$14	$19	**16%**
Total	**$133**	**$182**	**$110**	**$108**	**$65**	**$124**	**$120**	

Note: Values have been rounded.
Source: McDowell Group estimates based on data from ADF&G, CFEC, and hatchery associations.

More than half of hatchery salmon ex-vessel value went to seiners (57 percent). Gillnetters pulled in 38 percent, while trollers caught 5 percent of hatchery ex-vessel value over the study period. Trollers are only active in Southeast Alaska; in that region, troll harvests accounted for 15 percent of hatchery-derived harvest value.

Nearly all hatchery pinks were caught by seiners. Gillnetters dominated the harvest of hatchery sockeye and caught the majority of hatchery chum. The troll fleet caught more hatchery Chinook and coho than other gear groups.

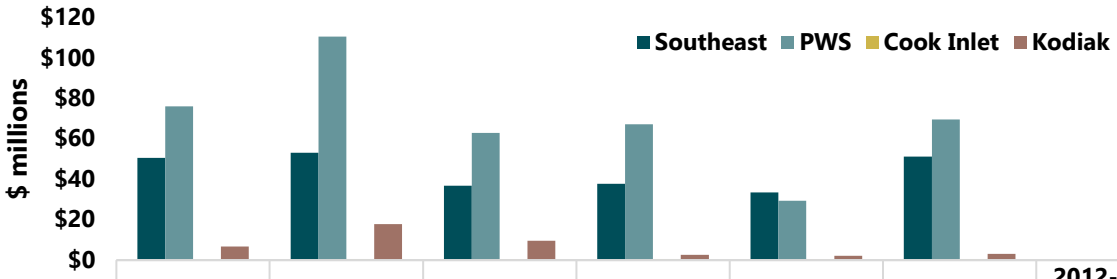
Table 4. Hatchery-Produced Harvest Value, by Gear Type and Species (000s), 2012-2017 Averages

	Chinook	Chum	Coho	Pink	Sockeye	All Species Combined	% of Total
By Gear Type							
Gillnet	$938	$25,577	$1,246	$616	$17,062	$45,439	**38%**
Seine	$466	$19,529	$843	$45,360	$2,280	$68,478	**57%**
Troll	$1,092	$2,044	$3,323	$33	$0	$6,492	**5%**
Total	**$2,496**	**$47,149**	**$5,412**	**$46,010**	**$19,341**	**$120,409**	

Source: ADF&G, hatchery associations, CFEC. Note: Totals may not sum due to rounding.

Prince William Sound typically tops other regions in hatchery production and value. Over the stu
harvests generated $69 million in ex-vessel value annually. Southeast harvests earned fishermen $44 million on average, followed by Kodiak harvests ($7 million), and Cook Inlet harvests ($0.5 million). In the particularly bad pink year of 2016, Southeast Alaska edged out PWS for highest hatchery ex-vessel value.

Figure 7. Hatchery-Produced Harvest Value, by Region, 2012-2017



	2012	2013	2014	2015	2016	2017	2012-2017 Average
Southeast	$50	$53	$37	$38	$33	$51	$44
PWS	$76	$110	$63	$67	$29	$70	$69
Cook Inlet	$0.2	$0.6	$0.4	$0.5	$0.4	$0.5	$0.5
Kodiak	$7	$18	$10	$3	$2	$3	$7

PWS hatchery harvests vary substantially from year to year due to a focus on pink salmon, which made up an average of 60 percent of PWS hatchery-derived ex-vessel value over the study period, followed by sockeye (23 percent) and chum (17 percent). Kodiak hatchery harvest value is also dominated by pink salmon (57 percent over the study period), though sockeye is also important (33 percent).

Chum salmon is the main hatchery focus in Southeast Alaska, with 81 percent of hatchery ex-vessel value over the study period. As chum salmon survival does not generally vary wildly from year to year, Southeast Alaska hatchery production provides a significant stabilizing force for seafood processors and fishermen in the region.

Sockeye salmon is the main focus of hatchery operations in Cook Inlet, though CIAA is currently working to build up the association's pink salmon program.[5] The full impact of these additional investments will not be seen for several more years. Currently, sockeye salmon make up 91 percent of the hatchery-produced ex-vessel value in Cook Inlet.

Table 5. Hatchery-Produced Harvest Value, by Species and Region (000s), 2012-2017 Averages

	Chinook	Chum	Coho	Pink	Sockeye	All Species Combined
Southeast	$2,496	$35,281	$4,422	$631	$925	$43,756
PWS	$0	$11,487	$664	$41,368	$15,685	$69,204
Cook Inlet	$0	$0	$0	$41	$412	$453
Kodiak	$0	$381	$315	$3,970	$2,319	$6,985

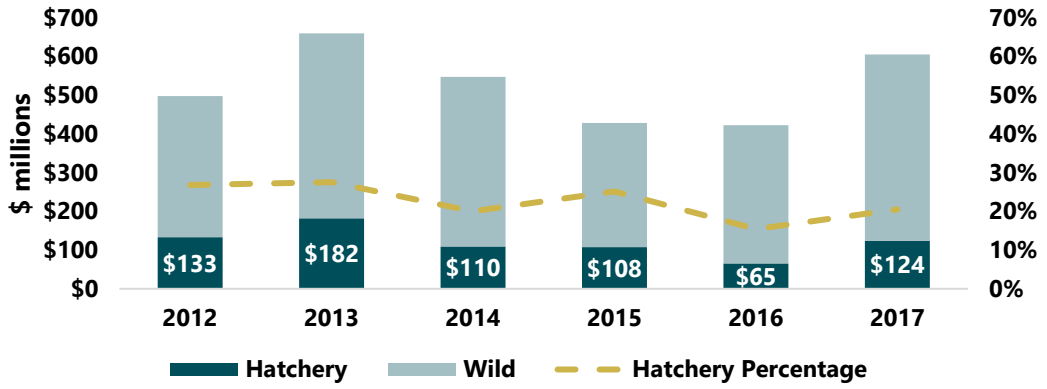
Source: ADF&G, hatchery associations, CFEC.

[5] Although CIAA is permitted for an annual eggtake of 309 million, realized egg take has been much lower than the total. In 2017, the organization's eggtake was 173 million.

Hatchery Contributions as a Percentage of Overall Alask Harvests

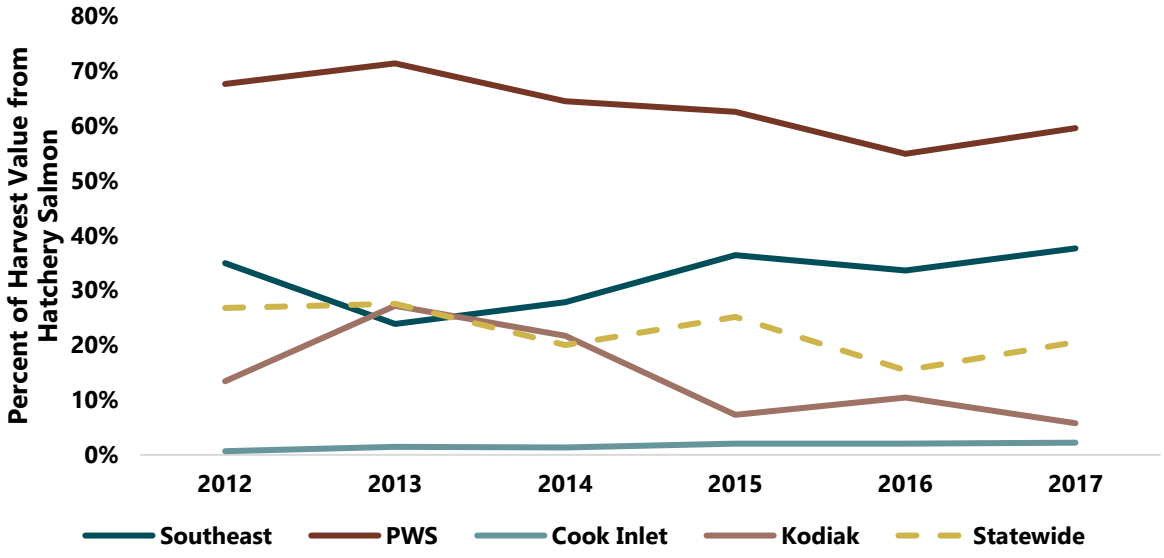
Hatchery-derived salmon represented 22 percent of Alaska's total common property salmon ex-vessel value over the study period. This percentage ranged from a high of 28 percent in 2013 to a low of 15 percent in 2016. Bristol Bay catches made up a third of this total salmon over the study period – more than any other region – due to several particularly strong years.

Figure 8. Hatchery Contribution to Ex-Vessel Value of Alaska's Salmon Harvests, 2012-2017



Hatchery contribution was highest in PWS (65 percent) over the study period, followed by Southeast (31 percent), Kodiak (16 percent), and Cook Inlet (2 percent). Over the study period, hatchery contribution percentages generally trended downward, though likely for different reasons depending on the region. Southeast was the exception, growing from 35 percent in 2012 to 38 percent in 2017. Key factors influencing regional hatchery contribution percentage include the relative strength of salmon runs and hatchery production levels for each salmon species, especially pink versus chum.

Figure 9. Hatchery Contribution to Total Salmon Ex-Vessel Value, by Region, 2012-2017



Source: McDowell Group estimates based on data from ADF&G, hatchery associations, and CFEC.

Hatchery Contributions to the Seafood Processing Sector

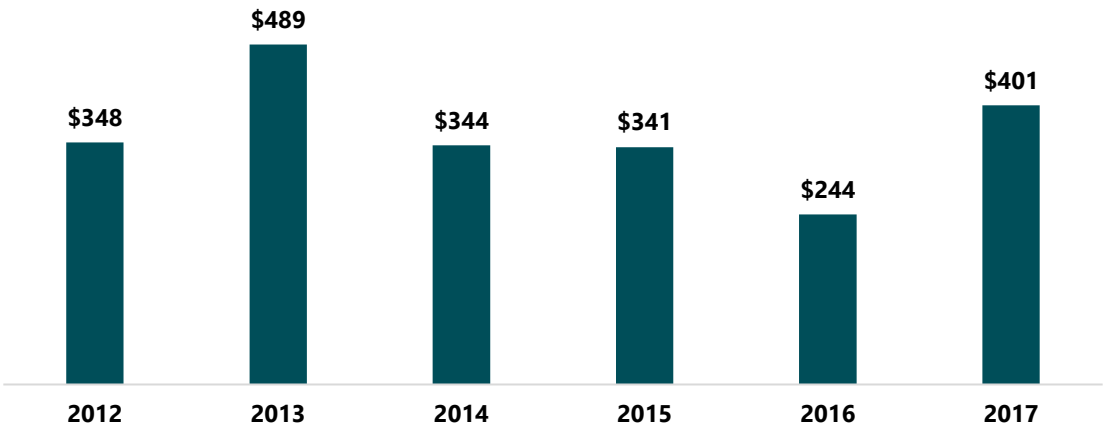
Salmon produced by Alaska's hatcheries and caught commercially are processed into a variety of products, generating significant benefits for Alaska's seafood processing industry. Over the study period, the first wholesale value of products produced with hatchery-produced salmon is estimated to average $361 million annually. First wholesale value (FWV) is defined as the price received at sale of product by a processor to a buyer outside their affiliate network.

First wholesale value includes payments to commercial fishermen (ex-vessel value) as well as the value-added by processors as they convert raw fish into various seafood products. The value added by processors supports the full spectrum of processor expenditures – including labor, local utilities, packaging and warehousing, tender vessel operations, expediting, and maintenance and mechanical services, among others – as well as processor profits.

Total First Wholesale Value

Over the 2012-2017 period, the first wholesale value of hatchery-produced salmon — including both common property and cost recovery fish — averaged $361 million annually. In the peak year of 2013, hatchery-derived FWV reached close to half a billion dollars ($489 million). Nearly four-fifths (79 percent) of hatchery-produced first wholesale value is estimated to come from common property fisheries, with the remainder deriving from cost recovery harvests.

Figure 10. First Wholesale Value of Alaska Hatchery Salmon Products ($ millions), 2012-2017



Similar to the relative contribution of each species to hatchery ex-vessel value, hatchery FWV is dominated by pink and chum salmon products (44 and 39 percent, respectively). Sockeye is responsible for 10 percent of hatchery-derived FWV, while coho (5 percent) and Chinook (2 percent) play smaller roles.

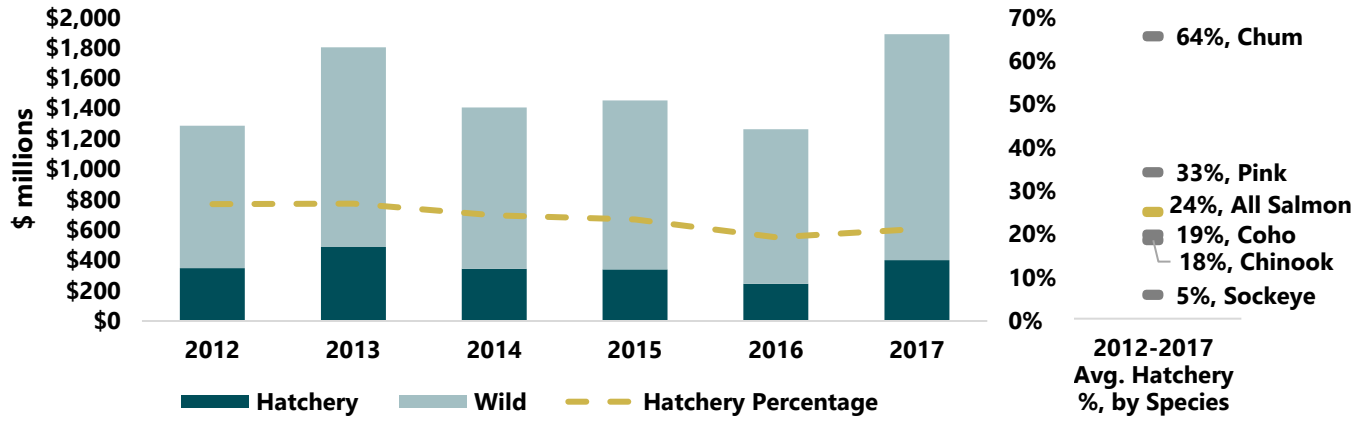
Another way to consider hatchery contributions to Alaska's processing sector is to examine th
or the value remaining after payments to fishermen. After paying harvesters an estimated $146 million for raw fish, Alaska's salmon processors earned an estimated gross margin of $216 million from hatchery-derived salmon products. This figure is not to be confused with profit margin as processors incur significant costs handling and producing salmon products.

Hatchery Contributions as a Percentage of Overall First Wholesale Value

Hatchery production is responsible for an estimated 24 percent of total statewide salmon first wholesale value over the study period. This percentage ranged from 19 to 27 percent over the study period. Massive salmon harvests in Bristol Bay – combined with relatively weak pink runs – in recent years drive lower hatchery contribution percentages in the latter half of the study period.

By species, nearly two-thirds of chum wholesale value, one-third of pink wholesale value, and close to two-fifths of coho (19 percent) and Chinook (18 percent) wholesale value was derived from hatchery salmon over the study period. Due to the dominance of Bristol Bay fish, hatchery-derived sockeye products – despite being the third most valuable hatchery species – only make up 5 percent of sockeye FWV statewide.

Figure 11. Hatchery Contribution to First Wholesale Value of Alaska Salmon Products, 2012-2017



Considering only the regions of the state with hatchery production (Southeast, PWS, Kodiak, and Cook Inlet), hatchery salmon are responsible for 40 percent of ex-vessel value and 37 percent of first wholesale value. By species, hatchery-derived wholesale value made up 73 percent of chum value, 35 percent of pink value, 21 percent of coho value, 19 percent of Chinook value, and 17 percent of sockeye value.

Hatchery Contributions to Sport Fishing, Personal Use, and Subsistence in Alaska

Hatchery production contributes substantially to the availability of salmon for resident and non-resident sport fishing, as well as personal use and subsistence harvest by Alaskans. Over the 2012 – 2016 period, an estimated 10,000 hatchery-reared Chinook, 5,000 chum, 100,000 coho, 19,000 pink, and 138,000 sockeye were caught annually in sport/personal use/subsistence fisheries in Alaska.

Harvest numbers reported in this section are considered conservative due to limited sampling of sport and related harvests for origin (hatchery/non-hatchery), among other factors. Harvest numbers include hatchery salmon produced by ADF&G's sport fish hatchery in Anchorage, as these fish are caught alongside PNP hatchery salmon throughout Southcentral Alaska. Production at Alaska's eight PNP hatcheries account for 94 percent of all hatchery-origin sport salmon harvests over the study period.

Table 6. Sport and Related Harvest of Hatchery Salmon, by Species, 2012-2016 Annual Average

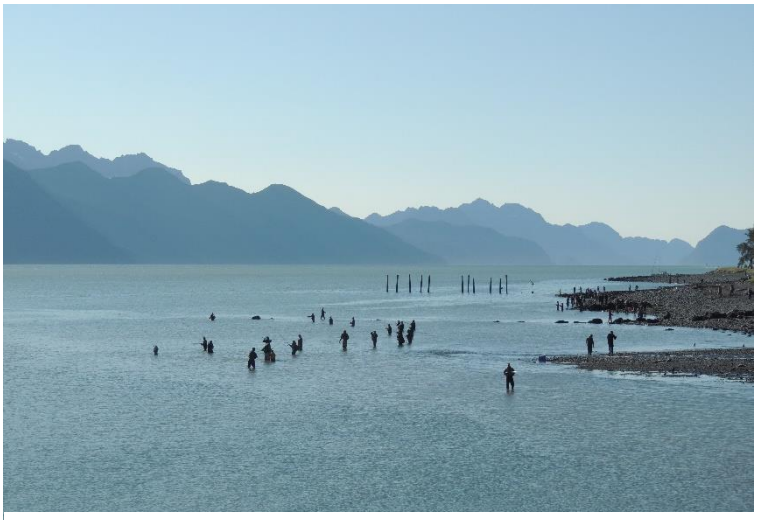
	2012-2016 Average (Number of Fish)
Chinook	10,000
Chum	5,000
Coho	100,000
Pink	19,000
Sockeye	138,000

Source: ADF&G. Note: Numbers have been rounded to reflect the imprecise nature of these estimates.

Sport harvests accounted for nearly all the sport/personal use/subsistence harvest of hatchery-produced coho and Chinook over the study period. By contrast, most non-commercial hatchery sockeye were harvested by personal use and subsistence fishermen (80 percent), with only 20 percent caught by sport fishermen.

Sport Fishing

Hatchery releases – primarily in Valdez, Seward, Juneau, Ketchikan, Wrangell, lower Kenai Peninsula, and Kodiak – support extensive shore-based and saltwater fishing opportunities. The top fifteen hatchery sport harvests, by species and hatchery association, are listed below, along with the communities or regions in which most of each harvest occurs.



Silver fishing near Seward. Photo credit: CIAA

Table 7. Top Hatchery Sport Harvests, by Hatchery Association and Species, 2012-2016 A

Hatchery Association	Species	2012-2016 Avg. Annual Harvest	Primary Harvest Regions/Communities
SSRAA	Coho	30,825	Ketchikan, Wrangell
CIAA	Sockeye	25,683	Kenai Peninsula, Lower Cook Inlet
VFDA	Coho	24,893	Valdez
VFDA	Pink	16,678	Valdez
PWSAC	Coho	7,385	Whittier
NSRAA	Coho	7,080	Sitka, Angoon
DIPAC	Coho	6,830	Juneau
KRAA	Coho	4,218	Kodiak
CIAA	Coho	3,584	Seward
SSRAA	Chinook	2,641	Ketchikan
DIPAC	Chum	2,622	Juneau
CIAA	Pink	2,400	Homer, Seldovia, Nanwalek, Port Graham
KRAA	Chinook	2,017	Kodiak
DIPAC	Chinook	1,954	Juneau
NSRAA	Chinook	1,585	Sitka

The harvest numbers presented above are annual average harvests over the study period. Actual hatchery-origin harvests vary year to year depending on hatchery release numbers, local sport bag limits, fishing effort, and other factors. For instance, DIPAC's revitalized coho program has created significant fishing opportunities in the Juneau area in recent years; in 2018, ADF&G managers doubled the sport bag limit for coho in Juneau area waters as a result of exceptionally strong returns.

Coho and pink returns to the Valdez area – which can be caught from the shore as well as by boat – have long supported a series of annual salmon derbies as well as significant charter fishing activity and both resident and non-resident visitation to the community. (See photo at right.)

In addition to adding to overall harvests, hatchery fish can provide crucial fishing opportunities in certain times of year or weather conditions – an especially important factor for charter fishing businesses. In May and June in the Ketchikan area, for instance, the local charter fleet (primarily serving cruise visitors) is largely dependent on SSRAA Chinook returning to nearby release sites. This was especially true in 2018 due to low wild Chinook runs. SSRAA coho are also crucial during the late coho run (late August through September) for certain charter operators in the region.

Silver fishing in Valdez. Photo: Garrett Evridge

Based on data from annual ADF&G harvest surveys, anglers in Alaska spent about 2.1 million ar fishing for all types of species annually (2012-2016 average). These anglers caught about 120,000 Chinook, 22,000 chum, 583,000 coho, 135,000 pink, and 556,000 sockeye annually over the period.

Harvests in Southeast and Southcentral combined accounted for between 90 and 99 percent of the total statewide sport harvest, depending on the species of salmon. The relative importance of saltwater and freshwater sport salmon fishing varies considerably between the two regions, with most Southeast sport harvests occurring in saltwater but roughly equal harvests in saltwater and freshwater in Southcentral. In both regions, most sockeye harvests are in freshwater. An impressive 94 percent of statewide sport sockeye harvests occurred in Southcentral, with nearly all of that harvest occurring in freshwater.

Table 8. Sport Salmon Harvests, by Region and Saltwater/Freshwater, 2012-2016 Annual Averages

	Sport Harvest	% Saltwater	Hatchery Harvest	% Hatchery
Southeast				
Chinook	67,587	98%	6,227	9%
Chum	12,254	95%	3,425	28%
Coho	274,979	89%	45,772	17%
Pink	73,940	90%	45	0%
Sockeye	18,230	40%	0	0%
Southcentral				
Chinook	50,039	54%	3,700	7%
Chum	8,059	31%	1,263	16%
Coho	297,344	45%	54,592	18%
Pink	57,552	49%	17,880	31%
Sockeye	519,765	5%	27,593	5%
Statewide				
Chinook	118,612	79%	9,936	8%
Chum	22,517	63%	4,687	21%
Coho	583,303	65%	100,364	17%
Pink	135,643	70%	17,925	13%
Sockeye	555,762	6%	27,593	5%

Source: ADF&G.

As a percentage of statewide sport-caught fish, hatchery-origin salmon accounted for 17 percent of sport coho harvests, 5 percent of sport sockeye harvests, and 8 percent of sport Chinook harvests. Unknown, but likely similar, percentages of Alaska's guided charter harvests are of hatchery origin.

Hatchery contributions by region were similar to the statewide percentages for Chinook and coho. Compared to Southeast, hatchery salmon made up higher percentages of Southcentral sockeye (5 percent) and pink (31 percent) sport harvests. In Southeast Alaska, hatchery salmon were especially important to sport chum harvests (28 percent) – perhaps due in part to a charter fishing operation in Juneau specializing in family friendly chum salmon fishing opportunities from a dock adjacent to DIPAC's Juneau hatchery (Chum Fun Charters).

Personal Use and Subsistence

Personal use and subsistence salmon fishing in Alaska is largely focused on sockeye salmon; a variety of gear are used including dip nets, cast nets, gillnets, and other gear types. Major hatchery-supported personal use/subsistence fisheries include three Copper River fisheries near Chitina, the Sweetheart Creek fishery near Juneau, various sockeye fisheries on Kodiak Island, and the China Poot fishery across Kachemak Bay from Homer.

Table 9. Top Hatchery Personal Use and Subsistence Harvests, by Hatchery Association and Species, 2012-2016 Annual Averages

Hatchery Association	Species	2012-2016 Avg. Annual Harvest	Primary Affected Communities
PWSAC	Sockeye	102,500	Fairbanks, Anchorage, Mat-Su, Copper River Valley
DIPAC	Sockeye	3,725	Juneau
KRAA	Sockeye	2,900	Kodiak, Ouzinkie
CIAA	Sockeye	1,355	Homer, Seldovia

The relative importance of hatchery fish to each of the fisheries listed above varies. Roughly 20 percent of Copper River subsistence/personal use sockeye harvests are produced by PWSAC's Gulkana hatchery. By contrast, the Sweetheart Creek personal use fishery near Juneau – which supports 220 households annually – is exclusively based on hatchery fish. Roughly a third of Copper River harvests are caught by households in Fairbanks, a quarter by Anchorage households, 18 percent by Mat-Su households, and 16 percent by Copper Valley area residents. Hatchery-supported subsistence fisheries on Kodiak Island include Telrod Creek and Ouzinkie fisheries.

China Poot dipnet fishing. Photo credit: CIAA

Copper River dipnet fishing

Economic Impacts of Hatchery Produced Salmon in Alaska

This analysis considers the full spectrum of economic impacts associated with salmon production at Alaska's eight private nonprofit hatchery associations. It includes analysis of direct, indirect, and induced economic impacts associated with:

- Commercial harvest of common property hatchery-produced salmon
- Processing of common property and cost-recovery hatchery salmon
- Hatchery operations and management
- Sport harvest of hatchery-produced salmon.

The economic impact model used for this analysis is based on the ex-vessel and first wholesale values described elsewhere in this report. The model incorporates industry characteristics that affect the magnitude of multiplier effects, including:

- The residency of permit holders and crew who harvest hatchery-produced salmon. Alaska resident fishermen are likely to spend a greater share of their earnings in Alaska — with greater multiplier effect — than non-Alaskans
- The residency of workers who process hatchery-produced salmon. Alaska's seafood processing sector has high non-resident labor participation. Non-resident workers spend less of their wages in Alaska than resident workers.
- In-state versus out-of-state purchases in support of fishing, processing, and hatchery operations. A significant portion of purchases made in support of seafood industry activity occur out of state (mainly Puget Sound).

Regional and statewide economic impacts associated with Alaska's salmon hatchery production are described in more detail below.

A Note on Annualized versus Total Job Estimates

Describing the economic impact of Alaska's salmon hatcheries in terms of employment is complicated by the highly seasonal nature of Alaska's salmon fishing and seafood processing industries. This study focuses on annualized employment. While understating the number of people that earn some income due to hatchery production, annualized employment numbers allow for comparisons to other sectors of the economy.

As an example, three crewmen (peak employment) each working a four-month season would be the equivalent one annualized (12 month) job. Where possible, annualized job estimates are supplemented with data that better illustrates the total number of people earning some income resulting from hatchery production and operations.

Commercial Fishing Impacts

The direct impact of hatcheries on commercial fishing includes income fishermen earn from the harvest of hatchery-produced salmon. Indirect and induced (multiplier) impacts occur when these fishermen spend hatchery salmon-related income in Alaska in support of their fishing operations and in support of their own households.

Alaska commercial fishermen harvested an annual average of $120 million (ex-vessel) worth of hatchery-produced salmon over the 2012-2017 period. Nearly 60 percent of this total ($71 million) went to permit holders and crew in the form of labor income. Additional labor income was generated indirectly when fishermen purchased supplies, gear, equipment, and services locally in support of their fishing operations. Induced labor income was created when permit holders and crew spend their income in Alaska. Including these indirect and induced effects, total commercial fishing-related labor income associated with harvest of hatchery-produced salmon is estimated at an annual average of $94.5 million.

Statewide, employment directly associated with commercial harvest of hatchery-produced salmon is measured at 1,040 jobs annually over the study period. Including direct, indirect, and induced employment, commercial harvest of hatchery-produced salmon accounted for an annual average of 1,540 jobs.

Table 10. Total Employment and Labor Income Associated with Commercial Harvest of Hatchery-Produced Salmon, 2012-2017 Averages

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Commercial Fishing			
Annualized Employment	1,040	500	1,540
Total Annual Labor Income	$70.9 million	$23.6 million	$94.5 million

Though not possible to quantify precisely, the number of people earning some income from commercial harvest of hatchery-produced salmon is several times larger than the annualized average. For example, virtually all seine and gillnet permit holders in Prince William Sound harvest some amount of hatchery produced fish. In 2017 there were 763 seine, drift net and set net permits fished in Prince William Sound. Based on standard crew sizes in these fisheries, it is evident that approximately 2,000 permit holders and crew can attribute some portion of their income to harvest of hatchery produced salmon. Similarly, in Southeast Alaska, a total of 1,657 troll, gillnet and seine permits were fished in 2017, with total participation estimated at approximately 3,500 permit holders and crew. Statewide, it is estimated that approximately 8,000 fishermen (permit holders and crew) earned some measure of income from harvest of hatchery-produced salmon.

Seafood Processing Impacts

The economic impact of salmon hatcheries on the seafood processing sector in Alaska includes jobs and wages for workers who handle and add value to hatchery-produced salmon. Multiplier effects result from in-state spending in support of plant operations (utilities, supplies, taxes, transportations services, etc.) and from in-state spending of processing workers' wages (consumer goods, groceries, entertainment, etc.).

Estimates of processing-related employment and wages connected to hatchery-produced salm the total first wholesale value of those salmon. First wholesale value includes the amount processors paid to fishermen for their catch (the ex-vessel value of the fish), the amount spent on wages for processing plant employees, purchases of the goods and services required to process the fish, taxes, and other costs of doing business.

Based on McDowell Group estimates, hatchery-produced salmon were processed into products worth an annual average of $362 million over the study period. Of this total, approximately $52 million per year went to processing workers in the form of labor income. With monthly wages of about $3,200 in sectors of the seafood processing industry most closely connected to hatchery salmon, direct employment can be estimated at about 1,360 jobs, on an annualized basis, over the 2012-2017 period.

Including multiplier effects, total statewide employment associated with processing of hatchery-produced salmon is estimated at 2,180 jobs and $82 million in total annual labor income.

Table 11. Total Employment and Labor Income Associated with Processing Hatchery-Produced Salmon, 2012-2017 Averages

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Seafood Processing			
Annualized Employment	1,360	820	2,180
Total Annual Labor Income	$52.2 million	$29.6 million	$81.8 million

Similar to the distribution of commercial fishing income associated with harvest of hatchery-produced salmon, the total number of processing workers who can attribute some portion of their wages to processing of these salmon is much larger than the annual average. For example, in 2017, an annual average 526 workers were employed in Prince William Sound's seafood processing sector. Peak employment totaled 1,906. All of these workers owe some portion of their wages to processing of hatchery salmon, which account for about 65 percent of the total salmon harvest in the region. In Southeast, seafood processing accounts for an average of 1,350 jobs, with peak season employment at approximately 3,400. Most of these workers are handling hatchery salmon at some point in the season. In the Southeast, Prince William Sound, Cook Inlet, and Kodiak regions, employment in seafood processing peaked at approximately 8,400 jobs in 2017. The large volumes of hatchery-produced salmon harvested during the summer played an important role in supporting this employment and the $154 million in total annual wages associated with those jobs.

Hatchery Management and Operations

The economic impact of hatcheries includes their own employment, wages, and spending with Alaska businesses. Hatcheries maintain a core group of year-round employees, supplemented by seasonal workers as necessary.

Vendor spending information provided by hatchery associations indicates that approximately $22 million is spent in-state annually on a range of goods and services. This spending supports additional jobs and income in the Alaska economy. Examples of in-state purchases include utilities, fuel, groceries, lodging, and building

supplies. Hatcheries hire local construction companies for capital improvements and maintenanc transportation businesses, and use a wide variety of Alaska-based professional services firms.

Based on data provided by hatchery managers, annualized employment associated with hatchery operations is estimated at 345 jobs statewide. Annual payroll totaled $15.5 million. Including multiplier effects, the total economic impact associated with hatchery employment and spending is estimated at 615 jobs and $25 million in total annual labor income.

Table 12. Total Employment and Labor Income Associated with Hatchery Operations, 2012-2017 Averages

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Hatchery Operations			
Employment	345	270	615
Labor Income	$15.5 million	$9.4 million	$24.9 million

Direct seasonal employment is higher than average employment. Its estimated that peak seasonal employment is about 50 percent above the annual average, or over 500 workers.

Sport Fishing

Sport harvest of hatchery-produced salmon has a range of economic impacts, though those impacts are difficult to fully quantify. Alaska residents and visitors alike spend significant amounts of time and money for the opportunity to sport fish in Alaska. Among non-residents, some visitors come to Alaska for the primary purpose of sport fishing, spending thousands of dollars on transportation, lodging, food, gear, and charter or guiding services. Other non-resident visitors may purchase a half-day, a full day, or several days of guided fishing while seeing Alaska on a cruise or independent vacation. In these cases, the opportunity to fish may be one of several reasons for their trip to Alaska.

Estimates of spending by visitors who sport fish while in Alaska are available from the Alaska Visitors Statistics Program (AVSP). However, the challenge with measuring the role of hatchery-produced salmon in this spending is, first, isolating the value of all salmon in visitors' sport fishing-related spending, when visitors may also be pursuing halibut or other species as part of their charter fishing experience. The next complication is to determine the economic role of hatchery fish in visitors' salmon fishing experience. Availability of hatchery fish can vary from area to area – being the primary target in some areas and a secondary target (after natural runs) in other areas.

Finally, it is not necessarily the number of fish harvested that drives the economic impact of sport fishing — just as much money might be spent for sport harvest of five salmon as for ten. The experiential (qualitative) value of sport fishing is an important aspect to sport fishing in Alaska, and what brings visitors to the state.

Measuring the economic impact of resident spending in pursuit of sport fishing activities is equally complex. Residents buy boats, gear, fuel, licenses, and other items for the opportunity to catch fish and pursue other marine activities. As described elsewhere in this report, hatchery salmon are an important part of the sport

harvest, but allocating an appropriate share of all resident spending in Alaska on sport fishing (l fishing) to hatchery salmon is practically impossible.

Finally, personal use and subsistence-related harvest of hatchery salmon also have significant economic impacts. In addition to economic impacts related to spending on boats and fishing gear, personal use and subsistence fishing have important household food budget implications (not to mention important social and cultural values).

This study focuses on the economic impact of spending by non-Alaskan sport fishermen, in their guided and unguided efforts to catch salmon. In 2016, Alaska hosted 192,000 guided non-resident fishermen and 146,000 unguided fishermen (these numbers include some overlap; approximately 300,000 non-resident sportfishing licenses were sold in 2016). These fishermen brought new money to Alaska, in the same manner that commercially harvested hatchery salmon are sold to outside markets and draw new money into the state's economy.

Non-residents who fished in Alaska in 2016 spent a total of $600 million while in the state, including guided and unguided fishermen, based on AVSP data. Recognizing the high level of uncertainty around the estimate, McDowell Group analysis suggests that approximately $25 million of this spending can reasonably be attributed to hatchery-produced salmon, with about 40 percent of that spending in Southeast, 40 percent in Prince William Sound, with the balance elsewhere in the state. This estimate is intended to capture spending on lodging, food, transportation, charter/guides, licenses, gear (for unguided fishermen), and incidentals for visitors whose primary trip purpose is to fish in Alaska, and who fish in areas where hatchery fish are prominent. It is also intended to capture an appropriate share of spending by visitors whose primary trip purpose may not be fishing but is nevertheless a part of their Alaska experience.

The economic impact of $25 million in visitor spending is estimated at 375 (annualized) jobs and just over $16 million in total labor income, including all multiplier effects.

Table 13. Total Employment and Labor Income Associated with Non-Resident Sport Harvest of Hatchery-Produced Salmon

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Non-Resident Sport Harvest			
Employment	285	90	375
Labor Income	$10.5 million	$5.7 million	$16.2 million

As measures of the economic impact of sport harvest of hatchery-produced salmon, these estimates are conservative. The estimates do not include any economic activity associated with Alaska resident spending on sportfishing for hatchery salmon, which is substantial in Valdez, Seward, Juneau, Ketchikan, and other communities.

Summary of Statewide and Regional Economic Impacts

In total, including commercial fishing, processing, hatchery operations, and non-resident sport harvest of hatchery-produced salmon, Alaska's salmon hatcheries together accounted for an average of 4,710 jobs and $218 million in labor income in Alaska, including direct, indirect, and induced effects. The total economic footprint of hatchery salmon, measured as economic output, is estimated at $600 million annually.

Table 14. Total Annual Statewide Economic Impact of Alaska Salmon Hatcheries

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Commercial Fishing			
Employment	1,040	500	1,540
Labor Income	$70.9 million	$23.6 million	$94.5 million
Seafood Processing			
Employment	1,360	820	2,180
Labor Income	$52.2 million	$29.6 million	$81.8 million
Hatchery Operations			
Employment	345	270	615
Labor Income	$15.5 million	$9.4 million	$24.9 million
Non-resident Sport Fishing			
Employment	285	90	375
Labor Income	$10.5 million	$5.7 million	$16.2 million
Total Economic Impact			
Employment	**3,030**	**1,680**	**4,710**
Labor Income	**$149.1 million**	**$68.3 million**	**$217.5 million**
Output	**$386.1 million**	**$216.0 million**	**$602.1 million**

The employment impact estimate of 4,700 jobs is an annualized figure. The number of people who earn some income from the harvest of hatchery-produced salmon in Alaska is several times the annual average. More than 16,000 fishermen, processing employees, and hatchery workers can attribute some portion of their income to Alaska's salmon hatchery production. Thousands of additional support sector workers earn wages connected to Alaska hatchery production.

Southeast Alaska Hatchery Impacts

The economic impacts of hatchery produced salmon in Southeast Alaska are detailed in the following table. In, total, salmon hatcheries account for just under 2,000 jobs in the region and just over $90 million in annual wages, including all multiplier effects.

Table 15. Economic Impact of Salmon Hatcheries in Southeast Alaska

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Commercial Fishing			
Employment	365	210	575
Labor Income	$26.2 million	$9.2 million	$35.4 million
Seafood Processing			
Employment	585	375	960
Labor Income	$22.1 million	$14.4 million	$36.5 million
Hatchery Operations			
Employment	165	125	290
Labor Income	$7.8 million	$4.5 million	$12.3 million
Non-resident Sport Fishing			
Employment	115	35	150
Labor Income	$4.2 million	$2.3 million	$6.5 million
Total Economic Impact			
Employment	**1,230**	**745**	**1,975**
Labor Income	**$60.4 million**	**$30.3 million**	**$90.7 million**
Output	**$152.5 million**	**$84.8 million**	**$237.3 million**

Prince William Sound Hatchery Impacts

Hatcheries in Prince William Sound generated economic activity that includes an annualized total of 2,200 jobs and $104 million in annual labor income. Annual economic output totaled $316 million. These economic impacts are spread throughout the Southcentral region, not just in PWS.

Table 16. Economic Impact of Prince William Sound Salmon Hatcheries

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
Commercial Fishing			
Employment	590	260	850
Labor Income	$40.4 million	$12.8 million	$53.1 million
Seafood Processing			
Employment	630	365	995
Labor Income	$24.7 million	$11.7 million	$36.4 million
Hatchery Operations			
Employment	115	95	210
Labor Income	$5.0 million	$3.1 million	$8.1 million
Non-resident Sport Fishing			
Employment	115	35	150
Labor Income	$4.2 million	$2.3 million	$6.5 million
Total Economic Impact			
Employment	**1,450**	**755**	**2,205**
Labor Income	**$74.2 million**	**$29.8 million**	**$104.1 million**
Output	**$203.4 million**	**$112.9 million**	**$316.3 million**

Tax Revenue Impacts of Alaska's Salmon Hatcheries

Harvesting and processing activity connected to hatchery salmon generate local and state tax revenue. This section describes the key sources of tax revenue directly and indirectly supported by hatchery-produced salmon.

Fisheries Business Tax

Hatchery-produced salmon commercially harvested and landed in Alaska are subject to the State of Alaska Fisheries Business Tax — a 3.0 to 5.0 percent levy on the ex-vessel value of the fish. Half of revenue generated from this tax is retained by the State and the other half is shared with the community and/or borough where the salmon are landed.

Over the 2012 to 2017 period, harvest of hatchery-produced salmon generated an annual average of $3.6 million in Fisheries Business Tax revenue, or nearly $22 million in total. The State of Alaska received about $1.8 million annually and local governments received an equal amount. The cities and/or boroughs of Kodiak, Valdez, Cordova, Seward, Sitka, Petersburg, Ketchikan, Haines, and Juneau are among the largest local government beneficiaries of hatchery-supported tax revenue.

Tax receipts fluctuate as harvest volumes and prices change year to year. The largest estimated annual revenue over the study period was $5.5 million generated from a record-breaking season in 2013. These estimates are conservative as they exclude volume associated with cost recovery harvest and assume a rate of 3.0 percent: it is likely some hatchery salmon are subject to a slightly higher rate.

Table 17. Estimated Fisheries Business Tax Revenue from Hatchery-Produced Salmon by Component, 2012-2017

	2012	2013	2014	2015	2016	2017	Total	Average
State	$2.0	$2.7	$1.7	$1.6	$1.0	$1.9	$10.8	$1.8
Local	$2.0	$2.7	$1.7	$1.6	$1.0	$1.9	$10.8	$1.8
Total	**$4.0**	**$5.5**	**$3.3**	**$3.2**	**$2.0**	**$3.7**	**$21.7**	**$3.6**

Note: Values have been rounded. Includes only common property harvested salmon. Assumes a 3.0 percent tax rate.
Source: McDowell Group estimates based on ADF&G and DOR data and information.

Local Taxes

Though difficult to quantify, hatchery salmon generate additional local revenue through raw fish, property, and sales taxes paid by commercial fishermen, charter fishermen, seafood processors, hatchery associations, and support sector businesses and employees.

Communities with a raw fish tax generate revenue from local landings of hatchery salmon. For example, hatchery salmon delivered to processors within the Kodiak Island Borough are subject to a 1.075 percent raw fish tax. In 2017, this tax generated $1.3 million from all species, including hatchery salmon.[6]

[6] https://www.commerce.alaska.gov/web/Portals/4/pub/Alaska%20Taxable%20Supplement%201.9.18%20Reduced.pdf?ver=2018-01-11-150658-867

Seafood processing plants generate property tax revenue in communities across Alaska. In 2017 five property tax payers in the city of Kodiak were processing companies.[7] Silver Bay Seafood's new plant in Valdez (valued at more than $40 million) is among the city's largest non-oil property tax payer; the company is also the largest property tax payer in Sitka.[8] Other processing plants in Seward, Cordova, Ketchikan, and elsewhere use hatchery salmon as part of their annual production. The availability of hatchery salmon helps preserve the financial viability of processing operations, which maintains tax revenue flowing each year to local communities.

Additional revenue is supported when fishermen and processors that handle hatchery salmon purchase goods and services subject to sales tax. The communities of Kodiak (7 percent sales tax), Cordova (6 percent), Seward (4 percent), Sitka (5 to 6 percent), Juneau (5 percent), and Ketchikan (4 percent) are among the Alaska cities benefiting indirectly from hatchery salmon.

[7] https://www.city.kodiak.ak.us/sites/default/files/fileattachments/finance/page/352/kodiak_city_of_cafr_final_2017.pdf
[8] http://www.cityofsitka.com/government/departments/finance/documents/CityandBoroughofSitkaFY2016CAFR.pdf

Submitted By
Sara MacDougall
Submitted On
11/15/2021 3:58:35 PM
Affiliation

Proposal 6 -Oppose! Reporting as of now is works fine and requiring 3 day reporting impacts travel plans because of lack of internet access in the area could impact peoples travels plans and will reduce tourism opportunities for local businesses.
Proposal 7 - Strongly Oppose! Banning guide services will prevent access to thousands of users who do not own a boat or do not wish stand on slippery rocks or wade into the fast current to try and catch fish. Properly licensed and vetted Guide services provide safe access to residents who would otherwise be unable to participate.
Proposal 8 - Oppose! Language is too vague and would restrict access to the Personal Use and Subsistence Fishery at the Bridge, O'Brian Creek, Terral Creek, Eskaleta Creek and Haley Creek. All of these drainages are popular access points for users.
Proposal 9 - Oppose! Language is too vague and would restrict access to the Subsistence Fishery at the Bridge.
Proposal 10 - Strongly Oppose! This proposal lacks common sense and would effectively force everyone to Dipnet from the shore leaving dip netter to stand on slippery rocks or wade into the river. This puts users at undo risk.
Proposal 11 - Strongly Oppose! This proposal would like all boaters who navigate their boats into the canyon could only tie off to the canyon walls or shore. As a professional mariner I feel that forcing lay people to navigate their boats into very very sketchy currents is a receipt for disaster and puts undue risk to the fisherman and their passengers.
Proposal 12- Strongly Oppose! There are a few places in the PU fishery that this interaction occurs. There are only a handful of locations to safely Dipnet from a boat in the PU where as there is nearly 20 miles of river bank for people who wish to Dipnet from shore can. Boats and canyon wall Dipnetters can co-exist with no apparent impact on fishing success from either user. Dipnetter who wade into the water in the same drift as boats are putting themselves at risk and present a hazard to navigation. By pushing out 30-40' poles these folks run their nets under the running gear of the boats presenting a possibility of fouling the motor and setting the vessel dead adrift creating a safety hazard for the captain and crew.
Proposal 13 - Strongly Oppose! Fish wheels are stationary hazards that boats avoid. By limiting navigation near fish wheels the proposal could eliminate access to the entire length of the Kotsina flood plain just above the bridge forcing everyone to fish across the river on the West Bank of the Copper. One person's "too close for comfort" is not another's. Data needs to be provided that demonstrates actual accidental contact or fowling of Dipnet gear from a boat with a Fishwheel. The hazard lies with the boat operator who could expect to capsize on contact with a wheel and thus can navigate around this hazard with this knowledge. Whether its a Fishwheel operator who drives a boat to their wheel or a dipentter the boat is only a momentary sound that quickly passes and does not impact fishing success. If it did the Fishwheel operator would not run a boat near their wheel.
Proposal 14 - Strongly Oppose! King salmon do not get "gilled" in the current allowable gear. With practice, kings can be removed from a Dipnet quickly.
Proposal 15 - Strongly Oppose! King salmon do not get "gilled" in the current allowable gear. With practice, kings can be removed from a Dipnet quickly.
Proposal 16 - Strongly Oppose! The use of sonar on while navigating any body of water is so prolific that nearly every vessel and certainly every commercial fishing boat employ sonar, aerial spotters and other means effectively to navigate and to locate fish. Though unlike our commercial counterparts, using sonar on the Copper River is more and aide to navigation than to find fish.
The biggest risk of injury or accident while gear is deployed is the reality of snagging submerged objects or structure unseen without the use of sonar. “Drifts” as we call them are only done in a handful of locations in the Personal Use and Subsistence Fisheries. This is in large part because the depth is shallow enough and significantly free of snags that allows dipnetters to drag their nets at the bottom without snagging. Debris such as logs and broken fishwheels get pushed down river resulting in a constant risk of fouling and the sonar plays a pivotal role in avoiding these hazards.
In discussing this proposal this with Senior Marine Inspector MSSE4 Overturf from USCG Sector Anchorage he stated “while it rare to find a fishing vessel without depth sounding device, most vessels have them as the added safety for the navigation of the vessel cannot be denied. “
Proposal 17 - Strongly Oppose! This proposal restricts the method of take by putting a penalty on a safer more time effective method of take and an additional burden on the user to obtain multiple permits and additional reporting.
Proposal 18 - Strongly Support! This proposal offers a reduction in congestion along the lower limit of the fishery. On busy days this area can be considered high risk for navigation due in large part to the number of vessels in this short drift. The longer drift would allow for a more orderly drift with allowing greater spacing between boats. Though the PU fishery is nearly 9 miles long” there are less than 1000 yards of viable drifts due to depth, snags, current and debris that impact the safety of the boat and crew. This addition though incrementally small adds a drift that is safe to navigate.
This drift is only available once the water level is high enough to flow over the gravel bar allowing navigation along this bank thus reducing its overall use to high water conditions.
Proposal 19 - Strongly Oppose! In years of low abundance, the resource should be allocated to Alaskan Residents and not sold to markets as a luxury food item.
Proposal 20 - Strongly Oppose! In years of low abundance, dipnetting yields low success and low success yields low pressure, but for those who what to slug it out should be able to do so within the current possession limits. Additionally, by lowering the limit it becomes less cost effective to travel to the fishery from anywhere other than the communities in the Basin.
Proposal 21 - Support! In recent years fish have come late so opening up a season earlier would make little difference as the fishing pressure would be low as would the success rates.
Proposal 22 - Support!

Submitted By
Sarah Nelson
Submitted On
11/14/2021 8:25:36 PM
Affiliation

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Proposal 6 oppose Proposal 7 strongly oppose Proposal 8 strongly oppose Proposal 9 strongly oppose Proposal 10 strongly oppose Proposal 11 strongly oppose Proposal 12 strongly oppose Proposal 13 strongly oppose Proposal 14 strongly oppose Proposal 15 strongly oppose Proposal 16 strongly oppose Proposal 17 strongly oppose Proposal 19 strongly oppose Proposal 18 strongly support Proposal 20 strongly oppose Proposal 21 strongly support Proposal 22 strongly support

From: Scott Willison
To: DFG, BOF Comments (DFG sponsored)
Subject: Comments for Alaska Sportfishing Rule Change Proposals #39 and #40
Date: Tuesday, October 26, 2021 10:43:18 AM

Proposal #39, Ibeck Creek:
If fishing pressure is adversely impacting coho escapement on the upper section of Ibeck (if supported by redd count or smolt outmigration data) I'd like to see other management strategies implemented to mitigate the impacts before an outright closure, such as catch and release, reduced harvest or a bait ban.

Proposal #40, 18-Mile or Silver Creek: Similarly to Ibeck Creek, I'd like to see other management strategies implemented such as catch and release, reduced harvest or bait ban before forcing an all out closure. I live in Washington State where our management tendencies have historically leaned towards all out closures. This leaves few fishing options and concentrates a lot of additional pressure on the few systems that remain open. I travel with the same group of 4 friends to Cordova every September to fish for coho and enjoy the natural beauty of this area and the tranquil hike into lower 18 Mile. If these fisheries are closed we will no longer make the trip as Ibeck and 18 Mile are the two watersheds that tend to remain in the best shape during our trip, so we often end up there when the Eyak and Alaganik are blown out.

Thanks for your time and thoughts.

Regards,
Scott Willison
scott@theconfluenceflyhsop.com

Submitted By
Sean Den Adel
Submitted On
3/2/2021 11:17:57 PM
Affiliation

Due to the ongoing global pandemic and the recent outbreak in Cordova caused by a city official, I strongly feel the 2021 BOF meeting should take place on zoom or a similar platform. Now is not the time to hold large public meetings in rural PWS communities. The public and stakeholders have the right to weigh in on the decisions of the board but the communities health is first and foremost!

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I participate in the commercial salmon fisheries of the Prince William Sound region as well as in processing.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region,

especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Sentoso Sendjaja
sentoso.sendjaja@oceanbeauty.com

Submitted By
Shawn Chura
Submitted On
11/8/2021 9:14:24 AM
Affiliation

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North Pole, Alaska 99705

Proposal 6 - Oppose, Proposal 7 - Strongly oppose, Proposal 8 - Oppose, Proposal 9 - Oppose, Proposals 10, 11, 12, 13, 14, 15, 16, 17, 19, 20 - Strongly oppose all. Proposal 18 - Strongly support, Proposals 21 and 22 - Support both.

Submitted By
Shawn Gilman
Submitted On
11/9/2021 10:33:46 AM
Affiliation

Proposal 7.

I am submitting comments as I have for the many cycles I have observed over the past 40 years. Proposal 7 drafted by me is an attempt to get the Board to address the upside down world that commercialized subsistence creates. Commercialized subsistence funnels new participants drawn by advertisements to partake in a subsistence fishery in a parody of subsistence activity. Many if not most of these participants arrive from non subsistence areas. My thoughts go to why I cannot go to Anchorage on a guided moose hunt, getting on the subsistence bus, be driven to the location of the game, handed a rifle , shown how to shoot, then shoot a moose? I believe the answer to that question as well as reviewing the criteria on how the board arrives at creating non subsistence areas helps frame what is happening. The 12 criteria are

1. Social and economic structure of area

2. Economic stability of the area

3. Employment information for the area

4. Cash income information for the area

5. Cost of goods and services from the area

6. Variety of species used in the area

7. Seasonality of the economy in the area

8. How many area residents participate in harvest

9. Harvest levels by area resident

10. Values associated with harvest

11. Areas of harvest

12. Extent of sharing by area residents

The disconnect between intent and reality of subsistence is more glaring every year. The staff comment that boats have existed in the dipnet fishery since 1984 in regards to my proposal and in every proposal that begs the Board to do something constructive regarding the new power boat dipnet/trawl activity ignores the change in nature of these boats and the areas and activities in which they engage. The comment also seems to belittle the impacts specifically to proposal #7 the huge increase in credit card activity boats versus the "1984" boat activity and its impact on subsistence law intent. I quote from a 1996 subsistence report to the Board authored by Steven Behnke. "For more than 20 years the state has wrestled with the question of how to protect the subsistence taking , uses and practices of the people in communities with the greatest dependence and historic reliance upon fish and wildlife for domestic consumption." My proposal ask the Board to wrestle with and steer the direction of subsistence in the future by stopping this commercialization before it becomes the norm throughout the copper River drainage including the mouth of the river. Adfg has not fully addressed the effect that failing to adopting this proposal will have on the resource.

Submitted By
Shawn Gilman
Submitted On
11/9/2021 10:46:58 AM
Affiliation

I ask the Board to oppose proposal 45 as it is contrary to the compromise that happened when the board lowered the separation distance between setnets inside the main bay subdistrict from 100 fathoms to 50 fathoms. They acknowledged that this shrunk the area available to the predominant gear type drift gillnets by as much as 50% or more and agreed that the beach was available to the drift fleet especially on clean ups and that 50 fathoms was 50 fathoms . The there is no room between two setnets argument to lower to 30 fathoms is just an allocative grab as setnets are not always 100 fathoms apart exactly nor are there always two that are 100 fathoms apart. This creates opportunity to the drift fleet to use the other 50 fathoms in the absence of a second set net. Lowering this would decrease opportunity to the drift fleet and increase opportunity to the set gillnet fleet which already enjoys above allocation average catches.

Submitted By
Shawn Gilman
Submitted On
11/10/2021 4:21:35 PM
Affiliation

i ask the Board to support proposal # 6. The need for inseason reporting is imperative as pressure increases on these fisheries. Despite Adfg managers assurance that all is fine and everyone reports what they catch. Despite saying they just know what is happening and they can expand numbers as needed. It really seems apparent to people in the know that it is time for change and more accountability. These fisheries have seen expanded commercial activity. There are online forums that share where to fish , how to fish and how many are being caught at the moment which is a fairly new tool and it is rapidly changing how people can be more direct and effective in their efforts. It certainly does not seem onerous or a stretch to ask for timely and accurate reporting in 2021. The ability to fine tune time and area for all these fisheries with increased pressure would be greatly enhanced with better information. Adfg's ability to access timely information will only become more important as new personnel comes online. The years of experience that allow a manager to look everyone in the eye and say they do not need timely and accurate numbers because they can just feel what is being harvested on the river every day may be lost . Thank you for your time and efforts.

Submitted By
Shawn Gilman
Submitted On
11/15/2021 8:44:34 PM
Affiliation

I would ask the Board to support Proposal 43. Being involved in the developement of the Plan that took historic catch over time before hatcheries and showed that Drift Gillnet harvested 50 percent, Seine 49.5 percent and Set gillnet .5 percent roughly. These numbers I believe even included a couple original early hatchery return years in for the Seine fleet. That said I have spent the last 40 years as a drift gillnet participant and have continually seen how the Drift fleet is under constant pressure from Seine and Set gillnet groups that fail to remember or realize the original numbers and to this day continually go over their allocations that are above the original historic averages. Please pass this proposal in good faith or at the very least put in motion a vigorous review of the current allocation plan and any new information that might be causing inequity such as Seine fleet bonus structures designed to avoid the COAR report, fishery relief funds that in effect pay for fish not caught while the lack of fish still stays on the allocation plan calculations in effect doubling the benefit to one gear group specifically the Seine fleet in the past 5 year calculations. thank you for your time and efforts.

Submitted By
Shawn Gilman
Submitted On
11/15/2021 9:02:42 PM
Affiliation

I ask the Board to oppose Proposal 5, The proposer has continually tried to politicize king salmon management on the Copper River in past cycles with conservation being the word used when they really mean reallocation. At the last Board cycle a similar proposal was proposed and suppported by KRSA ignoring ADFG's own recomendations to lower the escapement goal for King salmon. If one was to really look at the history and numbers throughout time. it is apparent that a vigorous and full force commercial fishery occured while keeping the Copper River King salmon stocks some of the healthiest in the State. This begs the question, did reallocation upriver and increasing commercial activity in the spawning beds, along with overescapement of sockeye due to "mandatory restrictions and political pressure on ADFG " cause more harm than good? Properly managed commercial fisheries create more opportunity over time for all users and the numbers prove it as well as numerous historic lessons from around the state on politicized fisheries versus management based on actual conditions and runs stengths. Thank you for your time and efforts.

Submitted By
Shawn Gilman
Submitted On
11/15/2021 9:19:54 PM
Affiliation

I ask the Board to support proposal 42. The set gillnet fleet has continually gone over their allocation that was increased from a historic less than .05% and increased to 1% in the original allocation plan basically doubling it until 2005. Due to low pink prices for the Seine fleet over a period of years the setnet gear group had harvested 7-10% of the PWS total value in the years leading up to 2005 so the board on a whim and not much discussion decided 4 percent was good. This has been a fortunate bump for the setnet fleet which enjoys their historic catch X400 percent and then some on average unlike any other gear group in the plan. The drift fleet which also had increased percentage catches of the total value due to low pink prices affecting the Seine fleets percentage did NOT get any increase in allocation to be clear. thank you for your time and efforts.

Submitted By
Shawn Gilman
Submitted On
11/15/2021 9:48:22 PM
Affiliation

I ask the Board to support proposal 41. The intent of mandatory inside closures was to 'save" king salmon and early run sockeye or so the saying goes when reallocation was quite often the intent. Mandatory inside closures ties ADFG's hands even if uneccessary and as shown they are more than willing and able to use them without being mandated. I also have seen the Department and Board say that mandatory measures for upriver fisheries were uneccessary. The Dept has testified that they are able to adjust to seasonal run strengths , weather and pressure without regulation. There are various proposals in the book that seek to do away with mandatory upriver closures and expand upriver areas and opportunities. I ask that the Board be consistent in regulation revisions or adoptions. I also ask the Board to review the history of the Copper River catch and escapements along with returns in concert with the restrictions that have been put in place over the years. I believe this will show heavy escapements of early sockeye and kings in the name of convervation/allocation are at least partially to blame for some of the weaker returns and lack of opportunity for all user's experienced recently. A properly managed commercial fishery creates more opportunity over time for all user groups. The numbers bear that out and hopefully will be acknowledged at this meeting. Thank you for your time and efforts.

208 Lake St. Suite 2E Sitka, Alaska

Phone: 907.209.3037 abby.fredrick@silverbayseafoods.com

November 15, 2021

Alaska Board of Fisheries
Boards Support Section
PO Box 115526
Juneau, AK 99811
Submitted via email: dfg.bof.comments@alaska.gov

RE: Comments on Proposals

Dear Alaska Board of Fisheries Members:

Silver Bay Seafoods is opposed to Agenda Proposals 49-55 currently under consideration by the Alaska Board of Fisheries (board) at its Prince William Sound/Upper Copper and Upper Susitna Rivers Finfish and Shellfish Regulatory Meeting

Silver Bay Seafoods is a fisherman-owned, Alaska seafood processing company. We operate six processing facilities in coastal Alaska communities. Our Valdez operation supports purse seine fishermen, crew, communities, and businesses who heavily rely on Prince William Sound salmon fisheries.

Proposals 49-53 seek to limit production of hatchery produced sockeye, coho, pink, and chum salmon – all of which are harvested by subsistence, personal use, sport, and commercial stakeholders and serve to supplement harvest of wild salmon stocks. The Alaska Salmon Hatchery Program has set an extremely high bar for conservative and sustainable management of salmon enhancement in Alaska. In fact, protection of wild salmon stocks has been at the forefront of the Alaska Salmon Hatchery Program since inception. This isn't just a nice idea, but a necessity, as all stakeholders rely on healthy, sustainable, wild salmon returns.

Wild and hatchery stocks are producing salmon returns that offer critical food and economic opportunities for remote Alaska communities that need it most. The Alaska Hatchery Program is an effective and celebrated success. There is no scientific evidence of harm to wild Alaska stocks. Contrary to the narrative in these proposals, this program has resulted in healthy, wild and hatchery salmon returns to the region for many years. To be certain of this observation of no harm to wild stocks, our Alaska fisheries management agency (ADF&G) and industry leaders have funded a comprehensive, multi-year research project to collect additional, targeted information about the relationship between hatchery and wild salmon stocks in Alaska. This project is ongoing, but in the meantime and since inception, Alaska has adhered to strong, conservative policies for sustainable management of our wild and enhanced salmon stocks. Therefore, enacting overly burdensome policies or regulations (such as those outlined in proposals 49-53) without supporting scientific data would be extremely harmful to Alaskans. As

mentioned by the Alaska Department of Fish and Game (ADF&G) the fisheries research and management agency granted the authority to assess this in the best interest of Alaska and our sustainable fisheries resource, many of the concerns raised in proposals 49-53, are already sufficiently addressed through a rigorous, public permitting process. We support the department's analysis and ask you to respect their professional input on these issues.

Proposals 54 and 55 reduce salmon production by 24% of the level permitted in 2000. The most alarming impacts from adopting these changes are 1) the redirection of harvest from supplemental enhancement stocks to wild stocks, and 2) the dramatically negative impact to this region's economic opportunity by reducing enhanced salmon production by 25% with no demonstrated benefit to wild salmon stocks. Hence, the likely and significant harm would outweigh the unsubstantiated benefit.

We respect the role board members have in conserving, protection and allocating Alaska's salmon resources. We encourage board members to make educated decisions about these important issues by reviewing all public comment, digesting the scientific data presented by ADF&G and truly weighing the impacts your decisions have on Alaskans and Alaska's sustainable salmon resource. Given the information currently available, Silver Bay Seafoods strongly opposes adoption of proposals 49-55.

Thank you for the opportunity to comment.

Respectfully,

Abby Fredrick
Director of Communications

Submitted By
Simon Malinski
Submitted On
11/14/2021 3:47:47 PM
Affiliation

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Waconia , Minnesota 55387

Hello,

My name is Blake Yorde. I've been a fishing guide in Copper Center, Alaska and surrounding area since 2007. The entire Copper basin relies on the salmon runs of the upper Copper River drainages. Most importantly to us as sportfishermen, the King salmon runs. I know there's not been a lot of representation for sportfishermen from the Valley in years past, mostly I believe because there's truly not many of us. However, the economic impact we have with our clientele coming to the state of AK and supporting the Copper Basin are immeasurable.

Proposal 5: Strongly Oppose

As you may know, Copper Center is situated at the confluence of the Klutina and Copper Rivers. Salmon is an important subsistence and sport fishing resource for many community members and provides a critical economy for many businesses in the Copper Basin related to fishing and tourism – restaurants, gas stations, bed & breakfasts, grocery stores, etc. The proposal presented by the Kenai River Sportfishing Association (KRSA) to raise the limit goal could have a serious impact to our community members and their livelihoods. Further, we don't see how the KRSA could have a better understanding of managing fish in the Copper River tributaries than State of Alaska Department of Fish & Game biologists, who in 2020 recommended an escapement of 21,000 – 31,000 fish. Proposal #5 would raise the escapement goal for king salmon from the current escapement goal of over 21,000 - 31,000 king salmon to 24,000 – 40,000 king salmon: essentially making it very difficult to sportfish any of the Upper Copper tributaries (i.e., Gulkana, Klutina, & Tonsina Rivers). Fish and Game has a very conservative management regime in place in the Copper Basin and does not hesitate to introduce precautionary measures like limiting harvest, restricting bait, or mandating catch & release only – or even closing fishing for king salmon entirely – if returns are not where they should be. As the owner of a business centered on sportfishing, and more generally as a person invested in the sustainability of this species for generations to come, I have always been impressed by ADF&G's management of this resource and feel that we should trust their data and knowledge moving forward.

Proposal 8: Agree

Proposal 8 states that there will be no dipnetting in the confluence 500 yd below and 100 yd upstream of any tributary in the upper Copper River. ADFG marks the tributaries in a straight line from top to bottom of the confluence. This method allows for sections of the river to grow past that line, which causes some confusion on where you can and cannot dipnet. Changing these boundaries will alleviate any confusion and allow the tributary mouth to change year to year. I see firsthand that these waters are prime conditions for fish to gather and prep for their push up to the spawning grounds. Dipnetting these areas seems to be akin to "shooting fish in a barrel." For example: The smaller tributaries are closed to all fishing for salmon within a quarter mile. Why would it be different along the copper in the larger tributaries?

Proposal 41: Strongly Oppose

This proposal to lift the inside boundaries for Kings is far reached and dangerous. With the difficulties of managing King Salmon and total numbers not meeting expectations, to open the natural king territory would do significant damage to the fish population. Commercial fishing inherently has the potential to do more harm to the fishery than any other user group just due to the method of harvest and the number of fish that they take. We see king returns trending downwards recently and I cannot understand the reasoning behind a proposal like this.

Proposal 32: Agree

If the rainbow populations on the Gulkana are sustainable, we should be allowed to keep trout. Fishing these waters on the regular, the Gulkana does not have the fishing pressure it got in the past.

Thank you for your time, and more importantly, your support for sportfishing.

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live in Homer and commercial and sport fish. My family homesteaded in Homer, Alaska in 1938 and began our fishing employment that year, hiking off the homestead to go fishing and also work in the canneries on the Kenai Peninsula. In 1985 my husband and I sold our Cook Inlet salmon permit and bought a Prince William Sound seine permit, took our small children with us and have been seining in the Sound ever since, our 36th year of seining was last summer. We have watched the PWS hatchery program grow and mature in the years we have fished and we're grateful for the hard work and dedication to the hatcheries that the fishermen and regional workers have put into them. The hatcheries have supplemented the wild stocks and made healthy and productive fisheries for both commercial and sport fisheries. We totally support the hatchery program and hope that it continues for the benefit of all the people of the region and the State of Alaska as well. We have been proud to see very large wild salmon stocks in the rivers and streams during these years since the hatcheries have started. The hatcheries helped overcome the decline of wild salmon due to the uplifting of the Sound due to the 1964 earthquake and the fluctuations in weather that froze out salmon streams and it was the visionary fishermen of Prince William Sound who started the hatcheries, something we should all be proud of. During a hatchery summit meeting in 2018 Clem Tillion made a passionate plea for the hatcheries to continue for the benefit of everyone, plus he reminded us of how many pink salmon Russian, North Korea and other Asian countries are producing (far more than we are) and said that if we stop we will simply lose our place in the markets of the world and in our own economy. We should be keeping that information in mind as we look at the salmon situation in the world. As far as the number of pink salmon PWSAC is producing, please remember that only a portion of the numbers we release make it out of the Sound as predation is a huge factor with marine mammals eating a huge number of them. Whales in particular have discovered the spring releases and eat an alarming amount. For more information on the survival rate of the salmon releases please read the studies that have been done on this matter which helps to understand why it is critical to have large releases because a much smaller percentage will actually survive and grow into adult salmon that will return to the Sound. I think it is important that everyone involved in these decisions go back and look at the information and testimonies from the 2018 emergency hatchery summit because so much quality research was presented and we should be making these decision with true solid information for the benefit of all the fishermen, the Alaskan towns and the State. Thank you very much for taking the time to read this and for making informed and wise decisions. Also, every seine boat employs anywhere from 3 to 5 crew members, each who work for a percentage of the catch, anywhere from 9% to 12% for each person. That makes the fisheries a great opportunity for young people to make a good living which our crew members have used to pay off college debt, buy business and build homes, a fact we are proud of because we know our one permit has contributed

greatly to the economies of Alaskan communities and young families. If you want direct testimonies from over one hundred of our crew members please contact us and we will provide you with their information.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Sonja Corazza
Sonja907@gmail.com
(907) 202-1104

Southcentral Alaska Subsistence Regional Advisor
c/o Office of Subsistence M
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199
Phone: 907-786-3888 Fax: 907-786-3898
Toll Free: 1-800-478-1456

RAC SC 21015.DP

MAY 13 2021

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

RE: PUBLIC COMMENTS ON 2020-2021 ALASKA BOARD OF FISHERIES PROPOSALS

Dear Alaska Board of Fisheries Members:

The Southcentral Alaska Subsistence Regional Advisory Council (Council) is one of ten regional advisory councils formed under Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and chartered under the Federal Advisory Committee Act. Section 805 of ANILCA and the Council's charter establish its authority to initiate, review, and evaluate regulations, policies, management plans, and other matters related to subsistence within the Southcentral Alaska region.

At its February 24-25, 2021 meeting, the Council reviewed and discussed several Alaska Board of Fisheries (BOF) proposals for Prince William Sound finfish. Many of the issues addressed by these BOF proposals were similar to issues presented in Federal subsistence fisheries proposals, which came before the Council during its fall 2020 regulatory meeting. These Federal subsistence fisheries proposals were presented to the Council as potential modifications on the Federal subsistence fishery and the Council made recommendations to the Federal Subsistence Board on them.

Now, the Council would like to offer comments on specific BOF proposals. The Council takes its responsibility to provide a meaningful preference for Federal subsistence users seriously and is only willing to consider the proposed restrictions **after** they are first adopted in the State managed subsistence and personal use fisheries. Although there may be value to the BOF proposals, this Council cannot support restrictions placed on Federally qualified subsistence users until restrictions are implemented and enforced on lower-priority fisheries.

The Council specifically offers the following comments to be considered at the upcoming Alaska BOF meeting addressing these proposals:

BOF Proposal 5: OPPOSE
The Council is opposed to modifying the Copper River Salmon Management Policy in any way. There has been a fairly low abundance of King Salmon over the last 10 years and if this policy is modified by lowering the 'Optimum Escapement Goal,' to manage for the 10-year rolling average, the State would be managing for a declining fish population. The existing policy should continue to provide for a minimum of 24,000 King Salmon (Sustainable Escapement Goal) in the system. Therefore, the Council opposes BOF Proposal 5 and supports maintaining the status quo for the Copper River Salmon Management Policy.

BOF Proposal 6: SUPPORT
The Council believes that due to the low salmon run forecast, there is a need for personal use and sport fish daily reporting to keep managers informed about conditions in the river to aid in State resource management decisions.

BOF Proposal 7: SUPPORT
The Council recognizes that guiding activity has significantly increased in recent years, specifically in the Chitina area, and it is reasonably expected to continue to increase in the future. Based on the information provided at its recent meeting, the Council felt there was a conservation concern based on the low runs last year for the Upper Copper River and the State's forecast for next season. This proposal would place more State-level restrictions on a resource that has been proven to be unpredictable and at times, diminishing.

BOF Proposal 8: SUPPORT
The Council felt that this proposal would help relieve some of the conflicts between user groups. Fish often concentrate in certain areas, specifically King Salmon, at the mouth of the Gulkana River; and, if dipnetting is allowed to increase near the tributary mouths of the Upper Copper River, it could have a significant effect on the ability for other user groups to harvest fish.

BOF Proposal 9 & 10: SUPPORT
The Council found that these proposals would significantly affect the harvest by Upper Copper River users. Dipnetting from a boat is an easy way to catch a large amount of fish. Prohibiting dipnetting from a boat at the State-level will have a positive impact on the ability of salmon to migrate to their spawning grounds.

BOF Proposal 14 & 15: SUPPORT
The Council is concerned about high salmon mortality, especially King Salmon. The Council heard anecdotal evidence of 'high-grading' and other activities associated with dipnetting, whereby its very nature decreases the probability of survival. The Council recognizes the need to protect the fishery resource and supports State regulations that prohibit or limit the use of monofilament and multifilament mesh associated with increased risk of mortality. It is important that sufficient numbers of healthy fish survive to reach their spawning grounds.

BOF Proposal 16: SUPPORT
The Council believes devices such as depth or fish finders offer only limited utility to target fish; however, it recognized that these devices may have an impact in the future as technology continues to evolve. As a safety issue, one needs to be able to 'read' the river instead of trying to

navigate with a device that might not provide adequate navigational information due to the river being silty. Fishing from a boat has become more popular and using devices could enable fishers to target and harvest a large amount of fish preventing enough King and Sockeye salmon to reach their spawning grounds. The Council recognizes that there may law enforcement challenges to prohibiting these devices from being on boats.

BOF Proposal 18: OPPOSE
The Council believes extending the lower boundary and allowing boat dipnetters a longer continuous drift (which may be viewed as trawling), will encourage more participation and result in increased harvests. This will affect the upriver fisheries and migration of King and Sockeye salmon. An extension could also make it more challenging for the Native Village of Eyak (NVE) to gather crucial mark/recapture program data. If there is no way to determine if harvests occurred above or below the NVE research fishwheels, the number of King Salmon reported at the end of the year may not be statistically valid. Such an inaccuracy could affect the management of this important resource. Lastly, this area of the river is difficult to read and extending the boundary could create an increased safety risk. There should not be a fishery established or extended in an area where people are transitioning.

BOF Proposal 22: OPPOSE
The Council believes that the purpose behind this proposal is to have the BOF review the customary and traditional use determination for other less desirable finfish in an attempt to ultimately request a customary and traditional use determination for salmon in this area. The Council does not support making a customary and traditional use determination for salmon because it would prohibit the subsistence fishery from being shut down in times of low abundance. In the State system, everyone is a subsistence user and it is problematic for those outside the Chitina Subdistrict to have as much say and access to the resource as those living locally and depend on the fish in that system do. This increase in access could also be detrimental to the fish stocks and cause future conservation concerns.

The Council appreciates the opportunity to comment on these BOF proposals and recognizes the importance of both State and Federal management of fisheries resources that are relied upon by Southcentral subsistence users. If you have any questions regarding this letter, they can be addressed through our Council Coordinator, DeAnna Perry, at 907-209-7817, deanna.perry@usda.gov.

Sincerely,

Richard Greg Encelewski,
Chair

cc: Federal Subsistence Board
Southcentral Alaska Subsistence Regional Advisory Council Members
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management

Hannah Voorhees Acting Policy Coordinator, Office of Subsistence Management
Tom Kron, Statewide Support Division Supervisor, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor,
Office of Subsistence Management
DeAnna Perry, Subsistence Council Coordinator, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor,
Office of Subsistence Management
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Projects Coordinator, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

Southeast Alaska Fishermen's Alliance
1008 Fish Creek Rd
Juneau, AK 99801
Email: kathy@seafa.org
Cell Phone: 907-465-7666
Fax: 907-917-5470 Website: http://www.seafa.org

November 12, 2021

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

Re: Comments on Prince William Sound Board of Fish Proposals

Dear Chair Carlson-Van Dort and Board of Fisheries members,

Southeast Alaska Fishermen's Alliance (SEAFA) is a non-profit commercial fishing association representing our 330+ members involved in the salmon, crab, shrimp and longline fisheries of Southeast Alaska but also includes members involved in the Prince William Sound (PWS) salmon drift gillnet fishery and longline fisheries throughout the state.

Proposal #5: OPPOSE - Change to an OEG escapement goal.

ADF&G's analysis of this proposal in RC 2 requesting the implementation of an Optimal Escapement Goal (OEG) would reduce long-term production of Copper River King salmon. In-river harvesting would not be liberalized until a higher number of fish were estimated to be in-river, reducing opportunity. There is something else happening to Chinook salmon throughout their range in Alaska rather than ADF&G management or the type of escapement goal.

Proposals #49, 50, 51, 52, 53, 54, & 55: OPPOSE - Changes to Hatcheries.

We will address our opposition to proposals #49-55, the proposals as a group rather than individually since many of the same factors exist for each of the proposals. As stated in the ADF&G comments RC 2, the Department opposes these proposals and states that in the permitting process the concerns raised in these proposals have been considered. Included in the hatchery permitting process is a public process and a department review. That review,

considered the concerns raised in the proposal including the need to minimize negative interactions between hatchery-produced and wild salmon, minimize straying and implementing harvest practices targeting hatchery produced salmon such that they do not negatively affect wild salmon escapements. Hatcheries provide many benefits including reducing harvest pressure on wild stocks as the hatchery release sites move a lot of the effort to the hatchery production instead of wild stocks. The hatchery program was developed by the State to supplement natural salmon production, not replace salmon, or displace it, nor to cause harm to wild stock production. Increase salmon abundance provides economic benefit and stability to the commercial salmon fleet. In addition, harvest opportunities are provided to all user groups.

Proposals #54 & #55 are slightly different in asking for a reduction of hatchery salmon to 24% of the level permitted in 2000 effectively reducing the hatchery production from 3.3 million fish to 800,000 fish impacting all user groups. Proposals similar to this have been considered most Board cycles and, in the end, not been acted on. The Alaska Department of Law in an informal Attorney General opinion[1] (Nov 6, 1997; 661-98-0127) has laid out the authorities of the Board of Fish and the Department of Fish regarding hatchery permitting and operations. This opinion clearly states that the legislative scheme for the regulation of private, nonprofit hatcheries vests the most detailed, comprehensive authority in the commissioner and department. The Legislature significantly restricted that authority by an amendment to AS 16.10.440(b) in 1979. This restriction provided the Board with more indirect authority over hatchery production but Board action that effectively revokes or prevents the issuance of a hatchery permit is probably not authorized. This would include reducing production to such a level as to make the hatchery unable to operate effectively revoking the permit.

Thank you for your consideration of our positions on these proposals.

Sincerely,

Kathy Hansen
Executive Director

[1] http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2018-2019/july_petitions/dol_1997_memo.pdf

SSRAA
Southern SE Regional Aquaculture Association
14 Borch Street, Ketchikan, AK 99901; Phone: 907-225-9605; FAX 907-225-1348

November 5, 2021

Alaska Board of Fisheries
Marit Carlson-Van Dort, Chair

By Electronic Copy Only: dfg.bof.comments@alaska.gov

Re: Comments on Proposal 55 – **DO NOT PASS**

Dear Chairman Carlson-Van Dort and members of the Board of Fisheries,

Thank you for the opportunity to comment on the above-referenced Proposal. Southern Southeast Regional Aquaculture Association (hereafter "SSRAA") is a regional non-profit salmon hatchery organization formed under state and federal law, and which was originally incorporated in 1976. SSRAA, along with the other regional hatchery associations in the State, along with the associated Private Non-Profit (hereafter "PNP") salmon hatcheries in Alaska, have a substantial interest in the outcome of this proposal. Proposal 55 is substantially similar to items previously submitted to the Board. In turn, SSRAA has made similar comments to these in those situations as well.

The Board's response to this item is exceptionally critical to Alaskans - perhaps more than any of us even realizes or understands. We implore you to carefully consider the potential impact of this proposed reduction in hatchery production. Affirming this proposal would encourage and amplify the message of those who would dismantle Alaska's salmon hatchery system despite obvious evidence to the contrary – that overall hatchery production levels have been steady for decades, a time period which encompasses many record-breaking returns of both hatchery and wild salmon.

Proposal 55 should not be taken seriously for a large number of reasons, but to highlight one: the damage that this action would cause if granted is truly astonishing. Among the damage: aquaculture associations have taken out infrastructure and operating loans from the Department of Commerce as well as from commercial lenders… loans that were contingent upon utilization of the permitted capacity for each organization. If the ability to produce over 37% these fish evaporates with the stroke of a pen, a catastrophic chain of events would cascade upon hatchery organizations and Alaska's commercial fishing industry. And then down upon fishermen, their families and their employees and suppliers.

To highlight the economic output of SSRAA, which of course is only one of the statewide group of hatchery associations, please note the following figures from a recent economic analysis:

- Annual harvests of SSRAA salmon in common property fisheries in the period 2013 to 2017 averaged 22 million pounds, with an ex-vessel value of $16.8 million. SSRAA's total economic impact in 2017 was estimated at 680 jobs and $32 million in labor income tied to direct impacts in commercial fishing, seafood processing, nonresident sportfishing and SSRAA's own spending and employment.

- SSRAA's relative contribution to harvest values is influenced by year-to-year variations in the abundance of wild pink salmon. SSRAA's peak contributions - more than 40 percent of harvest value in 2017, for example - occur in years with low pink salmon abundance. In 2013, a year with near-record pink salmon abundance, SSRAA contributed 13 percent of regional salmon harvest value.

- Total economic output associated with SSRAA and the salmon it produces was about $70 million in 2017. Output is a measure of total economic activity, including all labor income, spending on supplies and services, and related multiplier effects.

In addition to SSRAA's importance to Southeast Alaska's commercial fisheries, sport harvest of SSRAA salmon has a significant impact on the region's economy. Resident anglers who target SSRAA fish spend money on boats, fishing gear, fuel, and supplies, while non-resident anglers often hire local charter fishing companies that source many supplies locally and provide jobs to local residents.

SSRAA urges the Board to review the relevant data and truly understand what a massive impact it would be for the economy and culture of Alaska to have its hatchery programs dismantled through adoption of this proposal.

Thank you for your attention to these issues.

Again, SSRAA vigorously opposes Proposal 55.

Sincerely,

David Landis
SSRAA General Manager

Submitted By
Stephen Jansen
Submitted On
11/15/2021 5:12:10 PM
Affiliation

Phone
9072277096
Email
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Address
9850 Conifer St
Anchorage, Alaska 99507

To the Board of Fisheries: I would like to voice my strong opposition to proposals which reduce, restrict or outright ban the use of a boat to utilize the Glenallen and Chitina sub-district subsistence and personal use fisheries on the Copper River. Specifically proposals 9-15 and 17. As with most natural resources in this state an enlarging population is leading to increased competition among different user groups for finite resources. The above proposals are nothing, however, but thinly-veiled attempts by one such user group to hoard fish for it's own interest at the expense of another. Furthermore the constitutionality of such proposals is dubious at best given the mandate to manage Alaska's natural fish and game resources for the benefit of **ALL ALASKAN'S**. For more than a decade I have participated in Copper River personal use or subsistence fisheries from a boat. In every single one of those years I have personally fished with Elder Alaskans whose physical condition would prevent them from walking the bank or managing the heavier nets needed to fish from the shore. I have also more recently had the pleasure of introducing my children to this wonderful fishery, giving them the satisfaction of harvesting their own sockeye. It is an amazing thing to see them light up at the dinner table and proudly tell their mother how they caught the very fish they were eating tonight. Taking away the boat would effectively exclude these older and younger Alaskans from these fisheries. This would be a travesty as there is no valid management objective that eliminating the use of boats can achieve which cannot be better met by other measures such as limit reductions. Please do not take away my right to fish. Please vote no on these proposals.

Stephen Jansen

Madam Chair and Board of Fisheries Members,

I created proposal 88 and now no longer support it. I submitted the proposal on February 25 , 2020 before the impacts of Covid hit the sport fishery. I no longer support it because in the aftermath of Covid, I doubt the allocation criteria spelled out in **Alaska Statutes 16.05.251,** can be met.

Below is the criteria list from 16.05.251

(1) the history of each personal use, sport, guided sport, and commercial fishery;

In 2020, despite increased sport bag limits, the fishery could not catch their allocation of kings due to covid 19 impacts. In 2021 the department augmented the current plan drastically to ensure the sport fishery caught its entire allocation because of covid 19 impacts.

When the most recent history of the sport fishery harvest is considered it can be easily concluded that more fish allocated for the fishery is not necessary nor the solution to the fishery's current problems. It would also be wrong to rely on past harvest history since there is no way of knowing what the harvest trend of the fishery will be in the aftermath of covid. It could be significantly different and there is no way to make an accurate prediction. Allocation changes would be better addressed when the sport fishery is no longer harassed by the pandemic.

(2) the number of residents and nonresidents who have participated in each fishery in the past and the number of residents and nonresidents who can reasonably be expected to participate in the future;

Predicting the number of participants to participate in the future would be highly debatable and speculative. The covid pandemic is going to be with the world for quite some time according to health experts. Covid will most likely impact travel to Alaska for several years. To what extent who is to say? The delta variant of the covid virus created another pandemic within a pandemic. A new variant unsusceptible to the new vaccines could easily throw the country in to another economic crash similar to 2020 in a matter of weeks. So, to reasonably predict any accurate numbers of future participation by nonresidents would be difficult if not impossible.

(3) the importance of each fishery for providing residents the opportunity to obtain fish for personal and family consumption;

If anything, the decrease in nonresident fisherman has increased the residential sport fisherman's opportunity to obtain fish for consumption.

(4) the availability of alternative fisheries resources;

It can be easily documented that there is no need for an alternate fisheries resource at this time. The opposite is true in the current situation where there is more than enough of the resource available. Especially if managed correctly.

(5) the importance of each fishery to the economy of the state;

Currently all of the fisheries involving Chinook salmon can be demonstrated to be very important to the state economy overall. It would be a lengthy article to recite the economic mechanics of both the troll and charter fisheries. Sufficed to say both industries employ and support major parts of the Southeast economy. To allocate more fish to one at the expense of the other, would end in a deficit to the state's economy as a whole.

(6) the importance of each fishery to the economy of the region and local area in which the fishery is located;

In the Southeast region the commercial troll fishery and the charter fishery are both a valuable part of the economy. The troll fishery amid the covid 19 pandemic is performing as it always has. It has been economically stable. The charter fishery has not and has been deeply impacted. Given the recent sport harvest history where the problem clearly is not a lack of fish but covid, it is not logical nor rational to take fish from a functioning troll fishery, making it less economically viable, in attempt to revive the charter fishery from covid . In the current pandemic conditions, risking harm to a well-functioning economic participant of Southeast's current fragile economy, unwisely risks detrimental harm to the region's stability.

(7) the importance of each fishery in providing recreational opportunities for residents and nonresidents.

It can be shown that the opportunities for both would not significantly change if the allocation was changed. 2020 showed there was excessive opportunity for both and 2021 shows that had management been more appropriate for the situation, opportunity for the nonresidents would not have been impacted.

Sincerely, Steve Merritt

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live in Homer, Alaska, and I participate in the commercial, sport, and public use salmon fisheries in the Prince William Sound Region. Started commercial fishing with my dad in 1970, there was much instability in salmon runs in the 60s and 70s. My four children also grew up fishing PWS and fish their own boats currently. Hatcheries in PWS have created and sustained the stability and opportunity for our family to prosper for the last 40+ years.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Steve Tutt
mweifish1@gmail.com
(906) 399-6007

Submitted By
steve vanek
Submitted On
11/8/2021 9:13:49 PM
Affiliation
self

Phone
9075673470
Email
smlvanek@gmail.com
Address
PO BOX 39103
Ninilchik, Alaska 99639

I have been here since the FRED Division was building hatcheries. I wasn't sure about hatcheries then because I didn't know how carefully they were regulated. The Fred Division was involved with hatcheries so as to produce more salmon and other species for the common good. Now that the Fred Division is gone the onus falls on PNPs. But the objective is still the same. It is the Deparments job to see that they operate in the best interests of the State and of the wild fish. They do a good job. Let them do their job.

Submitted By
Steven James Swartzbart
Submitted On
11/4/2021 8:11:52 AM
Affiliation

Phone
9072533422
Email
sswartzbart@gmail.com
Address
P.O. Box 233
Cordova, Alaska 99574

2021 PWS BOF Public Comment

My name is Steven Swartzbart and I am second generation commercial fisherman from Cordova, Alaska. I am an Area E drift gillnet fisherman and passionate about protecting the value of the fishery. I appreciate the opportunity to comment on these proposals that will directly impact my livelihood.

Proposal 5- Oppose

Adding an Optimum Escapement Goal for the Copper River of 24,000-40,000 chinook would limit time and area for the commercial fleet and only benefit upriver users. In recent years the commercial fleet has taken most of the burden of conservation on years of low returns. Increasing the escapement goal above the present, scientifically established one would result in many unharvested king and sockeye (due to the similarities in run timing and area) salmon and would needlessly cost the commercial fleet millions. I support escapement goals that are set by ADF&G, not a sport fishing association from a different part of the state.

Proposal 7-Support

Subsistence opportunities to harvest salmon are being fished with commercial guide boats. This is a loophole and guide outfits are profiting from subsistence salmon. I hope to see the board support this proposal to limit the commercialization of subsistence fishing.

Proposal 19- Support

This proposal would simply help share the burden of conservation between Copper River user groups on years of low return and help give the management biologist the confidence to open the commercial fishery more.

Presently there is no way to count the number of fish entering the commercial area. So on years when run timing or escapement numbers are behind schedule, the commercial fleet is shut down. The fish then go up the river and past the Miles Lake sonar and the escapement goal is achieved without limiting upriver users. This means the commercial fleet sits on the beach and watches the run go up the river while the price of fish is at the season's highest. Not only is the fleet not making money, they are also not gathering useable data for the biologist. Building in an upriver safeguard would be a useful management tool and would hopefully prevent long, idle periods for the commercial fleet.

Proposal 31-Oppose

Increasing the bag limit to six sockeye creates a situation that can easily be abused. I believe it would be difficult for law enforcement to enforce the three-sockeye daily limit with so many users and so few law enforcement officers. I believe that this proposal should be discussed with the Alaska State Troopers and ADF&G before any action is taken.

Proposal 38-Support

Proposal 38 is an effort to help distribute the burden of conservation amongst both sport and commercial fisherman. It does not seek to limit Cordovans opportunities to catch coho salmon. The proposal does not affect subsistence fishing for coho and it only affects the number of fish you are allowed to take home sport fishing after two weeks of commercial closure.

I spend a lot of time in the fall sport fishing for coho on the Eyak River. In my experience, bait is more affective but is not used by that many people. It is also not used by many out-of-town tourists that help boost the local economy this time of year. This proposal does not take away local opportunities to catch eat cohos. It will also not negatively impact tourist ability to come enjoy the Copper River Delta.

Proposal 41- Support

ADF&G has used the inside king closures often and past their mandated date for king salmon protection. Repealing this mandate will not change how the fishery is managed by ADF&G, but will clean up an unnecessary regulation.

Proposal 45- Oppose

Proposal 47- Oppose

This proposal's main argument is that the gillnet fleet harvests too many pink salmon in the Coghill district prior to Ju seiners are allowed into the Coghill District. The writers of this proposal believe that "The intercepted enhanced fish are predominately pink salmon bound for the Valdez Hatchery". In 2021 the gillnet fleet harvested 218,388 pinks in the Coghill District prior to July 18, which was the last exclusively gillnet opener. The 2021 Annual Management Plan for Solomon Gulch Hatchery (Valdez Hatchery) says, "VFDA's 2021 anticipated pink salmon run to SGH is 20,593,644 million fish." This means the gillnet fleet harvested %1.06 of the of the Valdez Hatchery run in the Coghill District prior to July 18. This number also does not account for the pink salmon caught by the gillnet fleet at this time in the Coghill district that are bound for Wally Noerenberg Hatchery which is allocated to both seine and gillnet gear types. Taking this into account, the percentage of these fish caught by gillnetters is likely much lower than one percent.

Proposal 47 also has concerns about the wild stocks that are intercepted by the gillnet fleet in the Coghill District. It states that, "The wild fish intercepted are chum and pink salmon predominately bound for the Northwest District and the Northern District, both of which are exclusive Seine areas." This is true, which is why ADF&G closes the Bettles Bay Subdistrict to protect escapement for wild pink and chum salmon.

This proposal is attempting to address the issue of intercept fishing. I am sure the board hears many proposals all around the state trying to limit intercept fishing. The fact is, intercept fishing is always going to happen, especially in Prince William Sound between different gear types. The seine fleet has intercepted exclusively gillnet Main Bay sockeye in AFK for years and exclusively gillnet WNH chums in the Montague District though these species are way more valuable to the gillnet fleet. As long as each gear type's allocation works out as planned, trying to stop every intercepted fish is a race to the bottom. I encourage the board to look at allocation as a whole and not individual fish.

Proposal 48- Oppose

This proposal is similar to number 47 in that it seeks to limit intercept fishing. In this case by the gillnet fleet in the Eshamy district which is a very small compared to the rest of the sound. The Northwest and Alaska Seine Association claims that "The Gillnet group harvest large numbers of salmon in the Eshamy District, both wild and enhanced, bound for other areas." They claim that the gillnet fleet intercepts fish bound to almost two thirds of the sound; (1)Valdez Hatchery, (2)AFK Hatchery, (3)Port Chalmers Chums, (4)Ester Chums, (5)Northwest District, and the (6)Northern District. It is off the mark for the Northwest and Alaska Seine Association to claim that gillnetters are intercepting too many fish when gillnetters are already regulated to such a small area, compared to the seine fleet (the entire PWS). I encourage the board to look at allocation as a whole and not individual fish.

Proposal 58- Oppose

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I participate in the commercial salmon fisheries of the Prince William Sound Region.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

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The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

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Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez,

Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

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Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Steven Nast
steven.nast@obiseafoods.com
(206) 305-8351

Submitted By
Stuart L Deal
Submitted On
11/15/2021 12:52:13 PM
Affiliation

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Address
7314 11th Ave NW
Seattle, Washington 98117

I support the permit stacking proposals. They are gear reduction proposals, and we need that.

Prices of fish have not increased since the 1970s, while operating costs have increased considerably. Permit stacking can address this and a variety of problems for the commercial fleet without being a relatively permanent buy back. In Bristol Bay where permit stacking is allowed, recent increases in returns of salmon have accompanied a decrease in the number of boats operating two permits. This demonstrates how permit stacking can fluctuate with the changing conditions in the fishery. Enabling an owner of two permits to fish both on one boat is also a good idea.

A shortcoming of these proposals is that a 25 fathom increase in length for stacking a second permit may not offer enough incentive to effectively reduce the number of boats. Seine operators that I have spoken with, who agree that gear reduction is a good idea, doubt that a 25 fathom increase in length is motivating enough to stack a permit. I would prefer to see increased fishing opportunity for vessels operating with two permits. An increase in fishing time that is proportional to the number of operations withdrawn from the fishery would provide a better incentive for stacking.

For example:

10% of the fleet operates with stacked permits, then on about every 5th day of open fishing in a season, fishing is closed at midday to the fleet at-large, but the boats with stacked permits continue to fish the rest of the day. Harvest figures for aggregate benefit to the stacked permit operators determines the frequency of exclusive fishing periods. The increased harvest to operators stacking permits could be capped at 30% to manage the level of fleet reduction.

Stuart Deal

Seine vessel operator PWS

Submitted By
Sue Cox
Submitted On
11/15/2021 7:42:11 PM
Affiliation

I wish to voice a strong objection to proposal 9, eliminating the use of boats in the Glennallen sub district.

My family relies on the ability to harvest salmon under a subsistance permit on the Copper River. This proposal would hevely reduce our fishing opportunities and limit the number of fish we count on throughout the year. This area feeds our family throughout the year on a single subsistance permit, with responsible harvesting annually. We take a small count compaired to the counts taken by commercial fishing of the same fish population.

A concern was voiced regarding the number of fish reaching the spawning areas; however, the annual harvest from subsistance is significantly lower than that of commercial or personal use. I believe it would be more benificial for a reduction in counts allowed for all parties, rather than close off boat access. We are very fortunate to live in a state with subsistance opportunites, families depend on and I believe they should be protected for all those who depend on a subsistance way of life.

Thank you for your time,

Sue Cox

Submitted By
THEA THOMAS
Submitted On
11/14/2021 7:22:54 PM
Affiliation

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thea@ctcak.net
Address
PO Box 1566
112 S. 2nd St.
Cordova, Alaska 99574

Dear BOF members, thank you for your time and consideration of my comments. I am a resident of Cordova and a commercial salmon fisherman since 1987. I will focus my comments on the proposals concerning the **Upper Copper River Personal Use and Subsistence** and **Copper River King Salmon Management Plan.**

There are many issues on the Copper River, but the glaring area of concern is the decline in the Copper River sockeye salmon returns. The total return has gone from over 3 million fish to just over 1 million fish a year. The commercial fishery has shouldered the entire burden for the conservation of this resource. The commercial fishery has been closed for up to 3 weeks, with no reduction in the time, area and harvest of the upriver fisheries. In the past, the board has stated on numerous occasions that all fisheries must share in the burden of conservation. That is why I **strongly support Proposal 19**.

Concurrently as the returns have declined, the upriver fisheries have expanded. This is most evident in the use of boats and dip-nets in the Glennallen Subdistrict. Traditionally the subsistence fishery exclusively used fish-wheels. Not only has the fishery expanded to the use of boats, many of those boats are commercial operators with guides. **I strongly support the intent of all the Proposals 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17** that all in one way or another attempt to slow or control this expanding fishery.

I do not believe the sockeye returns on the Copper River will rebound soon, the upriver fisheries must share in the burden of conservation.

February 16, 20

Thomas E. Caine
3504 NW 191st Circle
Ridgefield, WA 98642
Tel No.: 360-887-4269

Alaska Department of Fish & Game
Board of Fisheries (and any other interested party)
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Re: Prince William Sound Fishery Proposals; Comments on

Dear Board Members,

This letter is being written in order to submit on-time comments on Sport and Commercial Fishing Proposals 38, 39, and 40 for the Prince William Sound / Cordova Area for the upcoming Board of Fisheries meeting later this year. I am a nonresident sport fisherman who, along with my wife, have enjoyed the beauty and public resources of the Cordova area for 12 years. The purpose of this letter is to express my opinions, and enter suggestions relative to the aforementioned Proposals, and to express appreciation for the opportunity to do so.

Proposal 38

I am in opposition to Proposal 38. Speaking for myself, and I suspect many others, losing the opportunity to catch-and-release coho, especially if/when the bag limit is reduced to a single fish, will ultimately result in the loss of many sport fishers to the area. Reservations for accommodations and travel must be made well in advance to fish the coho runs in the Cordova area. If, after making these reservations, the catch and release sport fishery were to be prohibited, I would likely cancel any prearranged trips to the area and thereby suffer the loss of accommodation deposits and encounter airlines change fees. Such cancellations would also impact revenue to the hospitality industry (accommodations, rental cars, rental boats, gas, groceries, restaurants, etc.) in Cordova.

Instead of prohibiting catch-and-release as suggested by Proposal 38, I believe the proper implementation of certain gear restrictions and fishing methods can minimize catch-and-release mortality to an acceptable level. Such restriction and methods include:

- Restriction of bait (as proposed)
- Use of barbless hooks
- Bring a hooked fish in quickly to prevent exhaustion
- Keep the fish in the water at all times to prevent scale loss and mucus coat abrasion
- Support a fish facing upstream into current until fully recovered
- Do not hold fish by the gill plates
- Minimize all handling of fish

Also, during existing commercial coho openers in the salt below the fresh water system in the Cordova area, virtually all salmon are prevented from entering the Eyak and related tributaries. This has a dramatic impact on sport fishing, especially with "extended" openers. So, when the coho run is good, sport fishing is greatly impacted by the commercial fishing; and now when the runs are low, Proposal 38 could eliminate sport fishing altogether.

Therefore, I respectfully request that the catch-and-release restriction recommended by F for this public resource not be adopted.

Proposal 39

I am in opposition to Proposal 39. Due to natural changes in river courses, the statement issued by Cordova District Fishermen United in their Proposal 39 is no longer completely factual. Until the last few years, there was a good fishing area below the bridge on Ibeck Creek. But the Scott River, which had normally put heavy silt in the Ibeck on its east side just above the bridge only during high flow periods, now discharges silt into the Ibeck even during normal and low water conditions. This makes the water below the bridge all but unfishable. If Proposal 39 is accepted, the only feasible fishing area that would remain would be from the bridge to a quarter mile above the bridge. Such a limitation would result in undesirable and unacceptable congestion of fishers in a very condensed space. This would especially occur during periods right after high flows when the waters of the Ibeck are among the first to clear and most other waters remain silty.

For many people, fishing the Ibeck is much more than just "meat fishing". The opportunity to be immersed in a quality fishing experience is possible on the Ibeck by hiking away from the usual crowded surroundings near the bridge. Since this is no longer possible downstream from the Ibeck bridge, it can only be achieved on the three mile stretch above the bridge.

I therefore respectfully request that Proposal 39 be denied.

Proposal 40

I am in opposition to Proposal 40 as stated. Unlike the other waters in the Cordova area which run heavy with silt during high flows, the 18-Mile system remains clear. Shutting down the fishery in this System would virtually eliminate sport salmon fishing opportunities in the area during heavy flows for days or weeks until streamflows subside and clear in other waters.

As stated in Proposal 40, the issue that the Copper River/Prince William Sound Fish and Game Advisory Committee would like the Board to address is the "lack of spawning coho salmon" in the 18-Mile System. I respectfully request that before accepting the Fish and Game Advisory Committee's Proposal 40 to close the 18-Mile System to sport fishing, that the Board consider other ideas that could accomplish the same objective without such a significant impact to the sport fishery.
May I suggest that an alternative proposal to achieve this end would be to adjust the commercial fishery in the salt water below Alaganik slough to increase adult escapement to these waters.

I therefore respectfully request that Proposal 40 be denied.

Thank you for the opportunity to provide comments to the fishery proposals for the Prince William Sound / Cordova Area.

Sincerely,

Thomas E. Caine

Thomas E. Caine

Submitted By
Thomas James
Submitted On
11/14/2021 6:00:02 PM
Affiliation
PWS Setnet

Phone
907 3991826
Email
colleen.james@gmail.com
Address
40732 Waterman Rd
Homer, Alaska 99603

I oppose proposal 42. It is unfair, the system that we have been using has worked well for the 27 years that I have fished in this fishery. This proposal will add to the existing problems and will certainly cause a great deal of division if adopted.

Submitted By
Thomas Llanos
Submitted On
11/14/2021 4:18:03 PM
Affiliation

Phone
907-227-9120
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thomasllanos@hotmail.com
Address
7441 Nathan Drive
Anchorage, Alaska 99518

Dear Fisheries Board, My name is Thomas Llanos. I live in Anchorage Alaska and have in the past relied on subsistence fisheries out of the copper river. I have used the charters to be dropped off and picked up. I have just walked to sites. I have used a boat owned by my son to fish. Restrictions proposed would limit my ability to feed my family. Although last dipnetting season, due to covid-19 restricted me to participate i feel any proposal put forth by the board would be a terrible choice for the freedoms of this state. I hope the federal oversightwould weight in in regards to the proposed limits in regards to the access to food to feed not only alaskan natives but thier families as well. As you know there are alaskan native families with non-alaskan natives who need the salmon as well. If you could Look towards a conservative balance between all industries. If the fisheries state biologist needs sample for copper river. Many alaskans would step up to provide that insight to understanding our copper river fisheries. Respectfully, Thomas Llanos

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live in Valdez and am a 3rd generation commercial fisherman. My Uncle was one of the founders of the VFDA Valdez Hatchery and my Grandfather helped start the hatchery system PWSAC in the rest of PWS. Fishing is everything to our livelihood and community. As arguably one of the most sustainable hatchery programs in the world, it would be remiss to penalize or reduce the production of such a successful program. And extremely detrimental to the people who rely on it.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Thomas Lopez
Fv.conspiracy@gmail.com
(910) 547-8280

From: Thomas Lopez
To: DFG, BOF Comments (DFG sponsored)
Subject: BOF COMMENT PROP 56/57
Date: Thursday, October 15, 2020 9:43:02 AM

Meeting: Working Meeting on 10/15/20
Name: Thomas M Lopez ll
Fishery: Seine permit and fishery participant for 11 seasons, 3rd generation seiner.
Email**: fv.conspiracy@gmail.com**

Re: Proposal 56
Gear stacking is a good solution for addressing the excess fishing capacity within the Prince William Sound (PWS), however for the purpose I do not believe this proposals would have the correct results.

Adding 25 fathoms of gear for a stacked permit is a good medium proposal that most of the fishery would support. I do not however support the depth increase aspect.

This would be too much of an advantage over a single permit holder. It would end by making us more efficient catchers and therefore making the management issues even worse.

Re: Proposal 57
Prop 57 I believe is the correct middle. The 25 fathoms of extra gear is not too much of an advantage to create more management issues. 25 fathoms of extra length is a good moderate proposal that addresses the issues of excess fishing capacity in the PWS. While also not being too much of an advantage to make it necessary to compete. I do not see any downside to the proposal as it carries benefit for all of the permit holders without making operations "above others".

Thank you,

Thomas M Lopez ll

.....

Submitted By
Thomas Nelson
Submitted On
11/5/2021 2:05:41 PM
Affiliation

Member of the Board of Fisheries,

I have been a lifelong Alaska resident and participant in Area E fisheries, as well as a permit holder for 30 years. I would like to comment on several proposals for this upcoming meeting and will try to group them by topic.

Proposals 49-55 relating to hatchery production, management and operations. I OPPOSE any action on these proposals. The Board of fish does not have authority over hatchery operations and should not consider any of these proposals. Any consideration to hatchery management plans would fall under ADFG's authority. Furthermore the justification for action in these proposals makes claims that there is no evidence to support. Just because hatchery pink salmon stray does not mean they are harming wildstocks. All salmon stray, and pink salmon will stray at a much higher rate because they are a short lifecycle species. They do not have multiple year classes to fill in catostrphic events in steams. They accomplish this by straying, at a relatively high rate in some years, to continue the success of the species. The statement in the Proposal "until straying ceases" is ridiculous and completely counter to the laws of nature. If hatcheries are supposedly harming wild stocks, why are PWS pink salmon wildstocks at all time record levels? The perception that hatchery fish are different from wildstocks is just that a perception. Donor stock came from local streams and without reading an otolith mark you would not be able to tell a hatchery produced fish from a wild fish. There is also some speculation regarding food competetion but again this is just a perception. The reality is hatchery salmon are a minority compared to wild salmon and salmon are a small minority compared to all the other juvenile fish in the ocean. There are billions of outmigrating salmon, but in the Gulf alone there are quadrillions of pollock each spring and thats just one species. Juvenile salmon will face far more competeion from other extremely prolithic species, and there are many, than other salmon. Thats the trouble with all these designer studies looking at relationships between salmon species and food abundance, it makes the assumptin that salmon are the only fish in the ocean. These proposals are based in activism, speculation and theory not on any actual scientific evidence. Using very narrow scoped, specifically designed studies to produce particular outcomes to be passed on as fact.

In regard to allocation, specifically proposal 43, I would be OPPOSED to changes in the allocation policy. Its a very complicated scenario with fisheries and market conditions varying from year to year and I feel the current policy does a good job trying to mantain parody. It has worked pretty well over the last 15 years and i see no reason to change something thats working.

Proposal 60 dealing with coordinates for closed waters i SUPPORT this proposal with the exception of F, Beartrap Bay, this bay already has coordinates in regulation and I see no need to change the closed area considering there is a white sign marker currently in place at the coordinates in the current book.

Proposal's 56-57 concerning permit stacking. I would SUPPORT this approach to reducing the size of the fleet in PWS. Another version of a buyback, the current number of permits is to high.

Thank You Thomas Nelson Homer, AK

Submitted By
Thomas Upah
Submitted On
9/5/2021 5:02:50 PM
Affiliation

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Address
8621 Solar dr
Anchorage, Alaska 99507

There comes a time when the health of the ecosystems become more urgent then financial gain. Commerical fishing of all salmon is continually decreasing salmon numbers. It is true that banning all salmon fishing for at least one season maybe longer would devastate an industry and cause difficulties. If Commerical fishing of salmon is allowed to continue the salmon may not be able to recover. Certainly any people losing income or jobs will most likely recover. In my mind the choice is simple but unpopular. Thanks for listening

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live in Girdwood and commercial, subsistence, and sport fish. Additionally, I am a processor and have twenty family members directly involved in the fisheries industry. I am also involved through extensive community involvement.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence, and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Tim Cabana
timcabana@yahoo.com
(907) 783-3297

Submitted By
Tobias gunzinger
Submitted On
11/15/2021 7:41:06 PM
Affiliation

I would like to object to proposal 9 , eliminating the use of boats in the Glennallen sub district.

For the past 2 years my family has made a trip to Chitna to Dip net on the copper river. We rely on the ability to responsibly catch salmon under a subsistence permit. If this proposal would pass it would greatly decrease the number of fish we count on through the year.

After reading into the proposal I find that the annual harvest from subsistence is significantly lower than both commercial and personal use fishing. In my opinion I would think it would be much more beneficial if the limit was reduced for commercial, and recreational instead of limiting personal use boats on the river. We have only lived in Alaska a few years and for sure one of the best benifits to living here is the ability to have subsistence opportunities and I hope they will remain for many more years into the future.

I appreciate your time and consideration into this matter.

Tobias Gunzinger

Submitted By
Todd Lemay
Submitted On
11/7/2021 9:26:58 AM
Affiliation
Resident

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Address
pob 58722
Fairbank, Alaska 99711

Poposal 6-Oppose

Proposal 7-Strongly oppose

Proposal 8-Oppose

Proposal 9-Oppose

Proposal 10-Strongly oppose

Proposal 11- Strongly oppose

Proposal 12- Strongly oppose

Proposal 13-Strongly oppose

Proposal 14-Strongly oppose

Proposal 15-Strongly oppose

Proposal 16 - Strongly oppose

Proposal 17-Strongly Oppose

Proposal 18- Strongly Oppose

Proposal 19-Strongly Oppose

Proposal 20-Strongly Oppose

Proposal 21-Support

Proposal 22-Support

Submitted By
Tom Zarrilli
Submitted On
11/9/2021 6:56:23 AM
Affiliation

Proposition 6- Oppose. In addition to Miles Lake sonar there are survey fish wheels located at Baird Canyon and Canyon Creek where fish are caught, counted, studied and tagged. From the catches of marked and unmarked fish at these sites the number of fish making way upstream can be calculated. Both Chinook and Sockeye salmon are sometimes fitted with radio telemetry units so that their progress and catch rate can be calculated. These resources provide a lot of data. Does the fisheries biologist need any more data or would this just be an unnecessary burden on fisher persons? Also of note would be the fact that internet or phone reporting wound not be possible by people using AT&T cell service. AT&T has 44.8 percent of the market(according to statistica website) and 0 coverage in the Chitina area. Proposition 7-People use guide and transport services because it is more economical than boat ownership. Proposition 8- Oppose. Proposition 9- Oppose. Proposition 10- This requires clarification before anyone could comment. Oppose. Proposition 11- Oppose Proposition 12- Oppose. Since there are limited areas to safely and productively drift a solution my be to designate areas to drift exclusively. Proposition 13- fishing to close for comfort is discriminatory. A boat operator certainly has it in his best interest not to have contact a fish wheel. Oppose. Proposition 14- Monofilament nets used do not "gill" chinooks. In my experience unkeepable Chinooks can be rolled out of mono nets quickly and effectively especially if not pulled abourd the boat bit kept over the side. If teeth do get tangled they quickly rip through the netting. Oppose Proposition 15- See above. Oppose Proposition 16- Not using available navigation aids is Ludacris. As a USCG master Captain and mariner who started out using paper charts I am impressed with the technology of the new gps/fathometer units. They make boating easier and safer for everyone. That said, as someone who has spent a lot of time dipnetting on the Copper I have never found the sonar/fish finder to be of any use targeting salmon. Oppose Proposition 17- Oppose Proposition 18- Support. During higher flows and crowded fishing times this would be advantageous. Proposition 19- Oppose. Why not let residents utilize the resource rather than a commercial venture exploiting it to sell overseas. Proposition 20- Understanding that this is a food source for many and counted upon, I see so much overtaking of what some people can process or use. Support. Proposition 21- Support.

Submitted By
Tony Murray
Submitted On
11/14/2021 4:13:13 PM
Affiliation

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Duluth, Minnesota 55811

Stronly Oppose #5

As a yearly vistor to the Copper center area I've seen seen the negative affects when sport fishing is closed for king salmon. I understand that there are times that warrant that decison. When the season is "open" for sportfishing alaska fish and games regulations are STRICKLY inforced by all guiding services. During past "open" seasons there is no shortage of king salmon. There are a ton of fishi in the river. By changing this rule to increase the number of salmon needed to be counted to allow sport fishing to continue will only hurt the businesses and citizens of this area while not making an impact to the salmon fisher. With only 1 king being taken by sport fisherman per year it doesn't seem justiflable to think of sport fishing as a "risk" to king salmon population in the area. Please keep the current escapment goal of 21,000-31,000 fish

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

We have processing plants in Cordova and Seward, and my participation in the salmon fisheries of the Prince William Sound region is through processing. I work for OBI Seafoods. Prince William Sound fisheries are very important to the success of OBI and the communities we support. We are a major supporter of Prince William Sound communities including Cordova, Seward and Homer.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Tony Ross
tony.ross@obiseafoods.com
(206) 286-2569

Submitted By
Tracey Nuzzi
Submitted On
11/14/2021 11:10:59 AM
Affiliation

Dear BOF,

I am a commercial and subsistence fish and game user in Cordova, AK. My family supports itself through both. Thank you for consideration of my opinion on the following proposals:

Proposal 5 Oppose

Proposal 6 Support

Proposal 7 Support

Proposal 9 Support

Proposal 10 Support

Proposal 18 Oppose

Proposal 19 Support

Proposal 20 Support

Proposal 21 Oppose

Proposal 22 Oppose

Proposal 41 Support

Proposal 44 Support

Proposal 45 Oppose

Proposal 46 Support

Proposal 47 Oppose

Proposal 48 Oppose

Proposal 49 Oppose

Proposal 50 Oppose

Proposal 51 Oppose

Proposal 52 Oppose

Proposal 53 Oppose

Proposal 54 Oppose

Proposal 55 Oppose

Proposal 58 Oppose

Comments on each proposal:

Proposal 5 – I oppose this proposal after reading the department's comments. In the department's comments, they say "they department recommends an SEG range of 21,000 – 31,000 king salmon in 2020 that better defines the range that would maximize long-term returns". I think maximizing the long-term returns is the goal and trust the department in enumerating escapement numbers.

Proposal 6 – I support this proposal; as the use of technology and the updates the State has made to its reporting p help determine in-season run strength and run specific escapement issues on the Copper River. For example, PWS sockeye hatchery has not made its brood stock goal in 5 years, which will start to impact all fisheries this next year. PWSAC and managers need as many tools as possible to maintain abundance. This is a great start.

Proposal 7 – I support this proposal; as I do support the no fee policy when it comes to subsistence harvest and not commercializing our Alaskan subsistence fisheries.

Proposal 9 – 10 – I support these proposals, as I do see the trend of commercializing our subsistence and PU fisheries through contracting boats as guides. As boat access trends increase, it only increases the pressure of an already fully allocated fishery.

Proposal 18 – I oppose this proposal. After reading the department's comments that to approve this proposal, it would make enforcement more difficult, nor likely to alleviate boat congestion. The PU fishery is already fully allocated and not requiring more area.

Proposal 19 – I support this proposal; as the burden of conservation is meant to be felt by all users. The last few years are a prime examples that when sockeye runs are low, the commercial users take the major share of the burden.

Proposal 20 – I support this proposal in the author's attempt to maintain similarity between the other PU fisheries in the State and help spread the fish out amongst more PU fishers.

Proposal 21 – I oppose this proposal; as my vague memory was about early season sockeye runs getting upriver before the start of the fishery, along with king salmon passage.

Proposal 22 – I oppose this proposal for the same reasons the BOF determined C&T Findings previously.

Proposal 41 – I support this repeal; as it follows a repeal the BOF made last cycle regarding closure of upriver fisheries after the commercial fleet was closed for 10 days. The argument used for that repeal is similar to the one used for this proposal. Managers have the authority to shut down the inside fishery but not necessary to be in regulation before we even determine run strength.

Proposal 44 – I support this proposal; as it seems most likely its intended purpose. If the gillnet or seine fleet go above their allocation, and hit their "trigger", they loose a fishery. It has an impact to adjust the allocation balance. The setnet fleet trigger has been interpreted as just fishing the first parts of each bi-weekly opener, limit of 36 hours. The Main Bay red fishery is a build-up fishery so this interpretation doesn't necessarily accomplish the goal of rebalancing.

Proposal 45 – I oppose this proposal; as it reallocates the Main Bay red run to the setnet fleet. The Main Bay fishery is a build-up fishery with most of the harvest being caught within the first 6 hours. By eliminating shoreline access to the gillnet fleet, you will reallocate much of that run to the setnet fleet and get further from allocation numbers.

Proposal 46 – I support this proposal; as the author is accurate that it will greatly assist in chum harvest, especially in years with warm surface water. The gear length limit could remain a tool that the department could use if the Coghill red returns are in concern; but if not, the fleet and managers would benefit from deeper gear to determine chum run strength sooner.

Proposal 47 – I oppose this proposal; as it only focuses on one district and one gear group. The quantity of VFDA pink salmon harvest in the Coghill district by gillnets is quite minimal to impact of the total run.

Proposal 48 – I oppose this proposal; as it only

focuses on one district and one gear group. Both the seine and gillnet fleets harvest species destined for other districts, some years more than others, with management attempting to minimize as best with providing most time and area.

Proposals 49 – 53 – I strongly oppose these proposals. They would greatly reduce and limit hatchery production, disrupt further economic stability in Prince William Sound and its communities and have a large impact to sport and subsistence users too.

Proposals 54 – 55 – I strongly oppose these proposals. Production changes occur slowly, over many years of planning, and the annual BOF hatchery meeting in March is a more appropriate place to review and form Alaska's vision of hatchery production and its place in the global world of aquaculture.

Proposal 58 – I oppose this proposal; simply because of the magnitude of potential red harvest of the seine fleet with extended area and no other fishing opportunities at the time. I sympathize with the seine fleet with these restrictions but the nature of both chum remote release programs is simply a small return, not designed to provide for the activity and effort that shows up. Both AFK chum fishery and Port Chalmers chum fishery gets heavily restricted, even if the gillnet fleet has the Port Chalmers fishery, because of its location and the way the fish enter the Sound. The red run return is a small run compared to the large pink runs, and the seine fleet are so efficient that three days in front of that entry, can take a large chunk of the run.

Thank you for your consideration,

Tracey Nuzzi

11/14/2021

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I participate in the salmon fisheries of the Prince William Sound region through processing.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez,

Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Traci Lacktorin
Traci.lacktorin@obiseafoods.com
(206) 586-6514

November 15, 2021

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

Via http://www.adfg.alaska.gov/index.cfm?adfg=process.comments and dfg.bof.comments@alaska.gov

RE: Prince William Sound and Upper Copper and Susitna River Sport; Proposals 32 and 33.

Dear Board of Fisheries,

On behalf of Trout Unlimited (TU) and its more than 20,000 Alaska supporters, I am writing to encourage the Board of Fisheries to reject proposals 32 and 33 to the Prince William Sound and Upper Copper and Susitna Rivers sport fishing regulations, 5 AAC 52.023. Current regulations require all rainbow trout and steelhead caught in the Gulkana River to be released while allowing anglers to retain arctic grayling and various species of salmon, subject to reasonable restrictions on time, place and manner of catch. The current regulations have proven effective in maintaining the health of the Gulkana River rainbow trout population while providing quality and sustainable sportfishing opportunity to Alaska anglers.

The Gulkana River is a popular sportfishing destination and, for anglers from the interior, is one of the most accessible and highest quality fisheries for wild rainbow trout. According to the Alaska Department of Fish and Game (ADFG) report, *Seasonal Distribution and Migration of Rainbow Trout in the Gulkana River, 2010-2012*,[1] the Gulkana River hosts approximately half of all annual angler days in the Upper Copper River and Upper Susitna River area. A major draw to the Gulkana River for many anglers is its abundant wild rainbow trout.

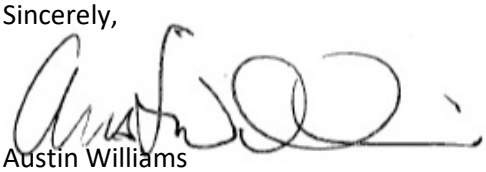
While anglers can sustainably retain and eat grayling and salmon under existing regulations, wild rainbow trout populations are vulnerable to overharvest even when harvest occurs at relatively low levels. In its *Fishery Management Report for the Recreational Fisheries of the Upper Copper/Upper Susitna River Management Area, 2016*, the ADFG urges conservative regulations and cautions that "the area's widely distributed stocks of wild rainbow and steelhead trout display generally low production with little ability to sustain harvest."[2] Proposals 32 and 33 depart from the current cautious approach without offering any scientific or background data in support.

To the extent proposals 32 or 33 are aimed at bolstering existing salmon hatchery programs, there's simply no evidence to suggest rainbow trout are causing the perceived problem or that the proposals, if enacted, would alleviate the perceived problem.

[1] https://www.adfg.alaska.gov/fedaidpdfs/FDS15-01.pdf.
[2] https://www.adfg.alaska.gov/FedAidPDFs/FMR17-45.pdf.

An abundant and healthy rainbow trout population is a major draw for anglers to the Gulkana River, which has additional benefits that ripple through the local economy. For those fishing the Gulkana River for sport, there may be no better quarry than rainbow trout. For those fishing the Gulkana River for food, fresh salmon or grayling over the campfire offer more attractive and sustainable alternatives. For these reasons, TU opposes proposals 32 and 33, and encourages of the Board of Fisheries to keep the existing rainbow trout regulations in place on the Gulkana River.

Sincerely,



Austin Williams
Alaska Director of Law and Policy
Austin.williams@tu.org

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live on Prince of Wales Island, and I participate in the subsistence and sport salmon fisheries of the Prince William Sound region. I am the assistant manager at the Klawock River Hatchery in Klawock Alaska. I have friends and family that rely on Hatchery fish from PWSAC and CIAA for subsistence uses.

I am writing in regards to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

Troy Liske
tliske@ssraa.org
(907) 755-2231

Submitted By
Tyee Lohse
Submitted On
11/15/2021 10:16:23 PM
Affiliation

Proposal # 6

I support this proposal and believe the BOF should adopt it. I think it is important as a unseasoned management tool, I believe with the current situation of the Copper River salmon stocks we need to use all the tools that are available.

Submitted By
Tyee Lohse
Submitted On
11/15/2021 10:23:59 PM
Affiliation

Proposal #10

I support this proposal and believe the Bof should pass it. I don't like to see the commercialization of the subsistence fishery that is taking place by allowing boats and boat charters for dipping salmon.

Submitted By
Tyee Lohse
Submitted On
11/15/2021 10:29:42 PM
Affiliation

Proposal #16

I support this proposal and believe the Bof should pass it. As has been stated it is much harder and far more damaging to release a King salmon from a gillnet style dipnet. The mortality rates are unacceptable.

United States Department of the Interior

NATIONAL PARK SERVICE

Wrangell-St. Elias National Park & Preserve
Mile 106.8 Richardson Hwy. P.O. Box 439
Copper Center, AK 99573-0439
907 822 5234 Fax 907 822 3281
http://www.nps.gov/wrst

IN REPLY REFER TO:

1.A.2

NOV 15 2021

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

Dear Members of the Board:

I am writing to comment on a recommendation submitted to the Alaska Board of Fisheries (board) by the Alaska Department of Fish and Game (ADF&G, or department) and on regulatory proposals for the Prince William Sound (PWS) Management Area that are to be considered by the board during its Nov-Dec 2021 meeting in Cordova. I am commenting on these because of their implications for salmon populations (stocks) that spawn in Copper River tributaries that drain portions of Wrangell-St. Elias National Park and Preserve (WRST). Consistent with the National Park Service (NPS) mission and associated management policies, the objective of my comments is to ensure the conservation of these stocks as significant natural resources that represent a vital source of energy and marine-derived nutrients to park ecosystems and are central to the traditions and subsistence practices of many rural residents who are affiliated with the park.

ADF&G recommendation that the board change the Copper River king salmon sustainable escapement goal (SEG) from 24,000 fish to 21,000-31,000 fish

I oppose this recommendation for the following reasons.

The department's review and recommendations for PWS escapement goals were outlined in an escapement goal memo dated 3/16/2020 and in a subsequent report (Joy et al. 2021b; see Attachment 1 – References Cited) published in January 2021. In these documents, the department recommended that the SEG for Copper River king salmon be changed from a lower bound SEG of 24,000 fish to an SEG range of 21,000-31,000 fish, thereby effectively reducing the lower bound SEG from 24,000 to 21,000 fish. The analyses that were performed in support of the escapement goal review and recommendation were described in a separate peer-reviewed report (Joy et al. 2021a) authored by members of the department's escapement goal review committee (committee).

The department's recommendation to change the escapement goal was based on results of models that used various data sets for Copper River king salmon for the period 1980-2018 (Joy et al. 2021a). The

committee performed two separate analyses, one based on a model that included data for the full 1980-2018 period and one based on a model that included only a subset of data for the more recent 1999-2018 period. In developing the escapement goal recommendation, a key metric of interest was the number of spawners that provide maximum sustained yield (SMSY). The full 1980-2018 model, including data for years prior to 1999, estimated SMSY to be 22,844 (lower than the current lower bound SEG of 24,000 fish), whereas the 1999-2018 model estimated SMSY to be 26,951 (higher than the current lower bound SEG). The committee considered results of both models in developing its escapement goal recommendation, but the recommendation to reduce the lower bound SEG from 24,000 fish to 21,000 fish is likely to have been strongly influenced by results of the full 1980-2018 model that estimated SMSY to be lower than the current lower bound SEG of 24,000 fish.

The choice to consider the full 1980-2018 model in addition to the 1999-2018 model was made despite the committee's observation that the 1999-2018 analysis was based on higher quality data relative to years preceding 1999, and that the 1999-2018 period coincided with an apparent decline in productivity that may be attributable to a declining trend in body size. This declining trend in size has been documented in several recent research publications that are based in part on data collected by the department (e.g., Lewis et al. 2015, Ohlberger et al. 2018, Oke et al. 2020). Relative to years prior to 1999, the 1999-2018 period also encompasses well-documented occurrences of marine heat-wave conditions that have increased in frequency, magnitude, and duration during the past two decades (Fig. 1). Such conditions are expected to intensify as climate warming increases in the decades ahead (Di Lorenzo and Mantua 2016, Joh and Di Lorenzo 2017), with uncertain implications for salmon populations that spawn in Copper River tributaries.

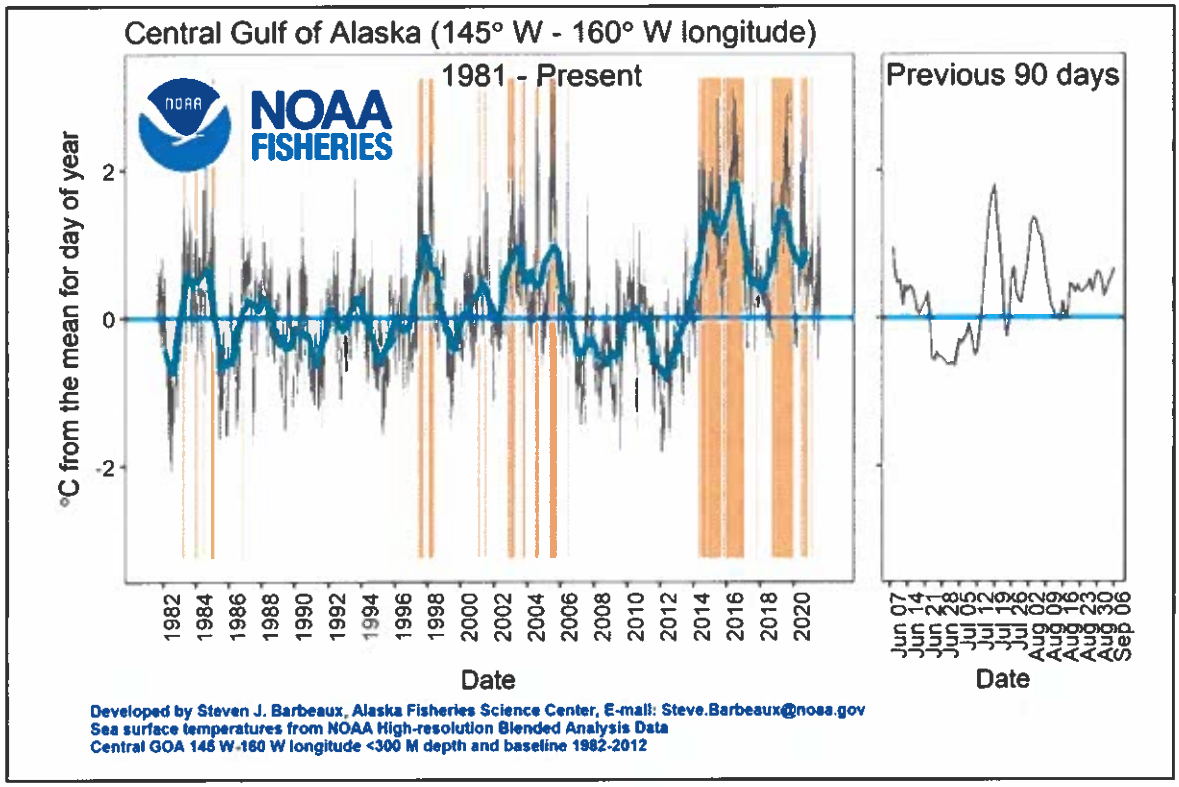


Figure 1. Sea surface temperature anomaly and marine heatwave conditions in the central Gulf of Alaska as of 9/6/2021. The graph shows satellite-derived sea surface temperature anomaly data for the central Gulf of Alaska. Here the central Gulf of Alaska is defined as the area between 145°W and 160°W longitude in waters less than 300 meters depth. The figure on the left shows the daily sea surface temperature anomaly (dark line), the 360-day rolling average (blue line), and time periods classified as having marine heatwave

conditions (orange shading) for January 1, 1981 through the present. The figure on the right shows the same for the previous 90 days only (*Credit: NOAA Fisheries, https://www.fisheries.noaa.gov/feature-story/central-gulf-alaska-marine-heatwave-watch, accessed 11/13/2021.*)

In considering the department's recommendation to lower the SEG for Copper River king salmon, I ask that the board consider the following facts.

1. Data collected by the department and analyzed in several recent publications indicate a declining trend in the size of Copper River king salmon, consistent with documented trends in other king salmon populations and other salmon species returning to spawn in Alaska.
2. Declining trends in salmon body size may be attributable in part to the increasing occurrence and severity of marine heatwaves that are projected to intensify in the future.
3. Declines in size are expected to result in declines in productivity, and analyses performed by the department's escapement goal review committee indicate a decline in productivity of Copper River king salmon beginning in the early 2000s.
4. The department's recommendation to lower the SEG was based in part on the full 1980-2018 model that used lower quality data from years prior to the recent decline in productivity and changes in marine conditions, may have overestimated the productivity of a king salmon population that is known to be declining in size, and therefore may have underestimated the degree to which the risk of overfishing would increase by reducing the lower bound SEG.
5. Reducing the lower bound SEG may pose greatest risks to small stocks, with potential adverse implications for overall population diversity of the Copper River king salmon population, encompassing genetic diversity as well as diversity of key life history traits (e.g., run timing) that may differ among individual spawning stocks. Recent research has found that population diversity within the Bristol Bay sockeye salmon stock complex reduces the interannual variability in overall run strength and harvest amounts due to the "portfolio effect" induced by multiple individual stocks characterized by different life history traits (Schindler et al. 2010).
6. Escapement of Copper River king salmon in 2020 was the 6th lowest since 2001 and did not meet the escapement goal. It appears that the goal may not have been met again in 2021. If this is the case, it will have been the 4th time in the past 10 years, with the lowest run since 2001 having occurred in 2016 when spawning escapement was estimated to be 12,485 salmon.

I oppose the department's recommendation to reduce the lower bound SEG for Copper River king salmon. To do so would be inconsistent with principles of precautionary conservation management, given the facts listed above, and may increase the risk of overfishing to a greater degree than is estimated by the full 1980-2018 model, especially for small stocks that are important for overall population diversity.

My opposition to the department's recommendation is consistent with concerns expressed by local stakeholders. In a 5/13/2021 letter to the department referencing PWS Proposal 5 (Establish an optimal escapement goal for Copper River king salmon), the Southcentral Alaska Subsistence Regional Advisory Council expressed support for maintaining the current lower bound SEG of 24,000 fish for Copper River king salmon due to the frequent occurrence of low escapement during the last 10 years. Likewise, in a 10/19/2021 letter to the board, the Wrangell-St. Elias National Park Subsistence Resource Commission expressed opposition to the department's recommendation to reduce the lower bound SEG for Copper River king salmon for the same reason.

<u>Proposal 5</u>: Establish an optimal escapement goal for Copper River king salmon

I support this proposal, with modification to maintain the current lower bound SEG of 24,000 fish rather than changing to an SEG range of 24,000 – 40,000 fish as proposed. For justification, see my previous comments on the department's recommended change in the Copper River king salmon SEG.

I support this proposal with further modification that the board address the long-standing lack of consistency between the king salmon escapement goals in the Copper River District Salmon Management Plan (CR District Plan, 5 AAC 24.360) and the Copper River King Salmon Management Plan (CR King Salmon Plan, 5 AAC 24.361). This inconsistency results in stakeholder uncertainty and concern about how the department is managing the commercial and subsistence fisheries in the Copper River District in coordination with Upper Copper River District fisheries to ensure conservation of Copper River salmon. The CR District Plan specifically directs the department to manage the Copper River District commercial salmon fishery to achieve an inriver goal of salmon, as measured at the sonar counter near Miles Lake. The spawning escapement component of the goal consists of the lower end of the sockeye salmon sustainable escapement goal (360,000 salmon) and ***17,500 other salmon***, which would include king salmon and a relatively small number of coho salmon returning before sonar operations cease in late July. The CR King Salmon Plan specifically directs the department to manage the Copper River commercial and all other fisheries to achieve a sustainable escapement goal of ***24,000 or more king salmon***. The different king salmon escapement goals in these two plans appear to reflect an error in regulation.

To correct this apparent error, the spawning escapement goal of 17,500 other salmon in the CR District Plan should be revised to match *or exceed* (to account for early returning coho in addition to king salmon) the 24,000-king salmon goal of the related CR King Salmon Plan. I ask that the board generate a regulatory proposal to revise the relevant section of the CR District Plan, 5 AAC 24.360 (b) to read as follows, with revised text **underlined in bold**, and regulatory text to be deleted fully capitalized and enclosed in brackets:

> (b) The department shall manage the Copper River District commercial salmon fishery to achieve an inriver goal of salmon, as measured at the sonar counter near Miles Lake, based on the total of the following categories:
>
> Spawning escapement
>
> - lower end of sockeye salmon sustainable escapement goal
> - **24,000 king salmon** [17,500 OTHER SALMON]
> - **500 other salmon** *(or the department's best estimate for the number of coho included in sonar counts)*

This apparent regulatory error has implications that warrant its resolution through a board-generated proposal during this cycle. From correspondence with department staff, I understand that the CR King Salmon Plan is the primary guidance for king salmon management, and that the department does not consider the king salmon escapement goals in the two plans to be contradictory. But the apparent inconsistency strongly suggests to stakeholders that the total inriver goal of salmon, announced annually, is at least 6,500 too low. The continued apparent inconsistency between the two plans will result in ongoing uncertainty and concern among stakeholders regarding the department's management of Copper River sockeye and king salmon.

Resolving the apparent regulatory inconsistency will clarify for all stakeholders the department's management intent relative to king salmon escapement. This transparency in management intent also may help to address long-standing concerns expressed by local subsistence users in communities nearest the headwaters of the Copper River. Past research (Merritt and Roberson 1986, Wade et al. 2009) and Alaska Native traditional knowledge indicate that sockeye salmon stocks associated with headwater tributaries are among the earliest stocks to enter the river, with run timing similar to king salmon. Since at least 2004 (e.g., board proposal 53 in 2005) and as recently as 2021, subsistence users in headwater communities have repeatedly urged fisheries managers to allow more early run salmon to escape upstream of the

Gulkana River to increase subsistence harvest opportunities. Conservation measures that aim to ensure adequate king salmon escapement have the potential to benefit early migrating sockeye salmon stocks and local subsistence users who depend on these headwater stocks for meeting their subsistence needs.

Proposal 21: Amend the opening date of the Chitina Subdistrict personal use fishery from June 7 to June 1

I oppose this proposal for the following reasons.

Adoption of this proposal would allow fishing that would impact early migrating stocks of sockeye and king salmon, with the potential to disproportionately and adversely affect weak stocks that are important for the overall population diversity and portfolio composition of Copper River sockeye and king salmon populations. Previous studies of migratory timing of Copper River sockeye (Merritt and Roberson 1986, Wade et al. 2009) and king salmon (Gilk-Baumer et al. 2017) confirm that upper Copper River stocks typically arrive earlier than most other stocks, meaning that these stocks would be at greatest risk if the opening date of the personal use fishery was changed from June 7 to June 1. As indicated previously in my comments regarding king salmon escapement goals, since at least 2004 (e.g., board proposal 53 in 2005), subsistence users in headwater communities have repeatedly urged fisheries managers to allow more early run salmon to escape upstream of the Gulkana River to increase subsistence harvest opportunities. These urgings were expressed again in 2021, both to me and to ADF&G fisheries managers, due to increasing concerns about not having adequate harvest opportunities to ensure that subsistence needs are being met. These concerns are associated with subsistence users' perceptions that excessive harvest of sockeye and king salmon stocks destined for headwater spawning grounds occurs during early season openings of the Copper River District commercial fishery and the Upper Copper River Chitina Subdistrict personal use fishery. The delayed start of personal use fishing times in the Chitina Subdistrict is an effective means of allowing some of the earliest salmon stocks to distribute to the upper reaches without being harvested downstream, and I ask that the opening date not be changed to allow earlier fishing.

In relation to this proposal and concerns expressed by upriver subsistence users, it is important to note that WRST and ADF&G were successful in obtaining NPS funding for a 3-year research project that will use in-season genetic analyses to determine the stock composition of sockeye salmon harvested in the commercial fishery and upriver personal use and subsistence fisheries. The project "Apply Genetic Analysis of Copper River Sockeye Salmon Stocks to Inform In-Season Decision Making" will be implemented by ADF&G (Gene Conservation Laboratory, Division of Commercial Fisheries, and Division of Sport Fish) in 2022-2024. In addition to providing data for consideration by fisheries managers in-season during years 2022-2024, we anticipate that preliminary results of the 3-year study will be available for consideration by the board during the next cycle for the PWS Management Area in 2024.

Proposal 41: Repeal mandatory closed waters from the Copper River King Salmon Management Plan

I oppose this proposal for the following reasons.

The mandatory closed waters during the early season commercial fishery serve as a conservation measure to assist in managing to achieve the escapement goal for Copper River king salmon. The stocks being harvested in the area closer to the mouth of the Copper River are very likely to consist of a high composition of Copper River bound stocks. This proposal would eliminate the existing regulatory provision that assists in managing to ensure the sustainability of these stocks.

As indicated previously in my comments regarding king salmon escapement goals, escapement of Copper River king salmon in 2020 was the 6th lowest since 2001 and did not meet the escapement goal. It appears that the goal may not have been met again in 2021. If this is the case, it will have been the 4th time in the past 10 years, with the lowest run since 2001 having occurred in 2016 when spawning escapement was estimated to be 12,485 salmon. Given this context, increasing public expression of concerns for Copper River king salmon, and the fact that many of these stocks are bound for spawning locations in WRST, I do not believe it to be prudent to repeal the mandatory closed waters.

Thank you for your consideration of these comments and your support for the long-term conservation of salmon in the Copper River.

Sincerely,

Ben Bobowski, Ph.D.
Superintendent

Attachment

cc: Jeff Mow, Acting Regional Director, NPS Region 11 (Alaska)
Grant Hilderbrand, Acting Associate Regional Director for Resources, NPS Region 11 (Alaska)
Sue Detwiler, Assistant Regional Director – Subsistence, U.S. Fish and Wildlife Service – Alaska Region

Attachment 1 – References Cited

Di Lorenzo, E., and N. Mantua. 2016. Multi-year persistence of the 2014/15 North Pacific marine heatwave. *Nature Climate Change* 6:1042-1048. DOI:10.1038/nclimate3082.

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UNITED FISHERMEN OF ALASKA

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E-mail: ufa@ufa-fish.org **Website:** www.ufa-fish.org

November 10, 2021

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

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

Re: Prince William Sound Salmon Hatchery Management - **Proposals 49-55**

Commissioner Vincent-Lang, Madam Chairman and Board Members:

United Fishermen of Alaska is the oldest and largest trade organization for commercial fishermen in the State of Alaska. UFA has engaged with the Alaska Department of Fish and Game (ADF&G) as well as the State Legislature and the Alaska Board of Fisheries (Board) regarding Alaska's hatchery programs for more than 40 years. UFA believes that Alaska's hatchery program is an example for the world of conservative and strategic integration of enhanced stocks with wild stocks.

Alaska's hatchery program isn't perfect and ongoing studies regarding straying and genetic robustness will help ADF&G and the regional planning teams to make necessary changes if and when they are required. However, the best time for these type of hatchery programmatic discussions is at the Board's hatchery committee meeting and during the Board's statewide meeting based on completed studies and known scientific information. For example, it's relatively easy to document salmon straying. However, it's much more complex to determine the amount of naturally occurring straying of wild stocks and whether or not straying of enhanced stocks adversely impacts wild stocks. In other words, the fact that straying occurs doesn't mean that, biologically speaking, straying is a problem to be solved.

Proposals 49-53 before the Board at your Prince William Sound finfish meeting are attempts to completely reshape Alaska's hatchery program and the decisions that make the program a success. The basis for these proposals is speculative: the proposer suggests that mixing of wild stocks and enhances stocks "is not reasonable segregation and is against the law".

Moreover, a host of terms suggested are not defined. For example, what does "reasonable segregation of returning hatchery-reared salmon from naturally occurring stocks" mean? The issues raised and the changes proposed in proposals 49-53 are not unique to Prince William Sound. Adoption of one or more of these proposals is likely to impact all of Alaska's hatcheries. The Board should reject proposals 49-53.

Proposals 54 and 55 are asking for direct reductions to Prince William Sound's hatchery production. The basis for these proposals is a thesis that increased competition for food in the Gulf of Alaska is reducing western Alaska chum salmon and impacting Gulf of Alaska wild salmon. Our limited knowledge of ocean food abundance, variation (seasonal, annual or cyclical), direct migratory interfacing of salmon stocks as well as a host of other variables that are impacting salmon returns to Western Alaska would suggest that this thesis is also speculative and should not be the basis for hatchery regulation if the Board is relying on the best AVAILABLE scientific information. Moreover, wild pink salmon runs in the Gulf of Alaska are healthy with virtually all systems meeting escapement goals. The Board should reject proposals 54 and 55.

Thank you for your consideration of UFA's comments regarding changes to the salmon hatchery management plans. UFA looks forward to further discussion regarding the State of Alaska's hatchery program during the Board's hatchery committee meeting in March 2022.

Regards,

Matt Alward
President

UNITED FISHERMEN OF ALASKA

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November 10, 2021

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

Re: UFA Opposes Board of Fisheries Proposals 49, 50, 51, 52, 53, 54, and 55

Dear Chair Carlson-Van Dort and Board of Fisheries members,

United Fishermen of Alaska (UFA) is the statewide commercial fishing trade association, representing 36 commercial fishing organizations participating in fisheries throughout the state and the federal fisheries off Alaska's coast. We have participated in the Board of Fisheries (BOF) process for over four decades and oppose proposals 49, 50, 51, 52, 53, 54, and 55.

UFA's Board of Directors met on October 27 and 28, 2020 prior to changes to the Board's meeting schedule and our members expressed multiple reasons why they were unanimously opposed to proposals 49, 50, 51, 52, 53, 54, and 55. These reasons include, but were not limited to the following:

- The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. It is a well-run stable program designed to increase salmon abundance and enhance fisheries while protecting wild stocks.
- Fisheries enhancement projects are carefully reviewed by the Department of Fish and Game, and through an established public process, before they are permitted and during all phases of operation. They are not permitted or allowed to continue if they have a significant negative effect on natural production.
- The Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association hatcheries are important infrastructure in the region and benefit the communities, economy, and harvesters of all user groups. Their hatchery returns reduce harvest pressure on returning wild runs particularly in years of low abundance.
- The Alaska Hatchery Research Project is a multiyear study investigating wild/hatchery fish interactions in Prince William Sound and Southeast Alaska. When the results of this study are concluded, peer reviewed, and assessed, the Department of Fish and Game will have the tools necessary to better define wild/hatchery fish

interactions; and, in cooperation with the hatchery operators, will reasonably address any concerns that are scientifically supported.

- The guideline straying rate of hatchery stocks recommended in proposals 50, 51, 52, and 53 does not correlate to presumed straying rates that occur naturally nor does it consider annual variations in straying rates due to environmental conditions.
- If approved, Proposals 49, 50, 51, 52, 53, 54, and 55 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. Any reduction in opportunity would impact all the stakeholders, communities, and user groups significantly and would be especially hard hitting during years of low returns.

In closing, UFA respectfully requests the Board of Fisheries reject proposals 49, 50, 51, 52, 53, 54, and 55. Alaska's hatcheries have operated with significant Department of Fish and Game oversight and public participation for over 40 years. Production has been stable for over 30 years without negative impacts to other fisheries and there is no need to interrupt this successful program.

Regards,

Matt Alward
President

Cc: Commissioner Vincent-Lang, ADF&G

UNITED FISHERMEN OF AL

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November 10, 2021

Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526
Submitted VIA: Alaska Board of Fisheries Comment Website

RE: Opposition Proposal 121

Dear Alaska Board of Fisheries Members,

United Fishermen of Alaska (UFA) is the statewide commercial fishing trade association, representing 37 commercial fishing organizations participating in fisheries throughout the state and the federal fisheries off Alaska's coast.

United Fishermen of Alaska is opposed to proposal 121 which seeks to close waters to commercial drift gillnet fishing in and around Coffman Cove. Several UFA members participate in this fishery and can attest to there being no safety issues documented in this area. In fact, this proposal served as the first, and only, communication fishermen who fish the area have ever heard or received about a perceived safety issue. As well, there has not been an increase in the number of gillnetters fishing around Coffman Cove as stated in the proposal[1].

If safety is a concern for the sport fishermen and sport guides who traverse this area, communication and education can easily solve the issue. The commercial fishermen and sport fishermen share the same small harbor and see each other often as they walk the dock. Several commercial fishermen have offered to help educate sport boat operators about the visual cues and setting patterns of gillnets, and how to navigate appropriately and safely when they are actively fishing. There have been some sport boat operators who have been receptive to this open dialogue.

When a person gets behind the wheel of a motorized vehicle they are also taking on the responsibility of operating that vehicle safely. That would include other people's property. This proposal punishes the victims of unsafe vehicle operation. It is akin to killing all the deer along the highway because they are a safety hazard to driving at high rates of speed.

Currently, commercial fishermen in the area give sport fishermen a wide-berth and do not set their nets in favored sport fishing spots, staying clear of the Triplet Islands northeast of the mouth of Coffman Cove. Commercial fishermen already make accommodations and concessions to the local sport fleet, and they are always open to communicate and share the resource and region.

[1] Personal communication with ADF&G

We ask the Board of Fish to take no action on this proposal and allow the local sport and commercial fishermen to work together to solve any concerns the authors of this proposal may have.

Regards,

Matt Alward
President

UNITED SOUTHEAST ALASKA GILLNETTERS

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USAG'S MAIN PURPOSE IS TO PROTECT, SERVE AND ENHANCE SOUTHEAST ALASKA'S COMMERCIAL GILLNET FISHERY

November 11, 2021

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

Dear Chair Carlson-Van Dort and Board of Fisheries members,

United Southeast Alaska Gillnetters is a non-profit organization dedicated to preserving, enhancing, and promoting the gillnet salmon fishery in southeast Alaska. We have approximately 175 fleet members and a board of nine permit holders. They represent each major community in the region, northern and southern at-large seats, and one seat for the "down south" guys. We are active in any venue we identify that may impact our fishery. This includes, but is not limited to, the Alaska legislature, the Federal delegation, the Alaska Board of Fisheries, Marine Stewardship Council, Forest Service, and NOAA. We have members actively participating on the SSRAA, NRSAA, and DIPAC boards, as well as at the Joint Regional Planning Team. We are members of United Fishermen of Alaska, and work within that group to promote and defend the fishing industry.

- United Southeast Alaska Gillnetters **oppose** proposals 49, 50, 51, 52, 53, 54, and 55.

- These proposals would either reduce or limit current hatchery production if implemented. Such action would cause economic hardship to fishermen, processors, coastal communities, and the state of Alaska.

- There is a careful public process, guided by the Department of Fish and Game, for permitting of enhancement projects or increases in production. Impacts of straying and wild stock interception are standard considerations in the process.

- There is currently an ongoing study regarding hatchery and wild stock interactions. When this study is completed and peer reviewed, the department of Fish and Game will have a better understanding of the impacts and/or benefits of hatchery production on wild stocks, and be able to make scientifically sound adjustments.

Enhanced salmon production is and has been relatively stable for a very long time. Fis
businesses, communities, processors, personal use/sportfish, and the state of Alaska
seen the benefits and economic returns of this important part of the fishing industry. Please reject proposals 49, 50, 51, 52, 53, 54, and 55.

Sincerely,

Max Worhatch, Executive Director, USAG

VALDEZ FISHERIES DEVELOPMENT ASSOCIATION, INC.
SOLOMON GULCH HATCHERY

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November 11, 2021

Alaska Dept. of Fish & Game
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RE: Proposal 49 – 5AAC24.370 Prince William Sound Management and Management and Salmon Enhancement Allocation Plan
RE: Proposal 50 – 5 AAC 24.365 Armin F. Koernig Salmon Hatchery Management Plan
RE: Proposal 51 – 5 AAC 24.363 Cannery Creek Salmon Hatchery Management Plan
RE: Proposal 52 – 5 AAC 24.366 Solomon Gulch Salmon Hatchery Management Plan
RE: Proposal 53 – 5 AAC 24.368 Wally Noerenberg (Ester Island) Hatchery Management Plan
RE: Proposal 54 – 5 AAC 24.370 Prince William Sound Management and Salmon Enhancement Allocation Plan
RE: Proposal 55 - 5 AAC 40.1XX. New Section

Chairman Carlson-Van Dort, Members of the Alaska Board of Fisheries,

Thank you for the opportunity to submit comments on proposals submitted to the Alaska Board of Fisheries (BOF) at the Prince William Sound/Upper Copper/Upper Susitna Rivers Finfish & Shellfish meeting. The Valdez Fisheries Development Assoc., Inc. (VFDA) provides the following comments **in opposition to Proposals 49-55**.

Proposals 49-55 are interrelated and similar in that the proposals intend to reduce hatchery production through board action by amending Prince William Sound (PWS) hatchery regulation governing hatchery management plans. VFDA's comments are therefore interrelated and applicable to each of these proposals.

VFDA opposes these proposals because if adopted, they will have significant negative effects on PWS hatcheries, and will have similar impacts to all other Alaska salmon fishery enhancement programs. Cascading effects of these regulatory amendments, which force hatchery operators to comply with arbitrary and yet to be defined straying limits, then impose a penalty of egg take reduction, immediately or over time, will significantly change Alaska's fisheries and create unnecessary economic harm.

If adopted, the Boards actions will negatively impact the sport, commercial, subsistence, and personal use fisheries, and place hatchery operators at risk for financial hardship during times of low abundance. The state of Alaska has invested heavily in its hatchery programs through its fisheries enhancement loan programs and has a vested interest in the long-term viability of PWS hatcheries and the benefits they provide to commercial fisheries and coastal communities. Reductions in hatchery capacity are likely to have a negative effect on fisheries enhancement lending and debt service ability.

Alaska's Constitution, Article VIII, Section 4 requires the state to manage its fisheries resources on a sustained yield principal. The Alaska Dept. of Fish and Game (ADF&G) conforms to this constitutional requirement through the application of various fisheries regulations, such as 5 AAC 39.222 - Policy for the Management of Sustainable Salmon Fisheries, and department policy on genetics and pathology. Further public input to plan production and address stakeholder questions are addressed annually through the approval of hatchery Annual Management Plans and adoption of regional Comprehensive Salmon Plans (CSP). These public processes provide tools to annually review and approve hatchery operations and consider effects of enhancement programs in each area**.** To codify questions of complex

hatchery/wild interactions into regulation as proposed will be costly, unnecessarily problematic and particularly burdensome to hatchery operators and ADF&G.

Proposal 49 – 5 AAC 24.370 Prince William Sound Management and Salmon Enhancement Allocation Plan

5 AAC 24.370 was adopted to equitably distribute returns of enhanced salmon produced by the Prince William Sound Aquaculture Corporation (PWSAC). This allocation plan, with a long history of intense board and stakeholder engagement, was adopted with a singular purpose:

"to provide a fair and reasonable allocation of the harvest of enhanced salmon among the drift gillnet, seine, and set gillnet commercial fisheries, and to reduce conflicts between these user groups ".

The PWS allocation plan is not intended to, nor should it be used, to address questions of complex hatchery/wild salmon interactions. There is little benefit to significantly changing a plan that exists to determine allocation of enhanced stocks among common property harvesters. Proposed amendments will likely increase the difficulty of implementing 5 AAC 24.370 by introducing arbitrary requirements, and yet to be defined, in season management directives. Any changes to the plan should be aligned with the intent of the plan and initiated by those that have a vested interest in the allocation of the fishery. Proposal 49 brings no benefit to the management for sustained yield of wild salmon, nor does it reflect the intent of this regulation. **For these reasons, VFDA opposes Proposal 49.**

Proposal 50, 51, 52, & 53

Proposals 50-53 prescribe the same amendments requested in Proposal 49, Article 3, Section 5 AAC 24.370 and applies it to the Cannery Creek Salmon Hatchery (.363), Armin F. Koernig Hatchery (.365), Solomon Gulch Hatchery (.366), and the Wally Noerenberg Hatchery (.368) management plans. These regulations establish Terminal and Special Harvest Area boundaries, dates for emergency openings, and authorizations for the harvest of hatchery fish for cost recovery and brood stock purposes. VFDA strongly disagrees that Section 5 AAC 24.363-368, is an applicable regulation to address the authors concerns and would offer the following objections and observations to these proposed amendments to Proposals 49-53:

5 AAC 24.
(e)(1) fish stocks in the state shall be managed consistent with sustained yield of wild fish stocks[3]

The management for sustained yield of Alaska's resources, including salmon, is guaranteed by the state's constitution. This directive is the first responsibility of ADF&G and they do an outstanding job meeting this constitutional mandate through in season management actions to maximize the harvest of both enhanced and wild stocks to meet adopted wild stock escapement goals. The effectiveness of ADF&G's management is evidenced by the regular achievement of escapement within the PWS management unit and the lack of salmon stocks of concern. Amending 5 AAC 24 to include this directive is redundant, being met currently by the department as required by state statute, and should be rejected.

(2) hatchery programs shall be operated without adversely affecting natural stocks of fish in the state[4]

A 40-year history of hatchery programs in PWS has shown that hatcheries are operated without adversely affecting the productivity of natural stocks. Wild pink salmon have remained genetically discreet and frequently produce robust returns of adult salmon, as evidenced by record natural returns of pink salmon over the last decade (2021-23.4MM[1], 2019-18.3MM, 2017-22.4MM, 2015-31.6MM, 2013-22.2MM[2]). This directive is currently met by the department through its oversight of PWS salmon hatchery programs and ongoing monitoring and research. This amendment to 5AAC.24 is unnecessary and should be rejected.

[1] Preliminary Pink Salmon Contributions for Area E Commercial Fisheries from Thermally Marked Otolith Samples 2021 - Preliminary
[2] 2020 PWS Area Finfish Management Report, Appendix D4 – Botz, Russell, Morella, Haught

(3) hatchery programs shall be operated under a policy of management which allows reasonable segregation of returning hatchery-reared salmon from naturally occurring stocks;[5]

PWS hatchery permits were given considerable scrutiny during initial review and author ensure hatchery sites and stock selection achieve a *reasonable* segregation of hatchery fish from natural stocks. This continues through ADF&G and Regional Planning Team review processes, which are open for public comment, when considering Permit Alteration Requests, Fish Transfer Permits, and Remote Release Site approval. However, it is recognized and accepted that a complete separation is not possible and that some level of interaction and straying will always occur, particularly with pink salmon. PWS hatcheries are currently operating under a policy of management that follows this guidance as best as can be achieved, given the variances of nature. Amending 5 AAC 24 to include this directive without providing scientific justification for what is reasonable is unwarranted and should be rejected.

(4) Hatchery program remote release sites shall be located in an area where a reasonable segregation from natural stocks occurs [6]

Like the approval of hatchery sites and stock selection, remote release sites are selected to provide reasonable segregation. Even though this same rigorous process of department review is observed, a complete segregation will never be achieved. PWS hatcheries are currently operated under a policy of management that achieves this as best as possible, given the variances of nature. As previously stated, amending 5 AAC 24 to include this directive without providing specification for what is reasonable is unwarranted and should be rejected.

(5) hatchery operations and specifications must be consistent with the comprehensive regional salmon plan approved under AS 16.10.375 [7]

Alaska Statute 16.10.375 in its entirety simply states:

The commissioner shall designate regions of the state for the purpose of salmon production and have developed and amend as necessary a comprehensive salmon plan for each region, including provisions for both public and private nonprofit hatchery systems. Subject to plan approval by the commissioner, comprehensive salmon plans shall be developed by regional planning teams consisting of department personnel and representatives of the appropriate qualified regional associations formed under AS 16.10.380 .

PWS hatchery operations and specifications are consistent with AS 16.10.375. Amending 5AAC.24 to require this directive serves no purpose and should be rejected.

(6) the department and board shall define and validate straying proportions "based" on the best available scientific information" to sustain productivity, without adversely affecting, or jeopardizing sustained yield of wild naturally occurring salmon[8] [9]

In 2012, ADF&G and a diverse group of fisheries scientists, began the Alaska Hatchery Research Project (AHRP). This multiyear study will attempt to quantify exactly what the above amendment seeks to require. That study is expected to conclude in 2024 and will likely be completed at a cost of $18MM. Until the results of this exhaustive study on the effects of hatchery pink and chum salmon in PWS and Southeast Alaska is concluded, and the results of the study are peer reviewed and assessed, ADF&G will not have the tools to define what this amendment would require today. Amending 5 AAC 24 to include this directive, which is currently being conducted by a very lengthy and costly research project, is not necessary and should be rejected.

(7) validated proportions of benign hatchery salmon straying are defined as chinook xxx%; sockeye xxx%; coho xxx%; chum xxx%, pink xxx%

The AHRP has yet to define what proportions of benign hatchery salmon straying might be acceptable or provide a definitive answer to the question of whether hatchery straying is significantly affecting natural stocks. Defensible scientific analysis remains to be concluded in

order to propose sustainability guidelines for hatchery production. Therefore, it is not appropriate for the board or the department to impose an arbitrary straying percentage at this time, n appropriate to adopt a regulation that is open ended or subject to interpretation. For these this amendment to 5AAC.24 should be rejected.

(8) Until the department and board have a policy of management that justifies and validates this reasonable segregation, of straying proportions without jeopardizing wild stock sustained yield,[1] the CSP and genetics policy 2% rule will be adhered to within wild naturally occurring streams[10]

The "guideline" of 2% straying of hatchery stocks referenced in the PWS CSP has not been formally adopted, nor is it found in the ADF&G genetics policy. To the contrary, the state's genetic policy provides rationale why a single rate of straying is not appropriate given a multitude of factors. This rigid trigger for straying does not correlate to presumed rates found in nature for pink salmon, and so there is no consensus for its adoption as a management tool. The CSP states:

"*The PWS/CR RPT recognizes that the present estimate of the acceptable threshold of hatchery-salmon straying **[2%]** is not well supported. Further research is needed to improve our confidence in the estimate of acceptable hatchery-salmon straying rates.*"[3]

This amendment does not define which metrics will be used or how they would be considered. Will it be by stream, district, or region? Stray rate or stray proportion? What considerations are given for effects of fishery management on straying. Insisting on a 2% threshold for hatchery pink salmon is not scientifically supported, and is not a realistic expectation to be placed on PWS hatchery operators; it certainly should not be used as a yardstick to measure hatchery production given continued persistent wild stock structure after decades of enhancement. For this reason, this amendment to 5AAC.24 should be rejected.

(9) when proportions of hatchery salmon straying exceed validated percentages, jeopardizing sustained yield of wild fish stock, production shall be ramped down the following spring, from each Remote Release Site, hatchery or THA source incrementally until adverse effects cease[11],[12]

The adoption of amendments (7)(8) and (9) create an unmanageable and unreasonably burdensome requirement on PWS hatcheries, and is designed to begin the complete elimination of hatchery pink and chum salmon production in PWS. Amendment 7 requires ADF&G to conduct costly and extensive research to determine a benign rate of hatchery straying for each species. Until that is completed, Amendment 8 requires the department adhere to a 2% hatchery stray rate that is not supported based on scientific evidence of inherent pink and chum stray rates, particularly for pink salmon. This amendment requires that if straying exceeds this arbitrary threshold, hatchery production will be ramped down incrementally until it eventually reaches a level that is unsustainable to the hatchery associations. It should be noted that the author provides no fiscal note, or consideration the effects of the proposed amendments will have on hatchery management plans, aquaculture association's ability to repay fisheries enhancement loans, or lost harvest opportunities to sport, commercial, subsistence, and personal use. It also would impose a board directive on the department to conduct research which will be extensive both in time and cost. For these reasons, this amendment and all others proposed to 5AAC.24 should be rejected. **VFDA strongly opposes Proposals 50, 51, 52, & 53.**

Proposal 52 - 5AAC 24.366 Solomon Gulch Salmon Hatchery Management Plan

VFDA provides these specific comments on Proposal 52 to clarify the operations and management of VFDA's Solomon Gulch Hatchery (SGH). The SGH was permitted in Port Valdez because it does achieve *reasonable* segregation of returning hatchery salmon from surrounding natural stocks. The donor stock propagated by VFDA is of early season Eastern District run timing, providing a 10-20 day period before district wild stocks arrive. In addition, the hatchery's location provides the ability to conduct

[3] PWS-Copper River Salmon Management Plan Phase III - 1994

terminal harvest fisheries away from natural stocks, further separating the effects of the commercial fishery on Valdez Arm wild salmon. By design, the SGH complies with the states genetics pol achieve segregation by spatial and temporal isolation of hatchery stocks. VFDA conducts no re releases of pink salmon in PWS, however VFDA does release approximately 20,000 Coho sal annually at the Native Village of Tatitlek for subsistence harvests by village residents.

The author's statement that, *"the SGH salmon is one of the prime offenders creating unacceptable inter-regional hatchery straying from PWS into LCI wild significant stocks"* is a mischaracterization of the magnitude of SGH marks that have been found in LCI streams. The author's claims that these fish are harmful, or massive in numbers, is unfounded. Of note, limited sample data was chosen to provide this unsupportable statement of SGH hatchery strays to LCI streams. The actual hatchery proportion of SGH marks in LCI streams made up only 0.5% in 2014, 3.0% in 2015, 1.4% in 2016 and 5.5% in 2017, based on data collected from this opportunistic sampling fieldwork.[4] Straying of SGH pink salmon within PWS has been determined to be low as well, primarily due to its early return timing and use of local brood sources close to SGH. ADFG sampling in 2012 found the average proportion of SGH strays in PWS streams to be approximately 2.3%.[5] Preliminary findings by the AHRP reported that the proportions of SGH otolith marks in PWS streams are low as well. **For the reasons stated above and here, VFDA strongly opposes Proposal 52 and others like it.**

Proposal 54 – 5 AAC 24.370 Prince William Sound Management and Salmon Enhancement Allocation Plan

Proposal 54 reduces the production of PWS enhanced chum salmon to a production level of 24% of year 2000 levels by direct board action. This proposal fails to provide good reason why this proposal should be linked to the allocation plan. The economic impacts of this arbitrary reduction to PWSAC chum production will have a significant impact on PWS harvesters and the Sound's coastal communities. It will have a disruptive effect on the allocation plan and severely disadvantage one gear group or the other. This proposal relies largely on an unsubstantiated claim of an agreement between the hatchery operators and a previous administration to reduce hatchery production. VFDA is not aware of any such agreement, nor does the refenced Joint Protocol on Salmon Enhancement #2002-FB-215 set forth any such directives for these reductions. **For these reasons, VFDA opposes Proposal 54.**

Proposal 55 - 5 AAC 40.1XX. New Section

Proposal 55 references hatchery pink salmon. However, the proposal could be interpreted to reduce all hatchery produced species state wide by 25% from year 2000 production levels; it will also result in production losses much higher than 25% for some programs. This proposal will require the immediate reduction of 97.5 million pink salmon eggs (36%) of current SGH production. This will result in the loss of 5.3 million adult pink salmon worth an estimated ex vessel value of $7.5MM annually to the PWS seine fleet, based on estimated average survivals and economic impact data. A reduction of 500,000 coho smolt (25%) will occur. The loss of sport fish opportunity to Southcentral/Interior fishermen is estimated to be 30,000 fish per year, creating far reaching impacts to businesses in Valdez and elsewhere. Millions in revenue will be lost to the seafood industry in first wholesale value, and lost tax revenue to the state and its municipalities. On a statewide level, these reductions will be far more devastating, including losses to the lodge and charter industries of coastal Alaska and the Copper River dip net fisheries, increasing pressure on natural stocks during times of low abundance. The statement of overproduction fails to recognize that PWS hatchery pink salmon production has remained stable from 1991-2015 and PWS hatchery pink salmon equates to approximately 7% of the total biomass of adult and juvenile pink salmon in the North Pacific using data provided by the North Pacific Anadromous Fish Commission. The vast majority are of natural origin. **For these reasons, VFDA opposes Proposal 55.**

Since the inception of private non-profit salmon hatchery programs, the state has relied on the application of robust scientific research to guide hatchery operations and permitting. The BOF has focused its regulatory responsibility on the allocation of enhanced resources and has never weighed into areas of

[4] Observations of Pink Salmon Hatchery Proportions in Selected LCI Escapements – Otis, Hollowell, Ford 2018
[5] Straying of Hatchery Salmon in Prince William Sound, Alaska – Brenner, Moffit, Grant 2012

hatchery permitting or production; the department has justifiably administrated these. This separation of jurisdiction has served Alaska well and we urge the BOF to observe historic practice when con requests from individuals for direct board action to limit or reduce hatchery production.

VFDA would like to thank the Board of Fisheries for the opportunity to provide comment and perspective on these proposals. We would respectfully request that the board reject Proposals 49-55 or any other request to amend hatchery production. Thank you for your consideration.

Sincerely,

Mike H. Wells
Executive Director

Submitted By
Wade Buscher
Submitted On
11/15/2021 8:58:34 PM
Affiliation

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Proposal 5) **Oppose**

Copper River King Salmon Management Plan;

In January of 2020, an ADF&G commitee made up of both divisions of Sportfish and Commercial Fisheries recommended an SEG for Copper River Chinook in the range of 21,000-31,000.

The proposal by the Kenai River Sportfishing Association to use an OEG instead of an SEG to increase the range of Chinook to 24,000-40,000 would unjustifiably limit opportunity for the commercial fishery, and may also drastically increase the sockeye escapement upriver to a point of overescapement.

Please allow the ADF&G to continue to manage the Copper River fishery in a biologically sensible manner, utilizing the best science available to determine the proper SEG, on behalf of ALL user groups.

Proposal 6) **Support**

Catch numbers in the commercial fishery are critical to in season management. Every fish is accounted for, and ADF&G utilizes these numbers in real time to either allow or restrict the commercial fishery. All data is good data, so if it helps to have all user groups record their catch in a timely manner, in real time, it would be beneficial to management to have these numbers when making regulatory decisions. I don't believe that submitting catch numbers on a daily basis would be a hardship for any user group.

Proposal 7; **Support**

Proposal 18; **Oppose**

Rules and regulations are neccessary to limit and manage resource over-utilization. Customary and Traditional use in the Copper River Dipnet Fishery was probably limited to the area specified in the regulations, and probably pertained mostly to a dipnet fishery. Larger and bigger dipnets, river skiffs, and charter operators, have allowed greater access and increased efficiency in the Copper River Dipnet Fishery. The authors of this proposal proclaim,

"This small increase in size of the Chitina Sub-district is unlikely to result in increased harvests, since the fishery is managed by emergency order to stay within the allocation contained in the management plan."

However, extending the CPUDF boundry would likely lead to more boats on the river, as well as set a precedent to extend the boundry again in the future as boating pressure increases. At some point there will need to be limitations placed on the number of boats inriver to prevent these "dangerous navigation hazards" from happening.

Proposal 19; **Support**

While subsistence users have the unique qualification of having priorty over other resource users (sport, PU, Commercial), in years of low salmon abundance, it makes sense that these lower priority user groups should share in the conservation effort so that subsistence and sustainability objectives are met.

Proposal 20; **Support**

Just as the commercial fishery is managed based on real time data, so to should the up river fisheries. Household limits in the PU fishery should be limited by abundance. If there is a large return of sockeye then limits should be liberal, and if low returns, then limits should be

more conservative. Managment has the tools to regulate the upriver fishery utilizing in season data. As climate chan variables affect salmon returns on the Copper, it is prudent to manage conservatively. The bag limits in the PU fishe conservatively, and increase as the abundance warrants.

Proposal 21; **Oppose**

Chinook numbers on the Copper River have seen a decline in recent years. Any opportunity for Chinook to make it to the spawning grounds should be of the highest priorty. The commercial fishery has seen restrictions in time and area to address this concern. (Boats are no longer able to fish inside the Barrier Islands where Chinook are known to be in the beginning of the season.) It would be counter intuitive to allow the PU fishery to commence earlier than usual, while these Chinook are in transit to their spawning grounds.

Submitted By
Wayne McClure
Submitted On
11/15/2021 11:39:09 PM
Affiliation

Proposal #9 Is a removal of a persons right to provide for there families soon there will be no rights to fish and maintain the natural resource... All because you have over controlling group of people saying it is being depleted of fish.... Please do not pass proposal 9... there are other ways to manage it.

November 14, 2021

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

Dear Members of the Board of Fisheries,

I am writing in regards to the upcoming Prince William Sound Board of Fisheries meeting taking place in Cordova, Alaska and wish to submit this public comment of support for Alaska's private non profit salmon hatchery program.

I live in Juneau and have been a researcher for more than 40 years in both biological and technological fields. I have over 20 years member-at-large of the board of directors of PWSAC and I am the Chair of the Fisheries Standards Committee (Conformance Criteria Committee) at the Alaska Responsible Fishery Management Program. I also am a Member of the Alaska Hatchery Research Project Science Panel.

I'm a retired emeritus professor at the University of Alaska. I have conducted research on hatchery-wild interactions and salmon conservation in PWS from the beginning of hatcheries in the 70s until the present. I've authored over 50 peer-reviewed research papers and 11 peer-reviewed perspective and review articles on these topics. Contrary to popular perception releases from PWS hatcheries have not markedly increased for several decades. Important research innovations that I have participated in and that have been supported by the hatchery system notably include the development of a mass marking technology, otolith thermal marking which enabled targeting harvesting of hatchery stocks to the benefit of wild stocks and which enabled direct study of straying, and the ongoing Alaska Hatchery Research Project which is providing remarkable information on stock composition, straying, and it's biological effects in PWS. Over the decades the PWS hatchery system has provided demonstrable important benefit to the salmon industry and the Alaska economy, particularly in years of low wild production. Despite whatever biological interaction that has occurred between hatchery-produced and wild salmon in PWS (ecological, straying, interbreeding) over 4 decades/20 pink salmon generations the productivity of wild populations remains apparently high.

As detailed in a series of econometric studies by the McDowell Group the PWS salmon fisheries are a significant contributor to Alaska's economy and therefore benefits my own community. As an Alaskan with a constitutional responsibility for salmon stocks I trust the regulation of hatcheries and of fisheries by ADFG and the RPT process to protect the productivity of salmon stocks in PWS. ADFG and the PWS RPT have demonstrated their ability to govern the scope and operation of hatcheries in PWS.

I am writing in regard to the Prince William Sound Board of Fisheries meeting with support for Alaska's hatchery program and the hatcheries of the region, Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA). Thank you for your consideration.

Alaska created the Fisheries Rehabilitation Enhancement Division (FRED) within the Department of Fish and Game in 1971. Later, in an effort to privatize salmon enhancement, the private nonprofit Hatchery Act of 1974 was created allowing for the application of hatchery permits by Alaskans. Prince William Sound Aquaculture Corporation (PWSAC) was founded in 1974 and Valdez Fisheries Development

Association (VFDA) was founded in 1980 – both as private nonprofit entities to benefit the Prince William Sound region, its fisheries, and user groups.

The Alaska hatchery program is designed to increase salmon abundance and enhance fisheries while protecting wild stocks. Fisheries enhancement projects are not permitted by the Department of Fish & Game if they are anticipated to have a significant negative effect on natural production. Our fisheries enhancement program is designed to supplement natural production, not replace or displace it. The Alaska salmon hatchery program, in place for over 40 years, is one of the most successful public-private partnership models in Alaska's history. The PWSAC and VFDA hatcheries are important infrastructure in the region and benefits the communities, economy, and harvesters.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association provide measurable economic impacts to the region by providing additional salmon for harvest by all user groups, reducing harvest pressure on returning wild runs in years of low abundance. These significant positive impacts are applied to the economies of coastal communities through the direct benefit of hatchery operations, increased landings, and raw fish taxes of salmon at local ports.

Each year, Prince William Sound (PWS) harvests of hatchery salmon generate approximately $69 million in ex-vessel value. Additionally, Prince William Sound hatcheries support 2,200 jobs, provide $100 million in labor income, and result in $315 million in annual output overall.

Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association together provide significant boosts to salmon fishing opportunity for all user groups throughout the region, especially during years of lower wild run returns. This opportunity is important to Cordova, Valdez, Whittier, Tatitlek, Chenega, and others. Any reduction in opportunity would impact the stakeholders, communities, and user groups significantly, but would be especially hard hitting during years of low returns.

If approved, Proposals 49 - 53 would reduce or limit hatchery production through direct action by the Alaska Board of Fisheries. These proposals would directly affect all hatchery programs in Alaska and have an immediate impact on sport, personal use, subsistence, and commercial harvests of hatchery fish statewide.

The concerns of proposals 54 and 55 were addressed by the Board of Fisheries through the submittal of an Emergency Petition and ACR's in 2018 to prevent the increase of 20 million pink salmon eggs for production in Prince William Sound. These actions were rejected by the Board of Fisheries because they did not meet the criteria for emergency action.

Thank you for your consideration. Please oppose Proposals 49 - 55 at the upcoming Board of Fisheries meeting in Cordova.

Sincerely,

William Smoker
wwsmoker@gmail.com
(907) 321-3602

Wrangell-St. Elias National Park
Subsistence Resource Commission

P.O. Box 439
Mile 106.8 Richardson Hwy.
Copper Center, AK 99573

October 27, 2020

Märit Carlson-Van Dort, Chair
Alaska Board of Fisheries
c/o ADF&G Boards Support Section
ATTN: Board of Game Comments
P.O. Box 115526
Juneau, AK 99811-5526

Subject: Comments on 2020-2021 Alaska Board of Fisheries Proposals for Prince William Sound Finfish and Shellfish

Dear Ms. Carlson-Van Dort:

The Wrangell-St. Elias National Park Subsistence Resource Commission (SRC) met by teleconference on October 5 and 6, 2020. The commission is a federal advisory committee that represents subsistence users of federal lands within Wrangell-St. Elias National Park and Preserve. At this meeting, the SRC reviewed the Alaska Board of Fisheries proposals being considered during 2020-2021 meeting cycle and would like to provide the following comments.

PROPOSAL 6: Require in-season reporting of subsistence, sport fish, and personal use harvest and effort
The Wrangell-St. Elias National Park Subsistence Resource Commission supported Proposal 6 with a vote of 6 support, 1 opposed, and 1 abstention. Requiring in-season reporting of subsistence, sport fish and personal use harvest and effort will provide information for better in-season management, especially in low run years. Managers will have information to inform potential restrictions or closures of the personal use or subsistence fisheries.

PROPOSAL 13: Prohibit dip netting from a boat within 75 feet of an operating fish wheel in the Glennallen Subdistrict
The Wrangell-St. Elias National Park Subsistence Resource Commission supported Proposal 13 with a vote of 5 in support and 2 opposed. The commission heard public testimony about an increasing number of boats on the river, and some boats are fishing directly in front of fish wheels. When they come close to the fish wheels, boats can create a wake that disturbs the fish wheels, resulting in dangerous conditions for the fish wheel operator. Prohibiting dip netting from a boat within 75 feet of an operating fish wheel would help to alleviate the problem.

PROPOSAL 14: Prohibit the use of gillnet mesh in dip nets
PROPOSAL 15: Prohibit the use of gillnet mesh in dip nets
The Wrangell-St. Elias National Park Subsistence Resource Commission opposed both Proposal 14 and Proposal 15 with a vote of 1 in support and 7 opposed. In the experience of SRC members who have commercial fished, net material doesn't make a difference in whether fish become entangled in a net. When one SRC member commercial fished one summer, for example, salmon were often gilled on an inelastic braided net. Net size or mesh size, in their experience, were bigger factors than the material. Another concern is a lack of availability of dip nets made from alternate materials. The person who supported the proposal cited testimony on both sides, with some saying the monofilament nets cause damage, and expressed concern about avoiding any potential negative impacts to the fisheries.

PROPOSAL 16: Prohibit the use of depth or fish finders on boats in the Upper Copper River District
The Wrangell-St. Elias National Park Subsistence Resource Commission supported Proposal 16 with a vote of 6 in favor and 2 opposed. When the Chitina personal use fishery is open, many people fishing in the Chitina area of the Glennallen Subdistrict don't get any fish. And the use of fish finders makes this worse.

PROPOSAL 18: Extend the lower boundary of the Chitina Subdistrict downstream ½ mile
The Wrangell-St. Elias National Park Subsistence Resource Commission unanimously opposed Proposal 18. There is plenty of room for people to fish, including the area upstream of Woods Canyon, but many boats are gathering where the river enters the canyon, trying to take advantage of the funneling of the canyon. Additionally, the proposed boundary extension could exacerbate the problem with upstream fishers not getting any fish in their wheels when the personal use fishery is open.

PROPOSAL 19: Reduce the maximum harvest level in the Chitina Subdistrict Personal Use Fishery when the Copper River commercial fishery harvest is 50% below the 10-year average on June 1
The Wrangell-St. Elias National Park Subsistence Resource Commission opposed Proposal 19 with a vote of 2 in support and 5 opposed.

Thank you for the opportunity to comment.

Sincerely,

Daniel E. Stevens
Chair

cc: NPS Alaska Regional Director
Superintendent, Wrangell-St. Elias National Park and Preserve