



February 19, 2022

Dear Board of Fish,

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

George Bennett

North Pole
99705



Submitted By
George Gundersen
Submitted On
3/11/2022 5:13:25 PM
Affiliation

Phone
9073861308

Email
gotoseaak@hotmail.com

Address
P.O. Box 51
Sand Point, Alaska 99661

I, George P Gundersen, would like to go on record opposing Proposal 282. I think it should not be on this agenda and it did not meet the criteria for an out-of cycle item. We haven't been able to fish the southeastern district mainland for at least six years which has not made an improvement in the Chignik area. Also the seine fleet moved out of Dologi in June which also showed no improvement in Chignik. I believe that Black Lake is the problem.



March 08, 2022

Dear Board of Fish,

ADF&G continuing to aim for the bottom of the Kenai late-run king OEG has not and will not work. ADF&G must start aiming for returns at the top of the OEG. Kenai kings are the most constrained salmon species in the river. The river (and adjacent Inlet) management needs to prioritize for the most constrained stock, regardless of how user groups are affected. Prop 283 continues to focus managers on the bottom of the OEG despite the risk to the river's most constrained stock. Proposals like this one will allow continued killing of kings despite weak returns, and proposals like this one will ultimately cause the extinction of Kenai kings.

A Sidebar: It is time for the BoF to reconsider the use of traps in Alaska. They would allow for maximum harvest of targeted species like sockeyes, while eliminating non-selective harvest of non-target species, like Kenai kings. Gillnets, regardless of mesh size, catch or damage far too many non-targeted fish like kings. Traps are superior from a conservation and management standpoint.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals, or when we clearly have continued weak king returns.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. And by the way, the bottom of the OEG doesn't seem to be producing enough returning fish to be viable. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened. ADF&G should be aiming for the TOP of the OEG, not the bottom like they have been. The bottom of the OEG doesn't seem to be improving the king return, and Prop 283 would make things even worse by killing more kings even when Kenai king returns are obviously in an extended period of low abundance.

Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "overescapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. I can't believe it was even put forward. Stay the course and protect the kings.

George Krumm

Estacada
97023



Good day, I'm a fourth generation Area M fisherman who is trying to make an honest living and it is getting harder and harder to accomplish this feat. We belong to a mixed stock marine fisheries that has given us the right to harvest salmon the same as other fisheries. This proposal 282 has turned into an allocation issue instead of fisheries management. Mixed stock fisheries are common in Alaska and should be protected by the Board. For example, according to WASASIP data, the sockeye fisheries in the Western and Perryville Districts in Chignik are themselves mixed-stock interception fisheries. WASSIP shows that they harvested sockeye that originated outside of Chignik. East of WASSIP and Bristol Bay sockeye made up a large portion of fish caught in these districts. The Board needs to manage fisheries on sound scientific data and not by political pressure.

Glenn Gardner



February 16, 2022

Dear Board of Fish,

I live in Eagle River Alaska. I have fish the Kenai since 1975 and while we may never see the glory days of 70 & 80 pound kings we owe it to our children and grandchildren to try to preserve this world class fishery. Additionally kings are a huge economic engine for the Kenai peninsula. Let's be realistic; com fish already get the absolute lion's share of this limited resource.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Glenn Peterson

Eagle River
99577



March 07, 2022

Dear Board of Fish,

I live near Ottawa Ontario Canada and winter in Hudson Florida. After 31 years in the Canadian Forces I retired into two subsequent jobs. Moving with the military gave me lots of opportunities in Canada and Europe to fish. I've fished three times in Alaska, both fresh and saltwater and always the Kenai in hope of the big one!

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn. I support this statement even when it impacts my expensive guided trip. The stock of large kings is unique and must be preserved.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG. I have been impressed with the Alaska fishery management in general. If one has the ability to do an actual count and limit the harvest accordingly, why use an estimate. There's too much margin for error. Err on the side of conservation.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened. YES; DITTO

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

I've seen the decline of sport salmon fishing in British Columbia since my first posting there in 1966. King salmon in particular now seem rare. The Kenai and the King salmon are a very special resource that I'd like to fish again.

Gordon Beech

Carleton Place
K7C 0B1



Gordon Scott
March 11, 2022

Box 847, Girdwood AK, 99587

907 244 7607

Comments for March 26 - April 2, 2022 Board of Fisheries Meeting

Dear Chairman Jensen and Fish Board Members

Here is a summary of my positions on various PWS Shrimp Proposals, with details following.

Proposal 237	SUPPORT	
Proposal 238	OPPOSE	
Proposal 239	OPPOSE.	suggest changing. (See below detail)
Proposal 240	SUPPORT	see note below
Proposal 241	SUPPORT	define shrimp
Proposal 242	SUPPORT	see note below
Proposal 243	SUPPORT	
Proposal 244	SUPPORT	see note below
Proposal 245	SUPPORT	see note below
Proposal 246	SUPPORT	see note below
Proposal 247	OPPOSE	.see note below
Proposal 248	OPPOSE	see note below
Proposal 249	SUPPORT	
Proposal 250	OPPOSE	see note below
Proposal 251	SUPPORT	
Proposal 252	OPPOSE	see note below

Discussion relating to PWS SHRIMP Proposals:

Proposal 239 OPPOSE.

Yet I suggest changing this so that no more than the legal amount of pots allowed to fish may be carried.

The ability to carry more gear than is allowed to be fished enables illicit fishing activity, as shrimp pot gear is not required to be tended and monitored. This is a very different scenario than the oft cited analogy that you are allowed to carry more than one fishing rod. The big difference is that that fishing rod must be attended.

Proposals 240, 242, and 246 SUPPORT

I suggest they need to be looked at together to find the best solution for all participants so that the Burden of conservation of the resource is shared equally. As it is now, the burden of conservation is mainly borne by the customers of the Commercial fishers.

It should be noted that there is currently a 10% burden of conservation that is already shared equally, as the Department uses the 90% confidence level of the TAH which is calculated by the surplus model. This is an excellent conservative element already in place. And there should not be a 40% penalty on top of that that is not equally shared.

All of the people of Alaska deserve access to this resource equally, as they are for other resources.



Proposals 244 and 245 SUPPORT

These are modeled on some provisions of the IFQ Halibut and Sablefish fisheries. These fisheries target catches are also determined annually, and this system has been working well for over 20 years.

These are proposed mainly because the current regulations in the non-commercial regulations do not allow the Department to manage the catches to the GHL. In fact those catches have been a roller coaster, with some very large percentages over GHL harvested recently, even in consecutive years since the last Board Cycle.

If these provisions are not put into place, then history has shown that this trend of significant over-harvest will repeat itself.

I welcome other ways to mandate that the Department manages this fishery within or near the GHL.

Proposal 247 OPPOSE

This does not allow for a slow paced and more valuable fresh marketing fishery. This would reduce the value of the current fishery. There is plenty of opportunity for anyone to participate in this open access fishery currently.

Proposal 248 and 250 OPPOSE

These would push the fisheries more into the egg bearing season, thereby harming the resource regeneration.

Proposal 252 OPPOSE

This will speed up the harvest, which will reduce the stability and value of market supply to Alaskan shrimp buyers

Thank you for the opportunity to comment, and your consideration of these positions.

Respectfully
Gordon Scott



February 16, 2022

Dear Board of Fish,

I live in Chugiak and have spent years making the drive down to the Kenai to go fishing. In recent years, however, my trips have become fewer and fewer. It is no longer worth the drive as the once incredible fishery has declined substantially even in the last 10 years.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Grant Gullicks
Chugiak
99567



March 11, 2022

Dear Board of Fish,

Save the Kings. I and other Canadian friends spend a lot of money every year to come and fish the night Kenai King Salmon. Truly best fishery when it is rolling that I know of. God Bless the Kenai and the Kings.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Grant Kuypers

Paradise Hill
S0M 2G0



February 15, 2022

Dear Board of Fish,

I have been on the Kenai peninsula since 1985. Lowering the escapement goals is just a bad idea. I have seen first hand the demise of our once great Kenai River King Salmon Fishery. Please do not change the goals. We should be increasing them if anything to help the fishery be maintained for future generations.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Greg Andersen

Kenai
99611



Submitted By
Greg Brush
Submitted On
2/14/2022 7:31:12 AM
Affiliation

The last Board of Fish meeting heard an overwhelming and clear cry for Kenai king conservation. The people spoke, loud and clear. This was fact based and data driven: we are losing our beloved wild kings! Anyone who lives here and has fished this river for decades can see it, feel it... and the data clearly supports that sickening gut feeling. To deny this is nothing short of disgusting. For this reason, many conservative changes were made, including a "big fish protection" under 34" rule for sport anglers and adopting an OEG range. Cut sport opportunities as well as commercial, across the board... anyone with a shred of conscious is in favor of less opportunity and more conservation. Its so important, now more than ever. No smoke n mirrors, no games; In layman terms- To aim for one "goal post" repeatedly is a recipe for disaster. We know this. Weve seen this. We are living this. Now, a Board generated proposal to allowmore commercial fishing in cook inlet when our projection is lower than ever, we havnt hit the bottom of the OEG (let alone the mid or top, where we should hit occasionally) is being considered. How sad. Please stand tall and strong against greed; be there for the resource; put sustainability first; break the cycle of neglect; represent our children; just vote NO against Ms Mitchels Board generated proposal, giving our kings a fighting chance!!! As for me, a cmmmercial fishing guide of 34 seasons on the Kenai? Youlle once again see me and mine in 18 inches of water flippin for reds this summer, instead of marjeting, selling and prostituting whats left of our genetically-unique Kenai kings.



February 22, 2022

Dear Board of Fish,

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Greg Davis
99515



February 15, 2022

Dear Board of Fish,

I was born in Anchorage and am 75 years old and we have a place in Poachers Cove. I have fished the river since my early 20"s when you could keep one King everyday. Now it's an anomaly if you catch one at all let alone able to keep it to eat. We need to do everything we can to preserve this run.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Greg Svendsen

Anchorage
99516



February 19, 2022

Dear Board of Fish,

I live in Anchorage am 75 years old and have been fishing the Kenai fiver my whole life. Why would you consider jeopardizing the world class King salmon run on the Kenai when a sport caught fish is worth 10X more to the economy than a commercial caught fish. It has been said that each one of those Kings are worth \$1000.00 to the economy in food, gas, motel, tackle, boats, motors, cabins, guides, etc. please save them. The average set netters is making \$7500.00 a year with a few making more so the statistics say. I learned this when I spent time time during governor Walkers tenor serving on a fact finding committee formed of commercial and sports fishermen. This does not make any sense economically. Thank you.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Greg Svendsen

Anchorage
99516



Submitted By
Greg Wallace
Submitted On
12/21/2020 12:46:28 PM
Affiliation

Phone
907 738 4058

Email
gwbonycreek@yahoo.com

Address
207 Mills St.
Sitka, Alaska 99835

My name is Greg Wallace. I am a Dungeness crab permit holder from Sitka.

I am submitting comments on proposal 214. I am asking for the language to include " in addition to the requirements specified in 5 AAC 32.050 a commercial Dungeness crab pot is either circular or square with vertical sides not exceeding 18 inches in height, a maximum outside diameter, length or width not exceeding 50 inches and a maximum volume not exceeding 35,348 cubic inches."

For points of discussion, the above stated maximum volume of 35,348 cubic inches is consistent with what is now the maximum created by the the largest legal round pot , a 18" high by 50 inch diameter pot.

I don't believe the use of square pots would be a burden on enforcement efforts, as the computation of volume for a square pot is simply length x width x height.

For comparison sake a 44 inch square pot of maximum height 18 inches has a volume of 34,848 cubic inches, very close to the maximum currently legal and a 45 inch x 45 inch x 18 inch high square pot would exceed the volume limit and be illegal.

Seventy of my 300 pots are 38"x 38" x 14" high square pots. The volume only being 20,216 cubic inches. I haven't found that they out fish my round pots but they have two advantages. One significant difference is they make a much more stable stack on my deck where they can fit in tight against each other, making a safer load in rough weather. The other is that with relatively small pots hanging bait is easier kept from interfering with the door triggers.

In conclusion I don't believe there are biological or enforcement issues with the use of square pots kept within the same size constraints of the round pots.

Thankyou for considering my requests.



March 05, 2022

Dear Board of Fish,

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Gregg Dunlap



March 01, 2022

Dear Board of Fish,

Dear Board of Fisheries Members;

I am a 20 year resident of Alaska and have spent time on the Kenai river every year since I first arrived in May of 2001. I was present and gave commentary at the last Board of Fisheries meeting in Anchorage where the historic changes were enacted. I thought that there was a great amount of effort by sport fishermen, subsistence fisheries and by commercial interest at that meeting to bring about the guidelines for the various Alaska fisheries including the Kenai river kings. I hope that we can all stay the course to continue to enact needed laws to protect and regrow this amazing fish. I know it was hard this last summer for the commercial interests but this is not the time to go backward. We need to study the situation and make constructive changes to help make it possible to have fair sport fishing, subsistence and commercial fisheries. This is going to take several years of hard work to find out how to do it. Please stay the course.

Thank you;

Gregory Kisling
Sportfisherman, Anchorage AK

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Gregory Kisling

Anchorage
99502



February 24, 2022

Dear Board of Fish,

We live in WA state. My son & have been fishing the Kenai since 1995 for sockeye, kings & coho. Great times! The king fishing is nothing compared to what is was!
Protect that river at all costs!

H.A. & Alex Bales

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Passing Proposal 283 prioritizes a small group of commercial fishing as one third of the set netters would qualify under the proposal. A vote in support of 283 gives a small group fishing preference, further risking the king salmon run in the Kenai River.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

H.A. Bales

Fife
98424



February 26, 2022

Dear Board of Fish,

Hello, my name is Haile Peveto. I currently live in Washington state, and am originally from Oregon. I have fished in Alaska a few times and fish up and down the west coast. Fisheries management is crucial for Alaskans because sportfishing is not only an important food source, but an economic powerhouse for the whole state. We need to rebuild the king salmon runs to support sport and commercial regardless. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? This seems illogical and against the wishes of most native Alaskans. Survival of kind salmon is what we have at risk here, please Vote NO on Proposal 283 to support the native species and show Alaskan natives and returning visitors you are listening to what is important to us!

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Haile Peveto

Bellingham
98225



March 07, 2022

Dear Board of Fish,

I live both in Seattle and in Los Angeles and like many within my sphere of influence (2 million and counting), Alaska is one of the true last frontiers and over fishing isn't helping Alaska.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Hannah Palmer

seattle
98109



February 17, 2022

Dear Board of Fish,

I live in Kenai River and have stopped fishing for kings on the Kenai for over 10 years because of the decline in numbers I think everyone including commercial fisherman and trawlers included should stop killing King Salmon

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Hans Brons

Soldotna
99669



February 19, 2022

Dear Board of Fish,

I am a 40 year Alaskan with a home on the Kenai River in Sterling. I have seen and enjoyed the days when 90,000 king salmon entered the river. The Kenai River king salmon species is a precious resource that we must preserve.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Harold Hollils

Anchorage
99515



March 07, 2022

Dear Board of Fish,

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Harry Browning

YULEE
32097



Dear Alaska Board of Fisheries,

I am a 12th grade student at Chignik Lagoon School of the Lake and Peninsula School District (LPSD) and I am writing to you about our local escapement. As of late, the sockeye escapement of the Chignik river has been extremely low, and it is getting increasingly harder to catch subsistence fish for our family and all the other families here in our village. Fishing is important to everyone in this village because it has been part of our cultural heritage for so long and we can't simply let this be lost. It is damaging our food security, causing severe hardships to everyone here. There has been studies that Area M is being allowed to intercept sockeye before enough escapement goes up our river, which we believe is causing a major problem for our run here.

Fishing for Sockeye has gotten especially bad since 2018 when there have been very minimal fishing openings, or even no fishing openings at all. My dad told me in 2018 that it was the first time in 100 years that we had no fishing at all, which is very shocking. The fishing business has been part of our culture ever since my grandfather was still young, and subsistence fishing has been part of our culture for even longer than that, close to a millennium. This overall is causing our heritage to wither away, and we cannot allow it to perish for good.

Our food security depends so much on our access to sockeye since it has been a part of us for so long and I don't want to imagine what would happen if we forgot the taste of fresh fish. I know that my grandmother likes to have sockeye several times a week, and if we can't catch subsistence for her, what will she do about that? The fishing business is the core reason why all of us here are able to afford living here. If there are no sockeye to catch for businesses, the businesses will stop buying fish from us here, and then the people of our village can't afford living here. That means that everyone will have to abandon the village and go live elsewhere. We cannot allow this to happen to the community.

Area M is being allowed to catch sockeye before enough escapement comes here for there to be an opening for those of us here, which is not exactly fair for us. We believe that Area M should not be allowed to catch Chignik sockeye until there is enough escapement here so we can have access to our local resource and the run will be sustained in the long term. By doing this, those of us here where I live can have an early run in and not have to wait way later for there to be an opening, or not having an opening at all during a fishing season.

We cannot allow our heritage and food security to die. Area M should be restricted from fishing for Chignik sockeye during fishing seasons. It is the only way, please help us.

Sincerely,

Henry Dustin Erickson



February 23, 2022

Dear Board of Fish,

40 year Alaskan resident who has watched the decline of salmon, we all need to help to restore this once great fishery.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Henry Garbowski



February 25, 2022

Dear Board of Fish,

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Hunter Hahn
Soldotna
99669



February 16, 2022

Dear Board of Fish,

I grew up on the Kenai River fishing it in the 80' and 90's. I still live in the Peninsula and now make my living as a sport fishing guide on the Kenai and Kasilof Rivers. In all my years on this River, I have watched the numbers of returning Chinook Salmon dwindle. I think the wrong answer is to continually lower the escapement goal so that it can be satisfied and allow more commercial opportunity. We need to conserve this amazing resource and I think we as stewards of the resource need to held responsible for its outcome. Leave the politics out of management.. Let us manage this run conservatively so that our future anglers can partake in its return.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Ian Flannery

Soldotna
99669-1792



February 23, 2022

Dear Board of Fish,

I live in Sterling Alaska and I am a fishing guide on the Kenai river. Not sure why we would put in new rules at BOF to protect king salmon only to take them away. It's time for us to worry more about the extinction of king salmon than over escapement of sockeye!

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Ian McDonald

Sterling
99672



Review of Proposal 282 to the Alaska Board of Fisheries

Michael Tillotson, John Brandon, Calvin Lee and Greg Blair

Executive Summary

Proposal 282 would restrict fisheries in the Dolgoi Island Area and Shumagin Islands Section. The rationale for Proposal 282 is that restrictions on the Dolgoi Island Area and Shumagin Islands Section fisheries are needed because the early run of sockeye salmon in Chignik has not met its biological escapement goal for the past four years (as discussed below, updated data show the goal was met in one of those years).

Although post-2018 escapement levels have been low by recent standards, early-run Chignik River sockeye salmon have also experienced periods with low escapement in years past, and in all but a few of those low escapement years the subsequent returns were above replacement. Indeed, ADF&G's preliminary 2022 forecasts predict the early-run of Chignik River sockeye salmon will be 639,000, which would allow for the midpoint of the biological escapement goal (400,000 fish) to be met with a harvest of 239,000 fish.

The Dolgoi Island Area and Shumagin Islands Section fisheries are mixed-stock fisheries that harvest fish from multiple runs of salmon. Like other mixed-stock fisheries, which are prevalent in Alaska, their impact on any one stock (including a weak stock) is buffered by the presence of other stocks. **Since 2018 there has been no direct correlation between recent harvest levels in the Dolgoi Island Area and Shumagin Islands Section and low escapement of early-run Chignik River sockeye salmon.**

The best available evidence indicates that the most likely cause of the recent low escapements for the early run of Chignik River sockeye are anomalous ocean temperatures. The freshwater habitat of the Chignik River system appears to remain productive. **Thus, it is reasonable to expect that, as anomalous ocean temperatures abate, run sizes and escapements will rebound. Out-of-cycle management changes to the mixed-stock fisheries in the Dolgoi Island and Shumagin Island Areas are not warranted under these circumstances.**

Proposal 282's restrictions would be imposed if the Department does not expect the early run of Chignik River sockeye to meet the midpoint (400,000 fish) of the current biological escapement goal, which is based on a range of escapement levels estimated to result in the maximum sustained harvest yield. A retrospective analysis of the effects of Proposal 282, had it been in effect over the past 10 years, shows that it would have triggered effort restrictions in the Dolgoi Island Area and Shumagin Islands Section fisheries in seven years of those years. **The proposed restrictions would not have been necessary in retrospect to satisfy the lower range of the escapement goal (350,000) in three out of seven years when the midpoint goal was not met during 2011–2021. And of the four years during the last decade in which the early run of Chignik sockeye salmon did not reach the lower range of its escapement goal, the benefits under Proposal 282 would have been insufficient to have met that goal in all but one year.**

The restrictions Proposal 282 would impose on the Dolgoi Island and Shumagin Island Area fisheries would have a far greater cost in terms of reduced harvests in those fisheries than benefits in terms of increased escapements for the early run of Chignik River sockeye. **On average, our retrospective analysis shows that the costs would outweigh the benefits by about 15 to 1.**

Author affiliation and background

The authors are members of ICF's Fish and Aquatic Sciences Team. ICF is an international consulting firm with expertise in fisheries science and management (among other fields of expertise). ICF was retained by the Area M Seiners Association to evaluate Proposal 282 before the Alaska Board of Fisheries. Dr. Michael Tillotson is a Senior Fisheries Biologist at ICF specializing in salmon ecology, evolution, and population dynamics. He has studied population-level responses to environmental change in both Pacific and Atlantic salmon ranging from Northern California to Western Greenland, including extensive experience with sockeye salmon in Western Alaska. Dr. Tillotson obtained his PhD from the University of Washington during which time he spent multiple field seasons studying salmon in the watersheds of Bristol Bay. Dr. John Brandon is a Senior Biometrician at ICF. His background is in population dynamics modeling, fisheries stock assessment and management strategy evaluation, with a PhD from the University of Washington. Calvin Lee is a Senior Biologist at ICF. His background is in population genetics and fisheries monitoring, with an MS from the Estuarine and Ocean Science Center at San Francisco State University. Greg Blair is a Senior Fisheries Biologist at ICF. His background is in salmonid population assessments, management, and habitat evaluation and restoration planning, with an MS from the University of Washington. During his time with the University of Washington he was the project lead for the Kvichak research project for the Fisheries Research Institute.

Introduction

Salmon populations are inherently dynamic and subject to fluctuations in run sizes. These population fluctuations can vary on time scales ranging from interdecadal to centennial scales (Rogers et al. 2013). Many factors have been linked to variability in salmon populations. For example, different life history characteristics and environmental conditions in spawning habitat can affect salmon populations. (Braun and Reynolds 2014). Additionally, climate patterns in the North Pacific Ocean have correlated with historically sharp increases and decreases in salmon populations (Mantua et al. 1997).

Anomalously warm ocean conditions led to a marine heatwave in the Northeast Pacific from 2014 to 2016 and even more recently from 2018 to 2019 (Amaya et al. 2021; Litzow et al. 2020). The ecological effects of the marine heat wave have been documented at multiple trophic levels ranging from plankton to forage fish and top marine predators (Arimitsu et al. 2021, Batten et al. 2021; Rogers et al. 2021; Suryan et al. 2021). Sockeye salmon (*Oncorhynchus nerka*) were affected in various ways from altered food webs, changed migration patterns, and increased competition with other salmon species (Cheung and Frölicher 2020; Connors et al. 2020; Fergusson et al. 2020; Yasumiishi et al. 2020).

Variability in abundance of salmon populations can cause disparate harvest rates on different salmon runs from year to year in mixed stock fisheries common in Alaska. Harvests from mixed stock fisheries contain different proportions of salmon runs from year to year (Dann et al. 2012). Evaluating the effects of mixed stock harvests on multiple salmon runs is difficult without accurate genetic data to differentiate between different salmon runs, particularly for smaller stocks/populations (Connors et al. 2019). Models have been developed to utilize genetic stock identification alongside age composition data to provide estimates of population composition (Cunningham et al. 2018). Other models have been developed that indicate mixed stock fisheries have limited effects on stocks of concern when the proportion of that stock is small; the influence and effects on that stock are diluted by the presence of other stocks in the fishery (Lloyd 1996). These tools and methods provide important information in mixed stock fisheries when there is concern about a particular run.



Recently, Chignik River Sockeye salmon, which is comprised of a genetically distinct early run and a late run, has been of particular concern due to low returns (Ross 2021; Creelman et al. 2011). The most recent data from the Alaska Department of Fish and Game indicate that the early run met or exceeded the minimum biological escapement goal (BEG, 350,000 – 450,000 fish) in two of the last five years (2017 and 2019)¹.

The Alaska Board of Fisheries policy defines a salmon fishery as a “conservation concern” when the stock is unable to meet a sustained escapement threshold (SET) over a four-to-five-year period (Policy for the management of sustainable salmon fisheries 5 AAC 39.222(f)(6)). It is important to note a SET limit would be lower than the lower bound of the BEG (5 AAC 39.222(f)(39)), because the SET is a limit related to conservation, and the BEG is an estimate used to manage escapement for maximum sustained harvest yield. We are not aware of a SET level having been determined for early-run Chignik River sockeye salmon but given the historical spawner-recruit data presented in the first section below, there is no indication that recent escapement levels have been consistently below a threshold that would present a conservation concern.

Two hypotheses related to environmental and habitat conditions have emerged as possible reasons for recent low returns. First, changes in freshwater habitat have been evaluated as affecting out-migrating smolts (e.g. Ruggerone, 2003). Second, recent climate events such as the marine heat wave have altered ocean conditions for salmon and may have affected marine survival. A third hypothesis relates to removals through harvest having depressed returns in recent years.

In this comment we use data from early-run (Black Lake) and late-run (Chignik Lake) Chignik River sockeye salmon to evaluate the effect of freshwater habitat on smolt abundance and/or quality as a possible hypothesis for low run sizes in recent years. We also evaluate evidence for changes in marine conditions as a factor for low returns, as well as how harvest levels in the Dolgoi Island Area and Shumagin Islands Section compare to Chignik River sockeye salmon returns since 2011. At the end of this comment, we provide a retrospective cost benefit analysis. This examines how the restrictions on fishing effort under Proposal 282 would have affected the sockeye salmon harvest in the Dolgoi Island Area and Shumagin Islands Section during the last decade and compares the reduction in harvest for those areas to the escapement benefit for early-run Chignik River sockeye salmon.

Previous years with escapement levels below the BEG

Estimates of escapement and subsequent returns (i.e., spawner-recruit data) are available for early-run Chignik River sockeye salmon during 1922–2015 (Appendix B3 in Schaberg et al. 2019; Schaberg *pers. comm.*). Among other things, these data provide a long-term perspective that includes previous years when escapement levels were similar to those during 2018–2021. In other words, years when escapement was between 179,200 and the lower range of the current BEG (350,000; Figure 1 grey shaded area).

¹ Updated brood tables from 1983 onwards used in these analyses were obtained from ADF&G (K. Schaberg *pers. comm.*). The updated early-run Chignik escapement estimate for 2019 is 379,444 sockeye salmon. The previous 2019 escapement estimate as noted in Proposal 282 was 345,918.

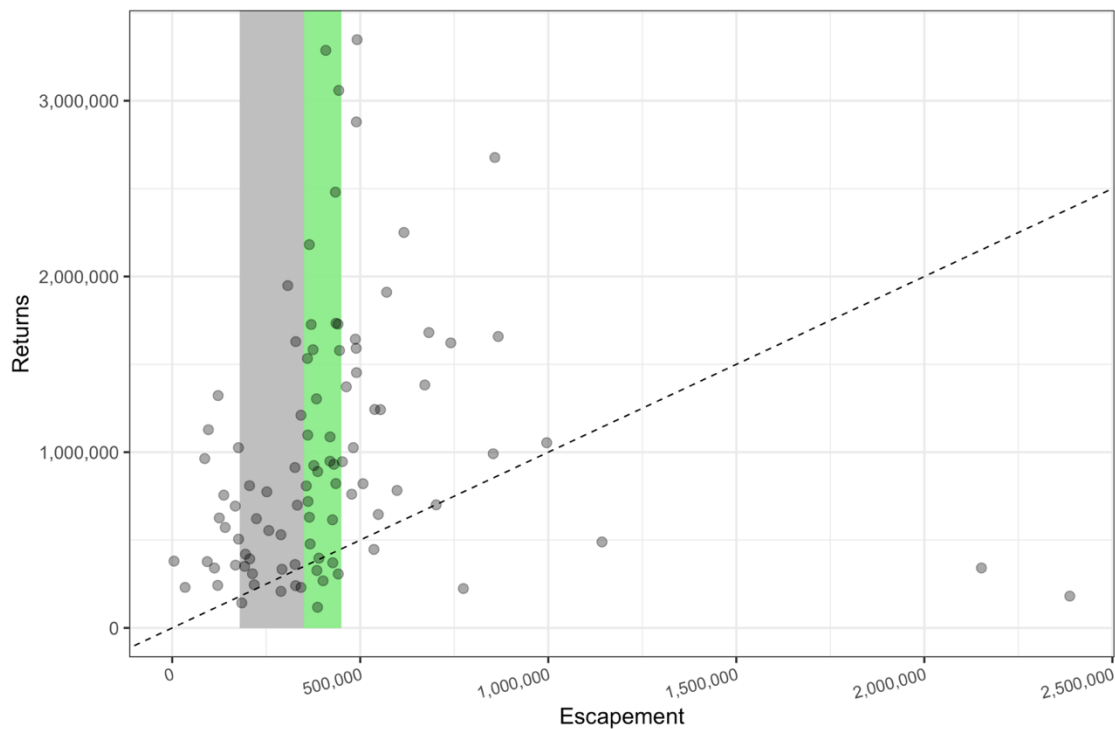


Figure 1. Escapement and returns (spawners and recruits) are shown for early-run Chignik River sockeye salmon during 1922–2015 (the last year complete returns are available). The grey shaded region shows the range of escapement corresponding with levels observed during 2018–2021 (i.e. between 179.2K and 350K). The green shaded region shows the BEG range (350–450K). The dashed line denotes the 1:1 replacement line.

Although post-2018 escapement levels have been low by recent standards, early-run Chignik River sockeye salmon have also experienced periods with low escapement in years past, and in all but a few of those low escapement years the subsequent returns were above replacement (i.e., returns were greater than the parental spawning escapement; Figure 1). These data demonstrate that early-run Chignik River sockeye salmon have exhibited resiliency in terms of compensatory recruitment in response to low escapement levels in the past. Indeed, ADF&G’s preliminary 2022 forecasts predict the early-run of Chignik River sockeye salmon will be 639,000, which would allow for the midpoint of the biological escapement goal (400,000 fish) to be met with a harvest of 239,000 fish².

Likewise, it is important to note that the current biological escapement goals are set to achieve an escapement level that has been estimated to correspond with the greatest potential for maximum sustained yield for the harvest (e.g., Schaberg et al. 2019). So, while escapement below this goal would not be expected to result in the maximum sustained yield for the harvest, that is not the same thing as a period of escapement below the BEG necessarily resulting in early-run Chignik River sockeye salmon having fallen below a self-sustaining threshold.

Potential explanations for low early-run Chignik River sockeye salmon returns since 2018 are nevertheless of interest because Proposal 282 would link fishing effort in the Dolgoi Island Area and Shumagin Islands Section with early-run Chignik River sockeye salmon returns relative to the BEG for

² Preliminary 2022 Westward Region Salmon Forecasts, ADF&G Advisory Announcement 12/14/2021: <https://www.adfg.alaska.gov/static/applications/dfnewsrelease/1349085563.pdf>

that run. The premise of the proposed restriction rules is presumably that harvest levels in the Dolgoi Island Area and the Shumagin Islands Section are a key factor in the early-run of Chignik sockeye salmon having failed to reach its BEG in recent years. Below we provide a review of alternative hypotheses that could explain recent Chignik River sockeye salmon escapement levels, including environmental and habitat conditions related to recruitment, and we also examine harvest levels in the Dolgoi Island Area and Shumagin Islands Section in recent years.

Freshwater habitat changes

- Substantial changes in the Black Lake watershed have been documented over at least the last five decades (e.g., Ruggerone 2003). These changes have collectively reduced the depth and volume of Black Lake (Ehakeem and Papanicolaou, 2008) which may result in closer coupling of air and water temperatures.
- Additionally, in recent decades, a combination of cyclic variability and climate change have resulted in relatively warm air and water temperatures in Western Alaska (Litzow et al. 2020).
- However, in general, these warmer conditions have proven beneficial for freshwater growth and overall productivity of the region's sockeye salmon stocks (Cline et al. 2019).

Changes in smolt quality and abundance

- It has been hypothesized that the observed changes in the Black Lake watershed have reduced the productivity and/or carrying capacity for juvenile sockeye, particularly during warm years when summer water temperatures in the shallow Black Lake may exceed physiological optima (e.g. Ruggerone et al. 2003).
- The effects of these changes are hypothesized to negatively influence both the Black Lake and the Chignik Lake populations through increased competition in Chignik Lake as Black Lake fry migrate downstream to avoid unfavorable thermal conditions (Westley et al. 2008); increased competition in Chignik Lake may then lead to reduced growth with negative consequences for overwinter survival in the lake and poorer smolt quality (i.e. length, weight or condition factor).
- Ruggerone (2003) concluded that these habitat changes have affected the Chignik stock complex and in part resulted in smaller productivity gains realized by the Chignik runs relative to other Alaskan salmon populations since the 1970s.
- Direct evidence of these hypothesized impacts is limited, and more recent research (e.g. Westley et al. 2008, Griffiths et al., 2013, Walsworth et al., 2020) by the University of Washington Fisheries Research Institute (FRI), which works extensively in the watershed, has generally indicated that negative impacts are not occurring.
- For example, Walsworth et al. (2020) reported that, contrary to expectation “Our results demonstrate that, even in years where most juvenile growth for surviving individuals was accumulated in Chignik Lake, the Black Lake stock can be highly productive”.
- Unpublished data from FRI support the notion that freshwater growth conditions remain favorable for sockeye in both the Chignik and Black lakes. Sockeye fry have been sampled in each lake near the end of the summer growing season (~September 1) since the 1960s. Since 2005 the average lengths of sampled sockeye in both lakes have remained 1 to 2 mm above the long-term means (Figure 2).

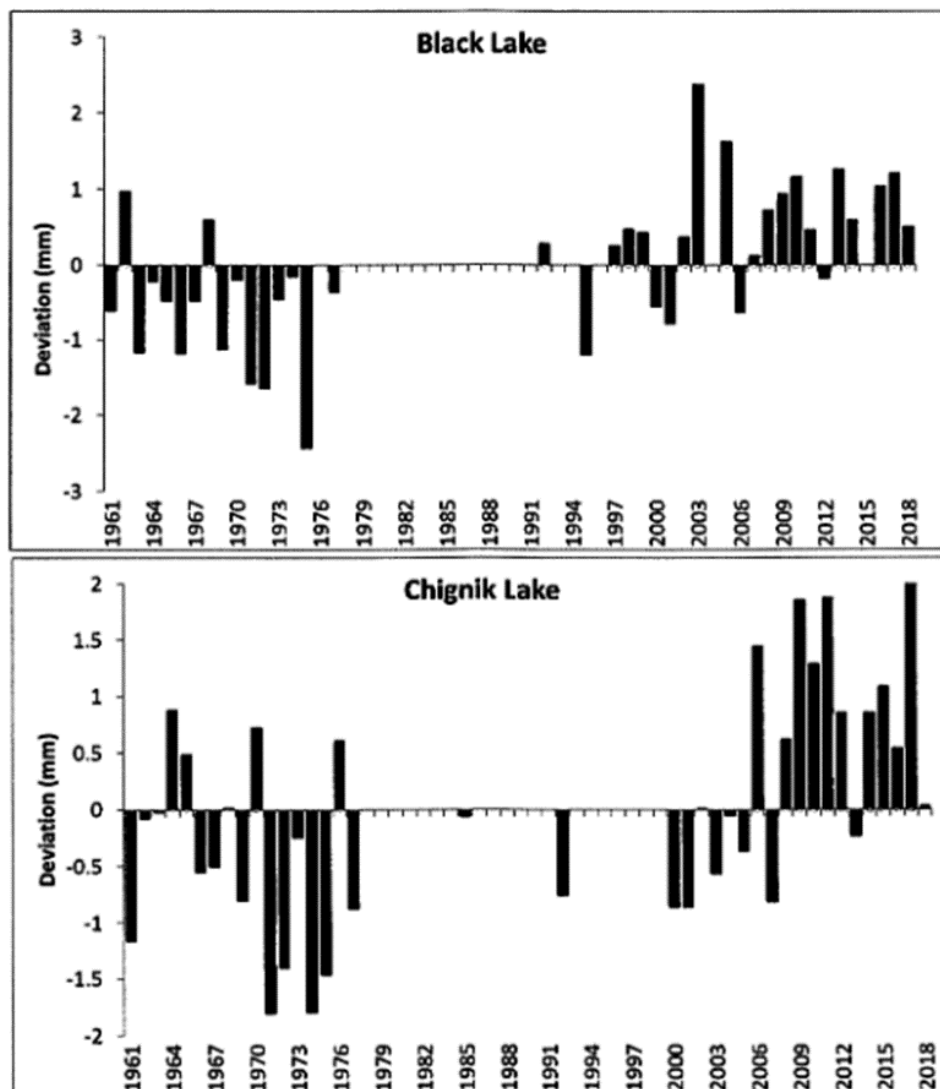


Figure 2. Average body sizes (fork length) of juvenile sockeye salmon caught in tow net surveys on September 1 in Chignik and Black lakes from 1961 – 2018, expressed as deviations from the long-term average (63.3mm Black Lake, 61.5mm Chignik Lake). Positive values denote better-than-average growth in that year, negative values denote worse-than-average growth in that year. Note that several years of data are missing during the 1980s and early 1990s. UW-FRI unpublished data. (Figure taken from RC47: Letter from Dr. Daniel Schindler to Alaska Board of Fisheries, February 17, 2019.)

- Separate from the FRI fry sampling, ADFG operated a smolt monitoring project between 1994 and 2016. Smolt data are from the combined outmigration of sockeye salmon from both lakes (Figure 3). Average smolt length, weight and condition factor³ remained relatively stable during this period, though there is some indication of declining smolt quality since ~2012.

³ The condition factor (K) is a measure of weight-to-length, where higher values represent fish that are in better body condition (i.e., less skinny), and is calculated as, $K = (W / L^3) * 10^5$

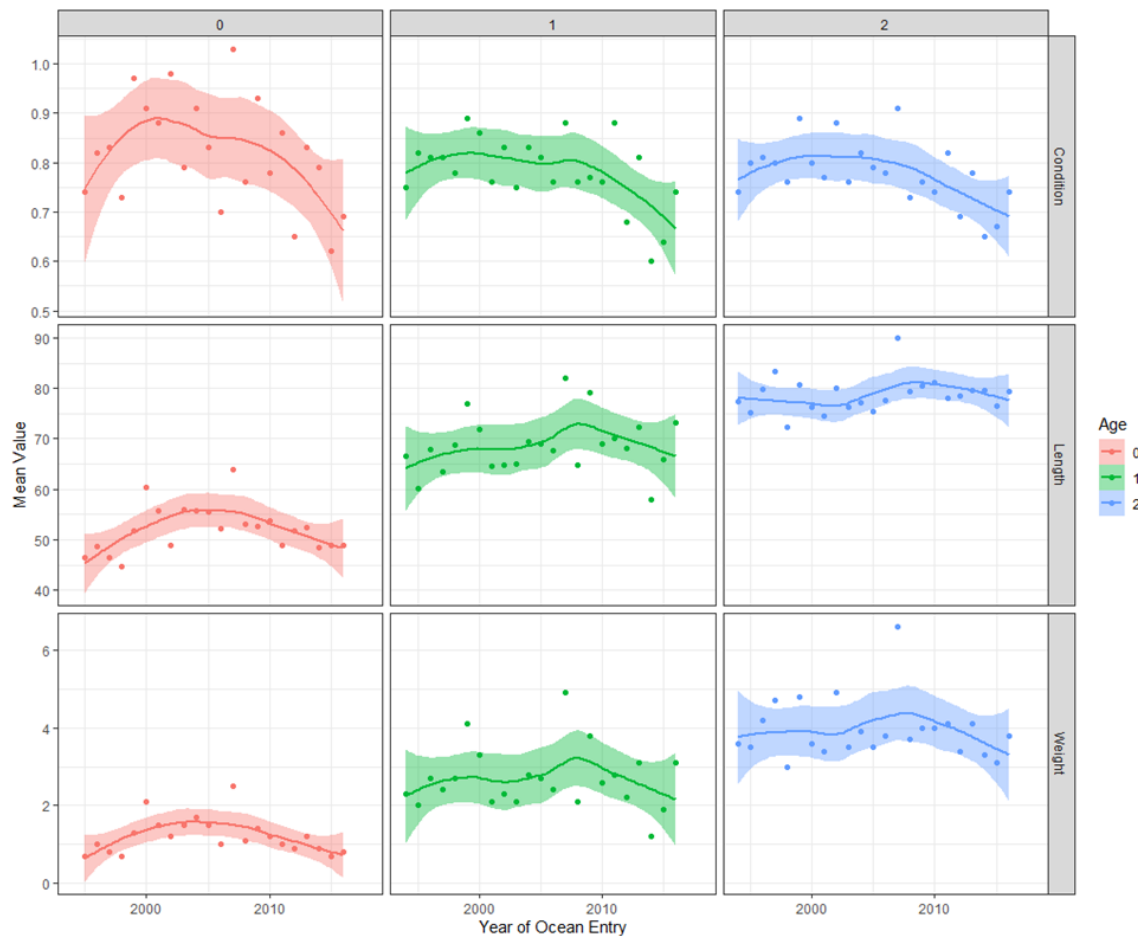


Figure 3. Mean length(mm), weight(g) and condition factor of Chignik smolts sampled by ADFG during outmigration; 1994-2016. Lines and shaded areas show LOWESS smoothing. Numbers in the top facets correspond with Age 0, Age 1, and Age 2 smolt.

- The FRI length data on September 1 (Figure 2) and ADFG smolt monitoring data (Figure 3) appear somewhat contradictory. The FRI data indicate larger sockeye at the end of the summer for both lakes whereas the ADFG data indicates smaller size of out-migrating smolts.
- However, a direct comparison of the FRI and ADFG data is problematic. First, the early and late runs are not distinguished during smolt enumeration, so changes in smolt quality may reflect changes in the relative abundances of two population with differential growth rates (e.g., declining size-at-age could indicate increasing prevalence of slower growing Chignik Lake smolts).
- Additionally, in many sockeye populations smolt age is negatively correlated with freshwater growth (Cline et al. 2019). Faster growing individuals may achieve a physiological threshold and initiate smolt transition, while slower growing individuals may delay migration for one or more years. This growth-migration response can lead to a counterintuitive situation where average smolt size-at-age declines in response to improved freshwater growth conditions because the largest individuals migrate to sea at younger ages (Tillotson and Quinn, 2016).
- The survival implications of such reductions in smolt age are uncertain. In many salmon populations larger smolts have been shown to experience improved marine survival. In the Kvichak River a shift from age-2 to age-1 dominance was associated with the loss of very large returns, but the population nevertheless continues to produce substantial harvestable surpluses (Rich et al., 2009; Tillotson and

Quinn, 2016). Across Bristol Bay populations climate warming has driven a trend toward dominance by age-1 smolt with no apparent negative impacts as the stock complex continues to produce record runs (Cline et al. 2019).

- With regard to low Chignik River sockeye salmon run sizes since 2018, critical years of smolt data are missing or suspect due to operational difficulties (2016⁴, 2017 and 2018). These smolt years would have produced returns primarily in 2018-2021.

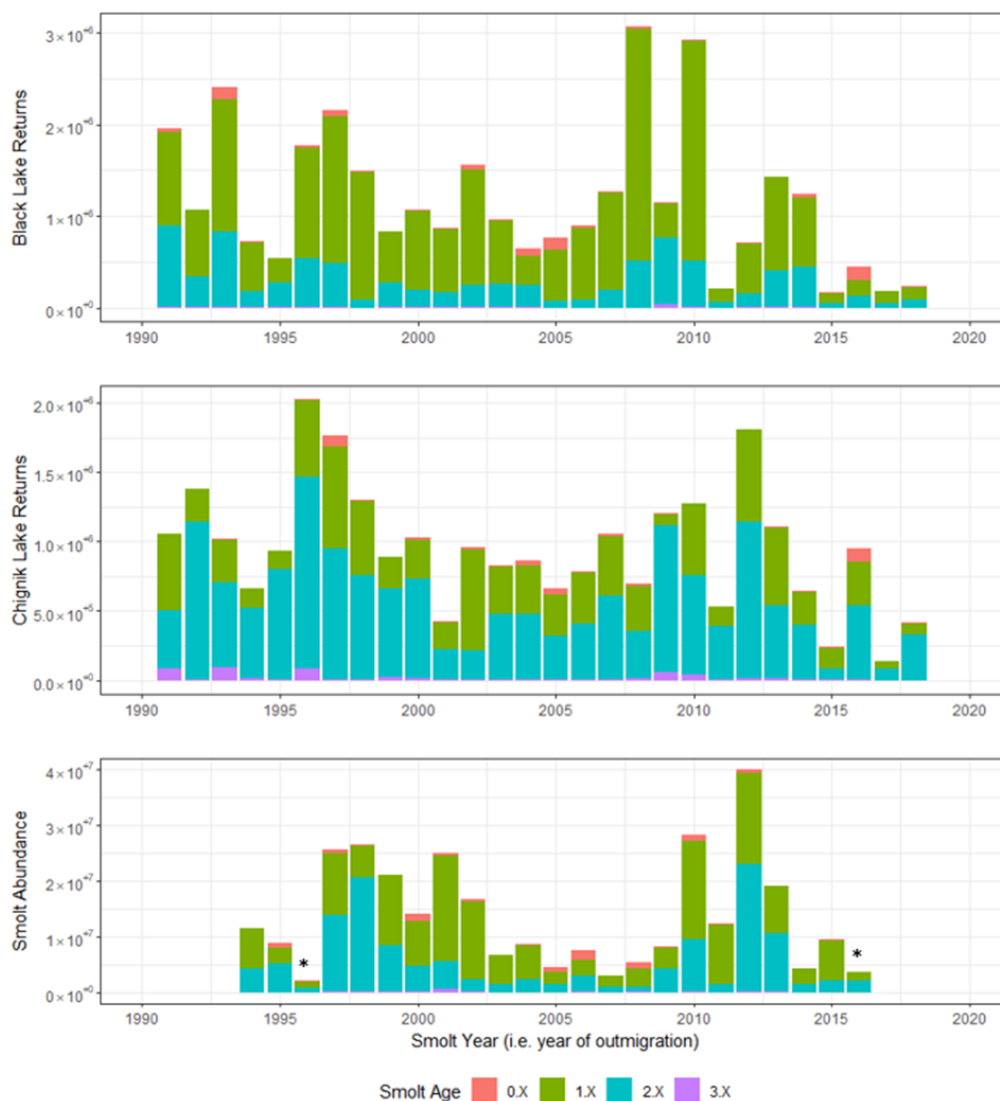


Figure 4. Upper and middle panels show adult returns for Black Lake and Chignik Lake runs by age from smolt years 1990-2018; bottom panel shows combined Black Lake and Chignik Lake smolt abundances and age composition estimated based on ADFG screw trap catches for smolt years 1994-2016. Smolt enumeration reports indicate that abundance estimates in 1996 and 2016 (those years are plotted with an asterisk *) were likely undercounts resulting from poor operating conditions for sampling equipment.

⁴ The smolt enumeration report for 2016 reports poor sampling conditions due to heavy fouling of the traps and low catches



- Smolt monitoring was reinitiated in 2019 and based on data from 2019 and 2020 the trend towards smaller smolt size has not persisted [Olson, M. (ADFG) *unpublished data*]. However, substantial changes in sampling locations and methods (sampling moved downstream to Chignik Lagoon and fish are caught using a beach seine) confound the comparison of these data with prior results and no estimates of smolt abundance are produced from the new sampling approach.
- Data from the ADFG Chignik smolt enumeration project indicate that the abundances of out-migrating sockeye were relatively low during 2014, 2015 and 2016, but comparable to a period of low smolt abundance that lasted from 2003-2008, years both populations had average adult returns (Figure 4). Total runs during years in which these smolt primarily returned (2005-2011) averaged over two million fish.

Summary and interpretation of freshwater habitat and productivity

- There is no doubt that the physical habitat and geomorphology of Black Lake has experienced persistent change over multiple decades. These changes have reduced the overall volume of available rearing habitat for the Black Lake population, and also amplified the effect of warming associated with climate change and internal climate variability (i.e. the Pacific Decadal Oscillation).
- Despite these changes, available evidence suggests freshwater growth conditions have actually improved over time, and that juvenile sockeye from both populations can exhibit a range of rearing behaviors that take advantage of multiple habitats. While conditions in Black Lake may now lead to early outmigration in warm years, there is no evidence that this behavior has negative impacts on either stock. Given that growth is limited by low temperatures in Chignik Lake, increased competition for resources resulting from Black Lake fish rearing in Chignik Lake is likely to be buffered by favorable growing conditions in the recipient habitat (i.e. Chignik Lake) during warm years.
- Habitat change in Black Lake has been ongoing over multiple decades while no concurrent long-term decline has been observed in the productivity of either the Black Lake or Chignik Lake populations (Figure 5). Based on the updated brood tables, the trend in returns-per-spawner since the mid-1980s has been slightly negative, though this is driven primarily by low productivity during the four most recent brood years with complete data (2012-2015), and neither trend is statistically significant. In any case, despite substantial year-to-year variability, the long-term average productivity of both runs has remained relatively stable despite substantial habitat changes in the watershed.

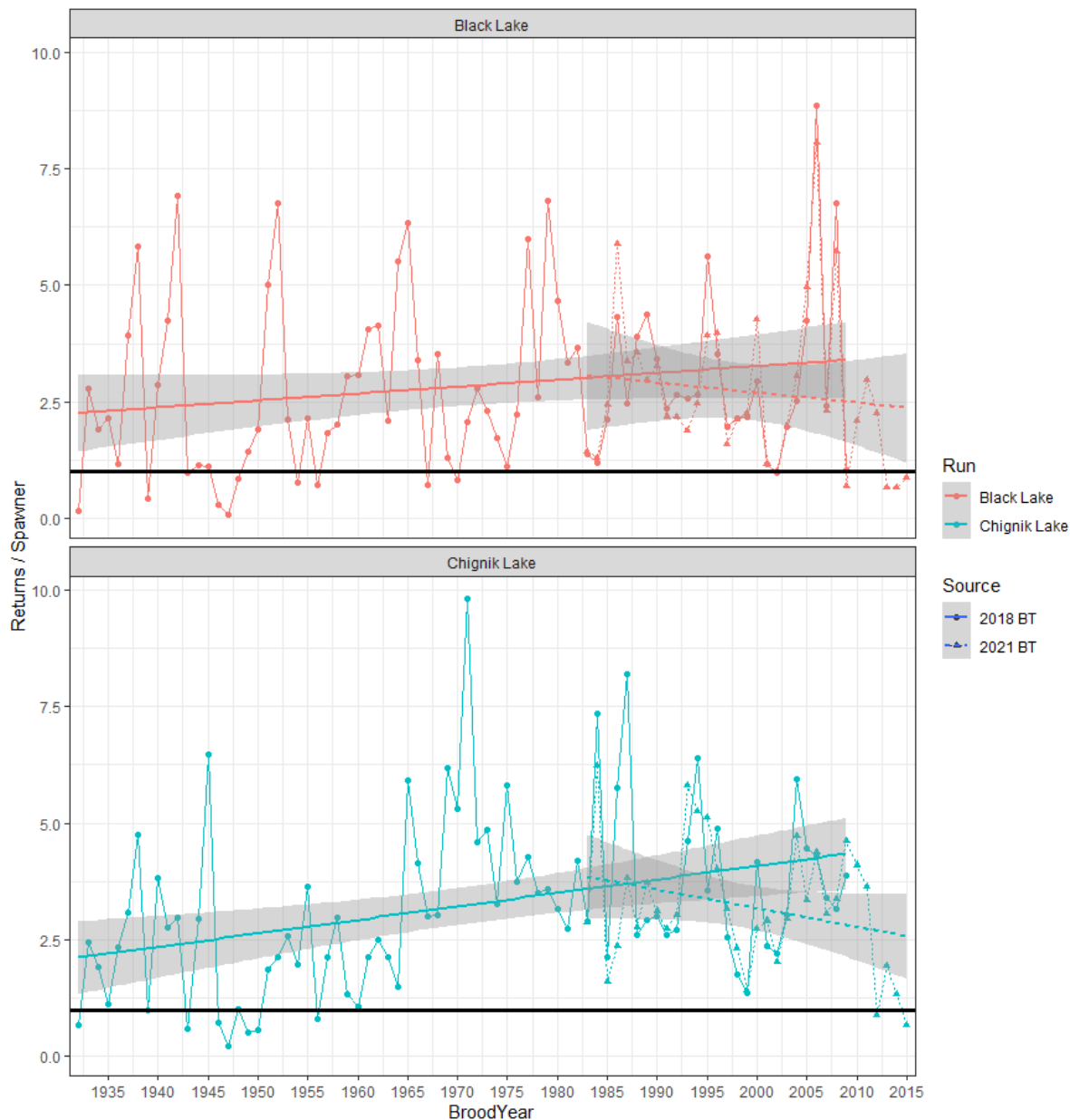


Figure 5. Returns-per-spawner (R/S) for Black Lake and Chignik Lake sockeye populations; brood years 1932-2015. Brood tables were updated in 2021, but not for the complete time-series. New data are shown separately with dashed lines and triangle markers. Revision of the previous brood tables generally resulted in minor changes in estimated R/S except for Chignik Lake in 1986 and 1987 where prior estimates appear to have been erroneously large. Shaded areas show linear trends based on the 2018 and 2021 brood tables. Bold black line shows replacement productivity.

Evidence for changes in marine survival

- Although smolt abundances appear to have been relatively low during the most recent years with estimates (fish that would have returned primarily during 2016-2019), low adult returns since 2018 do not appear to be *primarily* a result of low freshwater productivity. Similarly low smolt migrations produced adult returns that were typically between 1.5 and 2 million during the 2003-2008 period.

- Inference is complicated by the fact that critical years of smolt data were not collected (2017 and 2018) and smolt abundances have not been estimated since 2016. However, the 2018 return was primarily composed of smolts from 2015 and 2016. Comparing the 2018 total Chignik run of ~540,000 adults to the production of smolt years 2003-2008 suggests that marine survival may have declined by sixty percent or more relative to the earlier period. The presumed undercount of smolts in 2016 suggests that this is a conservative estimate of the decline.
- Marine survival of salmon remains in many ways a black box, but there are several plausible hypotheses that could explain this apparent >60% decline in marine survival:
 1. Some characteristics of smolts (e.g. length) or their behavior (e.g. date of ocean entry) may result in unusually high mortality during or shortly after their seaward migration. This transition is commonly reported to be critical in determining overall marine survival, and mortality during this period is likely size-selective. Under this hypothesis, although mortality occurs in the marine environment it nevertheless is driven in part by freshwater conditions through their impact on growth or migration timing.
 2. A related possibility is that early marine survival has declined rapidly independent of smolt quality or phenology. For example, atypical ocean temperatures may reduce food resources during this critical transition period, or an increasing predator field may reduce the number of surviving post-smolts.
 3. Unfavorable marine environmental conditions may also have a more diffuse impact on marine survival. An atypically warm marine environment may provide fewer or less energy-dense prey resources, a novel or increased predator field and can also influence metabolism. These factors may act individually or in concert to reduce total survival during the typically 2-3 year period of marine residence.
 4. A fourth possibility related to marine survival is that the harvest rate has increased substantially on Chignik bound adult sockeye. Assuming that Area M harvest is the primary source of non-terminal harvest of Chignik sockeye, this would require either a) a large increase in the total Area M sockeye catch or b) a large increase in the proportion of the Area M catch comprised of Chignik origin fish. We investigate this possibility further below, by examining harvest levels in the Dologi Island Area and Shumagin Islands Section from 2011 to 2021.

Summary and interpretation of marine survival

- The lack of smolt abundance estimates after 2016 creates a substantial impediment to partitioning the relative influence of marine and freshwater influences on low Chignik sockeye returns since 2018. Nevertheless, the single return year for which the majority of contributing smolt were enumerated (2018) suggests a marked decline in marine survival relative to a period of comparable smolt production (smolt years 2003-2008, return years 2005-2011).
- A further confounding issue is the unknown origins of sampled smolts. It is not possible to fully rule out a scenario in which the production of Black Lake smolts has declined dramatically relative the Chignik Lake. This could help to explain the relatively large decrease in overall productivity of the Black Lake population.
- Multiple interacting processes could have driven this ostensibly rapid decline in marine survival. However, apart from hypothesis 4 (i.e., substantially increased harvest in other areas), the plausible explanations are associated with a rapid shift in environmental conditions (as opposed to a long-term decline in productivity as a hypothesized consequence of Black Lake habitat changes). This is not to say that habitat conditions have played no role, but rather that their impact would have been realized

through reduced resilience to environmental extremes rather than as a direct driver of lower freshwater productivity.

- Based on these observations it is then necessary to compare the relative likelihood of two possibilities: 1) Anomalous environmental conditions were the primary driver of low Chignik sockeye returns between 2018 and 2021 or 2) a large increase in harvest of Chignik bound sockeye occurred during this period.

Marine environment vs. Harvest as the primary driver of low Chignik returns

- The recent period of low returns of Chignik Sockeye has coincided with unprecedented climatic conditions in the Northeast Pacific. Extreme sea surface temperatures began in 2014, peaked in in 2016, returned to near normal in 2017 before again returning to record highs in 2018-2019 (Figure 6, Amaya et al. 2020; Litzow et al. 2020; Walsh et al. 2017; Di Lorenzo and Mantua 2016). Peak values during the 2014-2016 event reached nearly 2.5°C above normal, and over 2.5°C in some areas during the 2018-2019 event (Amaya et al. 2020). Peak warming occurred during the summer for the 2018-2019 event versus in the winter for 2014-2016 (Amaya et al. 2020).

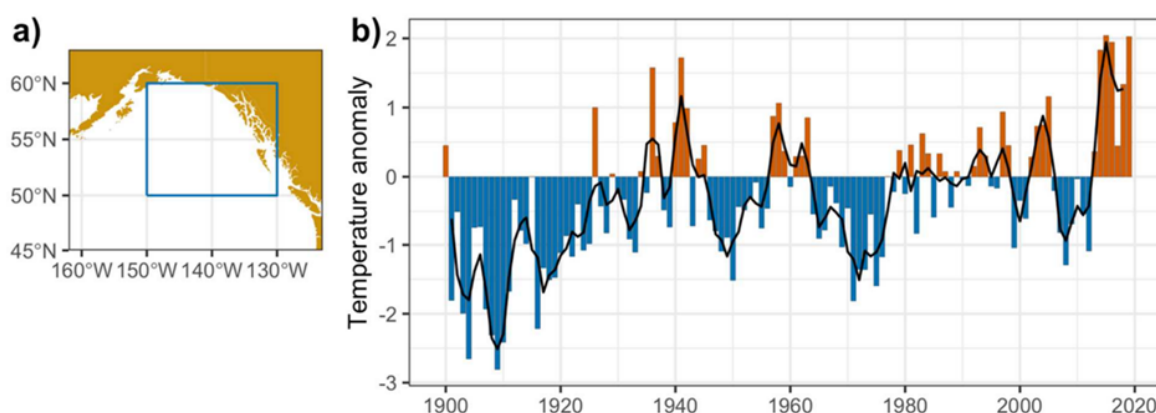


Figure 6. Observed Gulf of Alaska SST anomalies for comparison with preindustrial simulations. a) Area in the Gulf of Alaska for which observations and simulations are compared. b) Time series of area-weighted annual anomalies from ERSSTv5. Black line plots three-year running mean anomalies. Taken from Litzow et al. (2020).

- Sea surface temperature anomalies in the Gulf of Alaska have not only been exceptionally high, but this condition has also persisted across multiple years.
- The 2016 smolt year stands out as rather anomalous for several reasons. First, in the context of this low-productivity period, the adult returns produced by 2016 smolt were relatively large (especially for the Chignik Lake population, where total adults produced was above the long-term average). This likely in part reflects the extent of the 2016 smolt undercount, but the age composition of this smolt year was also atypical, with a large proportion of returning adults having been age-0 smolts.
- The 2017 return to more typical GoA SST may in part explain the more typical production of Chignik sockeye from the 2016 smolt year.
- A stated goal of Proposal 282 is that *“This proposal links fishing time in the Shumagin Islands and Dolgoi Islands Area to sockeye salmon escapement to the Chignik River.”* As described above, harvest in the Shumagin Islands Section and Dolgoi Island Area is composed of multiple stocks of salmon, with the proportion of Chignik River sockeye in the harvest varying by month and year in



each area (Dann et al. 2012). Here, we examine two possible hypotheses for the recent and rapid reduction in early-run Chignik River sockeye salmon escapement that involve the Dolgoi and Shumagin Islands harvest. Each of these hypotheses assumes that, since at least 2006–2008, the Dolgoi and Shumagin Islands harvest has been removing Chignik River sockeye salmon, but that something related to the harvest has changed in terms of its effect on Chignik River sockeye salmon escapement in recent years.

- One hypothesis is that the proportion of early-run Chignik River sockeye salmon in the Dolgoi and Shumagin Islands harvest has increased since 2018. Under this hypothesis, even if the total annual sockeye harvest in these areas had not increased, removals of Chignik River sockeye salmon would have nevertheless increased, which could have consequently depressed the escapement of those runs in recent years. We are not aware of any updated stock composition estimates since the WASSIP 2006–2008 study, however, that could be used to evaluate this hypothesis. Hence, this hypothesis cannot be ruled out, but it seems unlikely that there would have been a substantial increase in the proportion of early-run Chignik River sockeye salmon in the Dolgoi and Shumagin Islands harvest since 2018, given record high Bristol Bay sockeye salmon runs in recent years.
- A second hypothesis is that harvest levels in the Dolgoi and Shumagin Islands areas have been higher than average in recent years. Under an assumption that the proportion of Chignik River sockeye in the harvest has not decreased since 2006–2008, higher than average harvest levels during 2018–2021 would have resulted in more early-run Chignik River sockeye being removed in these areas than in previous years, depressing escapement to some degree. Unlike the hypothesis that the proportion of the harvest composed of the runs of Chignik River sockeye salmon has increased, it is possible to examine whether overall harvest levels in the Dolgoi and Shumagin Islands have been higher than average during recent years. Figure 7 shows the standardized harvest levels during 2011–2021 in these areas during June and July.
- From 2018 to 2021, when early-run Chignik River sockeye escapement was below the midpoint of the BEG, the sockeye salmon harvests in the Dolgoi Island Area were below their 2011–2021 average harvest level (Figure 7). Therefore, the below average harvest levels in the Dolgoi Island Area during 2018–2021 would be expected to have removed *fewer* early-run Chignik River sockeye salmon than usual since 2011, assuming the June and July proportion of the Dolgoi harvest that is composed of early-run Chignik River sockeye salmon remained constant on average.
- The Shumagin Islands harvest since 2018 was more variable with respect to its average level over the last decade compared to the Dolgoi Island Area (Figure 7), but there is no clear pattern between harvest levels in the Shumagin Islands and early-run Chignik River sockeye salmon escapement since 2018. For example, in 2018 and 2020, the years with lowest early-run Chignik River sockeye salmon escapement, the Shumagin Islands sockeye harvest was either below or approximately equal to its average 2011–2021 level in both June and July.

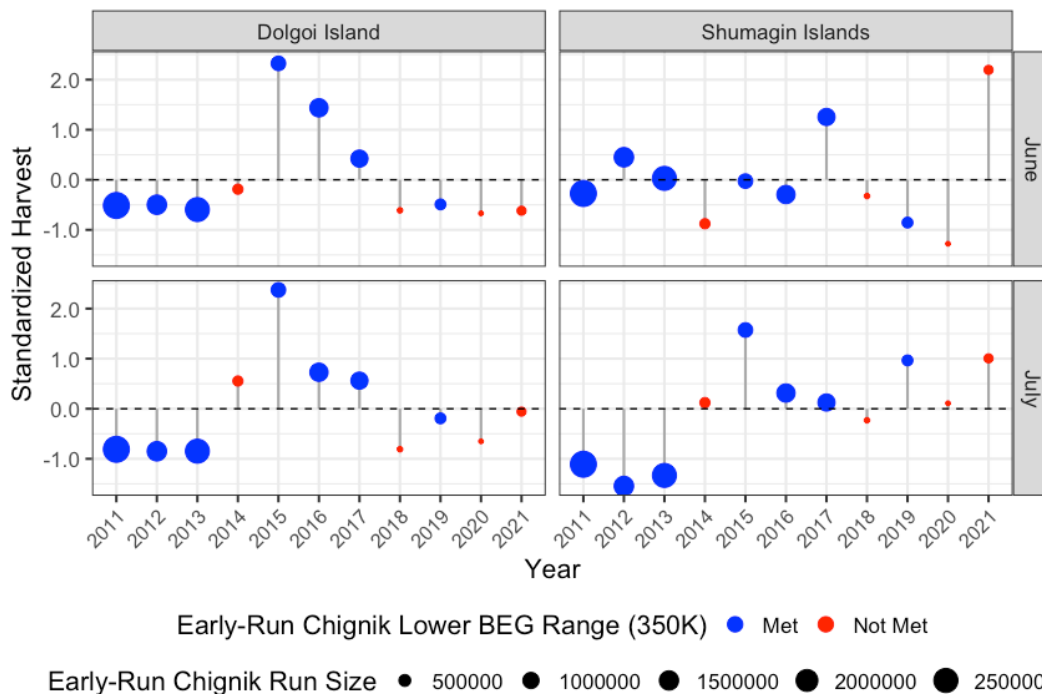


Figure 7. Harvest levels in the Dolgoi and Shumagin Islands are shown by month and across years during 2011–2021. Harvest levels are scaled (normalized) to the average annual harvest over that time period: A standardized harvest value of zero on the y-axes represents the average sockeye salmon harvest in an area-month stratum during 2011–2021; negative values are below average sockeye salmon harvest and positive values are above average sockeye salmon harvest in an area-month stratum. The size of the points is plotted relative to the early-run Chignik River sockeye salmon run size that year. Smaller points represent years with smaller relative run sizes during the last decade, and vice-versa. The point colors represent whether the lower range of the BEG (350,000) for early-run Chignik River sockeye was met or not each year.

Synchrony and variability of Chignik sockeye

- It is now well established that diversity within salmon populations and their habitats provides resilience against environmental change and reduces interannual variability in abundance through the “portfolio effect” (Hilborn et al. 2003; Schindler et al. 2010; Brennan et al. 2019).
- The diversity that underlies the portfolio effect is manifest across many scales, and each Chignik run is composed of unique spawning populations which exploit multiple rearing habitats. As such, each population no doubt benefits from its own life-history diversity and the substantially intact habitats of the watershed.
- However, at the population level the Chignik portfolio is relatively weak. If productivity is highly synchronous between the early and late runs then the year-to-year variation in the Chignik stock complex should be relatively large. If the populations are asynchronous, then the highs and lows of each should counteract one another, dampening variability.

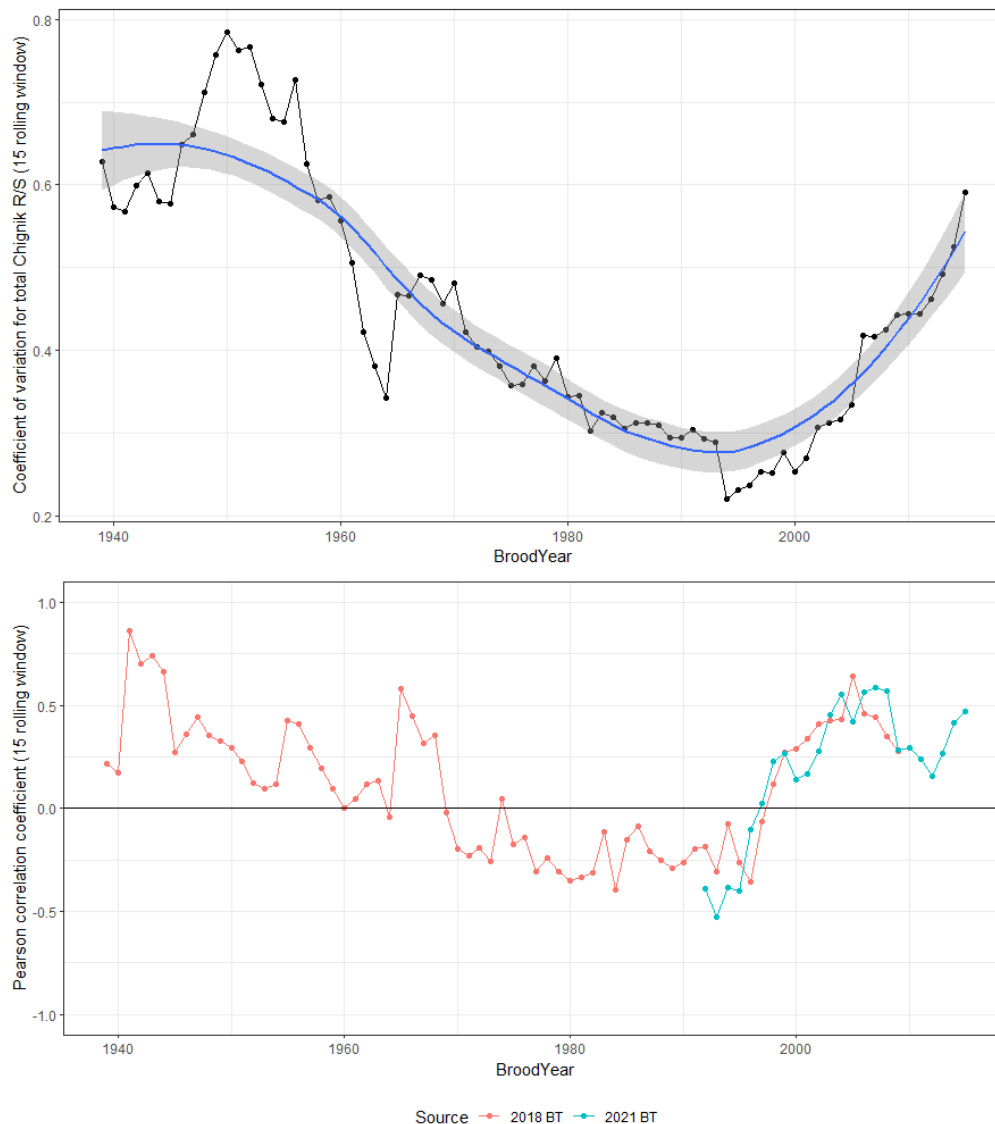


Figure 8. Time-series of variability and correlation in the productivity of Chignik sockeye, brood years 1939-2015. Top panel shows the coefficient of variation of recruits/spawner for a backward-looking, rolling 15-year rolling window. Blue line and shaded area show LOWESS smoothing. Bottom panel shows the Pearson correlation coefficient between Chignik Lake and Black Lake recruits/spawner over a backward-looking, 15-year rolling window.

- Correlation, either positive or negative, between the two runs could feasibly arise from either mechanistic or stochastic processes. A negative correlation could reflect competition for freshwater resources, while a positive correlation could reflect the synchronizing effect of a common marine environment.
- While the mechanisms that drive the relationship between the Black Lake and Chignik Lake sockeye productivity are no doubt relevant and interesting, they are also beyond the scope of this evaluation. However, the existence of positive correlation in productivity, regardless of its source, provides important context for interpreting the recent period of low returns.

- Examination of the correlation between Black Lake and Chignik Lake productivity, and the interannual variability in the productivity of the stock complex indicates that the populations have been relatively synchronous since ~2000 and that variability, measured as the 15-year coefficient of variation, has been increasing over this period (Figure 8).
- These findings do not provide an explanation for the root cause of recent low returns, but rather indicate that the potential for very small or very large returns has increased relative to a period between 1970 and the mid-1990s where the stocks' productivity was weakly, negatively correlated and interannual variability was rather low.

Evaluation of June 15th date as indicator of run size and return timing

- The proposed rule would take effect based on whether the Black Lake run is expected to achieve its midpoint escapement goal as evaluated on June 15th. The specifics of this “expectation” are not defined, but it seems reasonable to assume that this may be based on observed escapement relative to ADFG interim sockeye escapement targets. The interim escapement target for Jun 15th is ~25-30% of the early run midpoint escapement goal.
- From 2006 through 2017 at least 15% of the midpoint had been achieved by June 15th, and all years except 2008 and 2009 had achieved the lower interim target by this date (Figure 9). Even in 2014 when both the total Black Lake run and escapement were relatively low, more than 20% of the midpoint had been counted by June 15th.
- Since 2018 less than 5% of the midpoint had been achieved by June 15th, even in 2019 where total run and escapement were comparable to 2014.
- It is unclear whether the small escapements observed by June 15th in recent seasons are a result of small overall run sizes, or if it may be in part influenced by shifts in run timing. The proposed regulation would be highly sensitive to run timing, and so additional evaluation seems warranted.

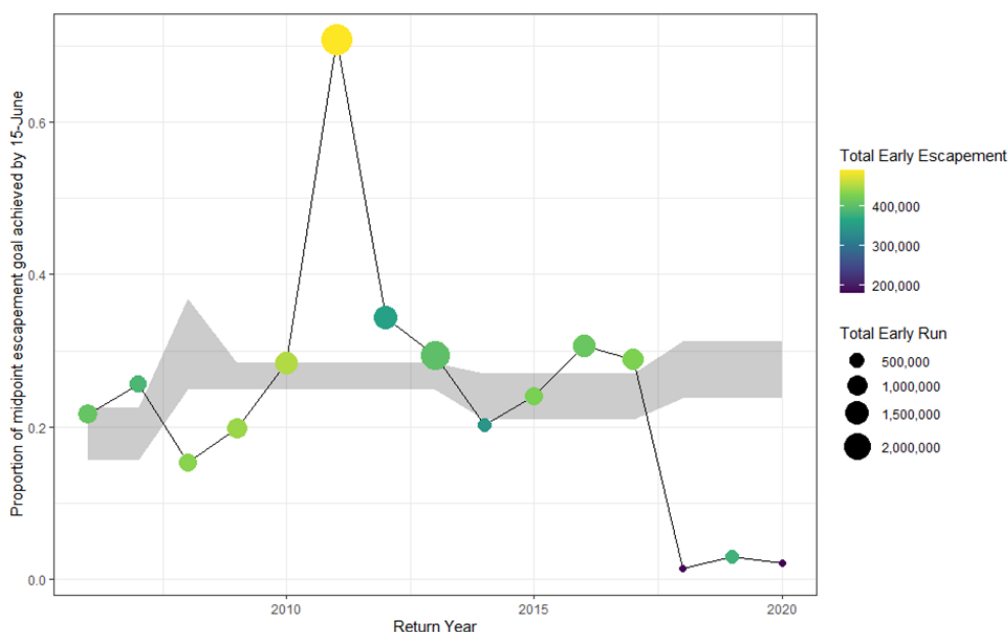


Figure 9. Proportion of annual Early Run midpoint escapement goal achieved by Jun 15th for return years 2006-2020. Shaded area shows the interim escapement target range on June 15th as a proportion of the midpoint escapement goal (400,000). Point size and color indicate the total early run escapement and run size, respectively.



Retrospective cost-benefit analysis of Proposal 282 restrictions on the Dolgoi and Shumagin Islands sockeye salmon harvest during 2011-2021

Proposal 282 would restrict fishing in the Shumagin Islands Section and Dolgoi Island Area from June 15 to July 25 unless the Department expects the mid-point of the biological escapement goal range for the early-run of Chignik River sockeye to be met or until the first commercial salmon opening in the Chignik Management Area.

This analysis applies Proposal 282's restrictions retrospectively to available harvest and escapement data during 2011–2021. The June and July proportions of early-run Chignik River sockeye salmon in the Dolgoi Islands Area and Shumagin Islands Section harvests are extrapolated to 2011–2021 from the WASSIP stock composition estimates from 2006–2008 (Dann et al. 2012).

Four questions are addressed: (1) What would the average annual loss of harvest have been in the Dolgoi Island Area and Shumagin Islands Section under the proposed restrictions for those years during 2011–2021 when the midpoint escapement goal for early-run Chignik River sockeye salmon was not met? (2) In the same set of years, what would the resulting escapement benefit of the proposed restrictions have been to early-run Chignik River sockeye salmon? (3) In those years, did early-run Chignik River sockeye salmon meet the lower range of the biological escapement goal (350,000) and, if not, would the escapement benefit from the proposed restrictions have been sufficient to meet the lower range of the biological escapement goal? (4) Likewise, in those years, what was the cost-benefit ratio measured in terms of annual loss of harvest in the Dolgoi Island Area and Shumagin Islands Section versus the escapement benefit to early-run Chignik River sockeye salmon?

Data and Assumptions:

- Annual June and July harvest numbers during 2011-2021 are from Tables 282-1 and 282-2 in ADF&G comment RC2 (ADF&G 2022).
- Likewise, whether the midpoint escapement goal was reached, or not, for early-run Chignik River sockeye salmon each year during 2011–2021 ADF&G comment RC2 Table 282-5 (ADF&G 2022).
- Only years during 2011–2021 where midpoint escapement was *not* met were included in the analysis.
- Updated estimates of annual escapement, harvest and run size for early-run Chignik River sockeye salmon were obtained from ADF&G (K. Schaberg *pers. comm.*).
- June and July stock composition estimates for the harvest in the Dolgoi Island and Shumagin Islands areas were from the WASSIP study (Appendix D1-D6 and E1-E8 of Dann et al. 2012).
 - The expected proportions of the harvest in each area composed of early-run Chignik River sockeye salmon was estimated by fitting a mixed-effects logistic regression to the stock composition proportions across temporal (e.g. weekly) WASSIP sampling periods during 2006–2008. Two independent regression models were fit to estimate the expected proportion of early-run Chignik River sockeye salmon in each area.
 - The form of the regression in the *R* computing language for each area was:

$$p \sim \text{month} + (1 | \text{year})$$

- Where: *p* corresponds to the mean of the estimated proportion of early-run Chignik River sockeye salmon during a temporal sampling period in an area (i.e. depending if regression was being fit to the proportions for Dolgoi or Shumagin Islands), during a given *month* (i.e. June or July) in that area, and *year* was treated as a random effect on the expected proportion of early-run Chignik River sockeye salmon in the harvest for that area-month stratum.

- The number of assigned early-run Chignik River sockeye salmon was assumed to be a binomially distributed random variate, given the number of genetic samples in each temporal sampling period and the corresponding mean of the estimated stock composition proportion for that sampling period. WASSIP samples collected during August were excluded from the analysis.
- The resulting estimates were found to be similar in value to a global average proportion calculated across years for the time-period samples in a given area-month stratum. Unlike a simple average proportion approach, however, the estimates from this mixed-effects regression account for the correlation in estimated proportions between samples from each area within a given year.
- Reductions in fishing effort under Proposal 282 followed the interpretation of ADF&G (Figures 282-6 and 282-7 in RC 2). The calculations in this analysis assumed that midpoint escapement was not expected to be met in June or July, and hence the full reduction in fishing hours would have occurred in the Shumagin Islands Section and Dolgoi Island Area. In June, the total allowable fishing time was assumed to be reduced from 416hrs to 272hrs (65.4% of fully allowed effort). In July allowable fishing time was assumed to be reduced from 249hrs to 126hrs (50.6% of fully allowed effort). The percentage of resulting harvest was assumed to be equal to the percentage reduction in fishing time (e.g., June harvest under the full restrictions was assumed to be 65.4% of the harvest that month).

Results and Conclusions

The estimated proportions of early-run Chignik sockeye salmon for the area-month strata that were used in the analyses are shown in Table 1. The results for harvest-escapement loss-benefit calculations for the area-month strata are shown in Table 2. The estimated escapement benefits resulting from the proposed harvest restrictions in the Shumagin Islands Section were generally similar in magnitude to those from the Dolgoi Island Area, but the harvest lost under the restrictions would have been substantially larger on average in the Shumagin Islands Section.

Table 1: Expected proportions (p) of early-run Chignik River sockeye salmon by area-month harvest stratum based on the regression fit to WASSIP stock composition assignments.

Area	Month	Estimated Proportion of Early-Run Chignik Sockeye in the Harvest (p)
Shumagin Islands	June	0.057
Shumagin Islands	July	0.040
Dolgoi Island	June	0.409
Dolgoi Island	July	0.139



Table 2: Intermediate calculations showing the escapement benefits for early-run Chignik River sockeye salmon by area-month stratum in each year that did not meet the midpoint escapement goal during 2011–2021. The expected proportion (p) of early-run Chignik River sockeye salmon in the harvest for each area-month stratum follows Table 1. Harvest is the reported sockeye salmon harvest (all runs) for each area-month stratum in each year. Restricted time is the fraction of fishing time allowed under Proposal 282 in each area-month stratum. Restricted harvest is calculated as the product of Harvest and Restricted time. Harvest lost is the difference between Harvest and Restricted harvest. Escapement benefit is the product of Harvest lost and p .

Year	Area	Month	p	Harvest	Restricted time	Restricted harvest	Harvest lost	Escapement benefit
2012	Dolgoi	June	0.409	29,900	0.654	19,550	10,350	4,233
2012	Dolgoi	July	0.139	36,700	0.506	18,571	18,129	2,526
2013	Dolgoi	June	0.409	14,411	0.654	9,423	4,988	2,040
2013	Dolgoi	July	0.139	36,993	0.506	18,719	18,274	2,546
2014	Dolgoi	June	0.409	79,488	0.654	51,973	27,515	11,253
2014	Dolgoi	July	0.139	242,039	0.506	122,478	119,561	16,657
2018	Dolgoi	June	0.409	11,941	0.654	7,808	4,133	1,690
2018	Dolgoi	July	0.139	42,698	0.506	21,606	21,092	2,938
2019	Dolgoi	June	0.409	30,993	0.654	20,265	10,728	4,388
2019	Dolgoi	July	0.139	132,835	0.506	67,218	65,617	9,142
2020	Dolgoi	June	0.409	2,521	0.654	1,648	873	357
2020	Dolgoi	July	0.139	65,765	0.506	33,279	32,486	4,526
2021	Dolgoi	June	0.409	10,830	0.654	7,081	3,749	1,533
2021	Dolgoi	July	0.139	152,496	0.506	77,167	75,329	10,495
2012	Shumagin	June	0.057	641,213	0.654	419,255	221,958	12,717
2012	Shumagin	July	0.040	120,063	0.506	60,755	59,308	2,386
2013	Shumagin	June	0.057	513,513	0.654	335,758	177,754	10,184
2013	Shumagin	July	0.040	154,953	0.506	78,410	76,543	3,079
2014	Shumagin	June	0.057	239,482	0.654	156,584	82,898	4,749
2014	Shumagin	July	0.040	395,465	0.506	200,115	195,350	7,859
2018	Shumagin	June	0.057	406,806	0.654	265,989	140,817	8,068
2018	Shumagin	July	0.040	337,209	0.506	170,636	166,573	6,702
2019	Shumagin	June	0.057	246,419	0.654	161,120	85,299	4,887
2019	Shumagin	July	0.040	534,937	0.506	270,691	264,246	10,631
2020	Shumagin	June	0.057	118,596	0.654	77,544	41,052	2,352
2020	Shumagin	July	0.040	393,403	0.506	199,071	194,332	7,818
2021	Shumagin	June	0.057	1,168,998	0.654	764,345	404,653	23,184
2021	Shumagin	July	0.040	541,694	0.506	274,110	267,584	10,765

The results aggregated across areas and months are shown for each year in Table 3. The average annual harvest lost was 398,742 sockeye salmon in the Shumagin Islands Section and Dolgoi Island Area combined. The average early-run Chignik River sockeye salmon escapement benefit was calculated as the product of the harvest lost and the proportion of that number that is expected to be composed of early-run Chignik River sockeye salmon. This assumes that all early-run Chignik River sockeye salmon that were not harvested would have survived and returned to Black Lake to be counted towards the biological escapement goal that year. The annual escapement benefit under Proposal 282 would have averaged 27,101 additional early-run Chignik River sockeye salmon per year.



Table 3: Combined Dolgoi and Shumagin Islands sockeye salmon harvest and resulting early-run Chignik River sockeye salmon escapement benefits are shown by year, with the restricted harvest level and harvest lost under Proposal 282. The “Minimum BEG met”, and “Minimum BEG met with benefit” columns show whether the lower range of the BEG (350,000) was met in a given year, and whether the escapement benefit from the proposed effort restrictions on the Dolgoi and Shumagin Islands harvests would have resulted in escapement having reached the lower range of the BEG for each year.

Year	Harvest	Restricted harvest	Harvest Lost	Early-run escapement benefit	Early-run escapement ^a	Early-run escapement with benefit	Minimum BEG met?	Minimum BEG met with benefit?
2012	827,876	518,131	309,745	21,862	356,513	378,375	Yes	Yes
2013	719,870	442,310	277,559	17,849	401,052	418,901	Yes	Yes
2014	956,474	531,150	425,324	40,518	342,404	382,922	No	Yes
2018	798,654	466,039	332,615	19,398	182,991	202,389	No	No
2019	945,184	519,294	425,890	29,048	379,444	408,492	Yes	Yes
2020	580,285	311,542	268,743	15,053	179,200	194,253	No	No
2021	1,874,018	1,122,703	751,315	45,977	296,033	342,010	No	No
Average	957,480	558,738	398,742	27,101				

a. Previously 2013 escapement for early-run Chignik River sockeye salmon were estimated to have been below the midpoint (400,000) of the BEG. It seems likely therefore that the in-season restrictions under Proposal 282 would have been triggered during 2013, and that year is retained in these analyses. Given the updated escapement estimates, however, the 2013 run is now estimated to have reached the midpoint of the BEG.

From 2011 to 2021, the early run of Chignik River sockeye salmon did not meet the midpoint of the current biological escapement goal range (400,000 sockeye) in seven years. The proposed restrictions would not have been necessary in retrospect to satisfy the lower range of the escapement goal (350,000) in three out of those seven years. And of the four years during 2011–2021 in which the early run did not reach the lower range of its escapement goal, the benefits under Proposal 282 would have been insufficient to have met that goal in all but one year. The cost-benefit ratio from Proposal 282 would have been 398,742 sockeye salmon lost on average to the Dolgoi and Shumagin Islands harvest vs. 27,101 additional early-run Chignik River sockeye salmon benefitting escapement per year, or a cost-benefit ratio of approximately 15 to 1 (Table 3).

References

- ADF&G. 2022. Alaska Department of Fish and Game staff comments on commercial, personal use, sport, and subsistence regulatory proposals, Committee of the Whole—Groups 1–3 for the Statewide All Shellfish (except Prince William Sound, Southeast, and Yakutat) and Prince William Sound shrimp only Alaska Board of Fisheries meeting, Anchorage, Alaska, March 26–April 2, 2022. Alaska Department of Fish and Game, Regional Information Report No. 5J22-01, Anchorage.
- Amaya, D. J., Miller, A. J., Xie, S. P., & Kosaka, Y. 2020. Physical drivers of the summer 2019 North Pacific marine heatwave. *Nature communications*, 11(1), 1-9.
- Arimitsu, M.L., Piatt, J.F., Hatch, S., Suryan, R.M., Batten, S., Bishop, M.A., Campbell, R.W., Coletti, H., Cushing, D., Gorman, K. and Hopcroft, R.R., 2021. Heatwave - induced synchrony within forage fish portfolio disrupts energy flow to top pelagic predators. *Global change biology*, 27(9), p.1859
- Batten, S. D., Ostle, C., Hélaouët, P., & Walne, A. W. 2021. Responses of Gulf of Alaska plankton communities to a marine heat wave. *Deep Sea Research Part II: Topical Studies in Oceanography*, 105002.
- Braun, D. C., & Reynolds, J. D. 2014. Life history and environmental influences on population dynamics in sockeye salmon. *Canadian Journal of Fisheries and Aquatic Sciences*, 71(8), 1198-1208.
- Brennan, S. R., Schindler, D. E., Cline, T. J., Walsworth, T. E., Buck, G., & Fernandez, D. P. 2019. Shifting habitat mosaics and fish production across river basins. *Science*, 364(6442), 783-786.
- Carey, M. P., Zimmerman, C. E., Keith, K. D., Schelske, M., Lean, C., & Douglas, D. C. 2017. Migration trends of sockeye salmon at the northern edge of their distribution. *Transactions of the American Fisheries Society*, 146(4), 791-802.
- Cheung, W. W., & Frölicher, T. L. 2020. Marine heatwaves exacerbate climate change impacts for fisheries in the northeast Pacific. *Scientific reports*, 10(1), 1-10.
- Cline, T. J., Ohlberger, J., & Schindler, D. E. 2019. Effects of warming climate and competition in the ocean for life-histories of Pacific salmon. *Nature Ecology & Evolution*, 3(6), 935-942.
- Creelman, E. K., Hauser, L., Simmons, R. K., Templin, W. D., & Seeb, L. W. 2011. Temporal and geographic genetic divergence: characterizing sockeye salmon populations in the Chignik Watershed, Alaska, using single-nucleotide polymorphisms. *Transactions of the American Fisheries Society*, 140(3), 749-762.
- Connors, B., Atlas, W., Melymick, C., Moody, M., Moody, J., & Frid, A. 2019. Conservation risk and uncertainty in recovery prospects for a collapsed and culturally important salmon population in a mixed-stock fishery. *Marine and Coastal Fisheries*, 11(6), 423-436.
- Connors, B., Malick, M.J., Ruggerone, G.T., Rand, P., Adkison, M., Irvine, J.R., Campbell, R. and Gorman, K., 2020. Climate and competition influence sockeye salmon population dynamics across the Northeast Pacific Ocean. *Canadian Journal of Fisheries and Aquatic Sciences*, 77(6), pp.943-949.
- Cunningham, C. J., Branch, T. A., Dann, T. H., Smith, M., Seeb, J. E., Seeb, L. W., & Hilborn, R. 2018. A general model for salmon run reconstruction that accounts for interception and differences in availability to harvest. *Canadian Journal of Fisheries and Aquatic Sciences*, 75(3), 439-451.
- Dann, T. H., C. Habicht, S. D. Rogers Olive, H. L. Liller, E. K. C. Fox, J. R. Jasper, A. R. Munro, M. J. Witteveen, T. T. Baker, K. G. Howard, E. C. Volk, and W. D. Templin. 2012. Stock Composition of Sockeye Salmon Harvests in Fisheries of the Western Alaska Salmon Stock Identification Program (WASSIP), 2006-2008. Alaska Department of Fish and Game, Special Publication No. 12-22, Anchorage.
- Di Lorenzo, E., & Mantua, N. (2016). Multi-year persistence of the 2014/15 North Pacific marine heatwave. *Nature Climate Change*, 6(11), 1042-1047.



- Elhakeem, M., & Papanicolaou, A. N. (2008). Evaluation of the reduction in the water storage capacity of Black Lake, AK. *International journal of river basin management*, 6(1), 63-77.
- Farley, E. V., Murphy, J. M., Adkison, M. D., Eisner, L. B., Helle, J. H., Moss, J. H., & Nielsen, J. (2007). Early marine growth in relation to marine-stage survival rates for Alaska sockeye salmon (*Oncorhynchus nerka*).
- Fergusson, E., Miller, T., McPhee, M. V., Fugate, C., & Schultz, H. 2020. Trophic responses of juvenile Pacific salmon to warm and cool periods within inside marine waters of Southeast Alaska. *Progress in Oceanography*, 186, 102378.
- Griffiths, J.R., Schindler, D.E. and Seeb, L.W., 2013. How stock of origin affects performance of individuals across a meta-ecosystem: an example from sockeye salmon. *PLoS One*, 8(3), p.e58584.
- Hilborn, R., Quinn, T. P., Schindler, D. E., & Rogers, D. E. 2003. Biocomplexity and fisheries sustainability. *Proceedings of the National Academy of Sciences*, 100(11), 6564-6568.
- Litzow, M.A., Hunsicker, M.E., Ward, E.J., Anderson, S.C., Gao, J., Zador, S.G., Batten, S., Dressel, S.C., Duffy-Anderson, J., Fergusson, E. and Hopcroft, R.R., 2020. Evaluating ecosystem change as Gulf of Alaska temperature exceeds the limits of preindustrial variability. *Progress in Oceanography*, 186, p.102393.
- Lloyd, D. S. 1996. Relative effects of mixed stock fisheries on specific stocks of concern: a simplified model and brief case study. *Alaska Fishery Research Bulletin*, 3(1), 21-31.
- Mantua, N. J., Hare, S. R., Zhang, Y., Wallace, J. M., & Francis, R. C. 1997. A Pacific interdecadal climate oscillation with impacts on salmon production. *Bulletin of the American Meteorological Society*, 78(6), 1069-1080.
- Policy for the management of sustainable salmon fisheries, § 5 AAC 39.222. 2000.
<http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2016-2017/jointcommittee/5aac39.pdf>
- Rich, H.B., Quinn, T.P., Scheuerell, M.D. and Schindler, D.E., 2009. Climate and intraspecific competition control the growth and life history of juvenile sockeye salmon (*Oncorhynchus nerka*) in Iliamna Lake, Alaska. *Canadian Journal of Fisheries and Aquatic Sciences*, 66(2), pp.238-246.
- Rogers, L.A., Schindler, D.E., Lisi, P.J., Holtgrieve, G.W., Leavitt, P.R., Bunting, L., Finney, B.P., Selbie, D.T., Chen, G., Gregory-Eaves, I. and Lisac, M.J., 2013. Centennial-scale fluctuations and regional complexity characterize Pacific salmon population dynamics over the past five centuries. *Proceedings of the National Academy of Sciences*, 110(5), pp.1750-1755.
- Rogers, L. A., Wilson, M. T., Duffy-Anderson, J. T., Kimmel, D. G., & Lamb, J. F. 2021. Pollock and “the Blob”: Impacts of a marine heatwave on walleye pollock early life stages. *Fisheries Oceanography*, 30(2), 142-158.
- Ross, I. 2021, September 13. As low Chignik salmon runs continue, people worry their communities will disappear. *KTOO*. <https://www.ktoo.org/>
- Ruggerone, G.T., 2003. Rapid natural habitat degradation and consequences for sockeye salmon production in the Chignik Lakes system, Alaska.
- Schaberg, K.L., Foster, M.B. and St. Savior, A. 2019. Review of salmon escapement goals in the Chignik Management Area, 2018. Alaska Department of Fish and Game, Fishery Manuscript Series No. 19-02, Anchorage.
- Schindler, D. 2019, February 2017. RE: Status of Rearing and Spawning Capacity of Chignik Lakes Watershed for Sockeye Salmon.
- Schindler, D. E., Hilborn, R., Chasco, B., Boatright, C. P., Quinn, T. P., Rogers, L. A., & Webster, M. S. 2010. Population diversity and the portfolio effect in an exploited species. *Nature*, 465(7298), 609-612.



- Suryan, R.M., Arimitsu, M.L., Coletti, H.A., Hopcroft, R.R., Lindeberg, M.R., Barbeaux, S.J., Batten, S.D., Burt, W.J., Bishop, M.A., Bodkin, J.L. and Brenner, R., 2021. Ecosystem response persists after a prolonged marine heatwave. *Scientific reports*, 11(1), pp.1-17.
- Tillotson, M. D., & Quinn, T. P. 2016. Beyond correlation in the detection of climate change impacts: Testing a mechanistic hypothesis for climatic influence on sockeye salmon (*Oncorhynchus nerka*) productivity. *PloS one*, 11(4), e0154356.
- Walsh, J.E., Thoman, R.L., Bhatt, U.S., Bieniek, P.A., Brettschneider, B., Brubaker, M., Danielson, S., Lader, R., Fetterer, F., Holderied, K. and Iken, K., 2018. The high latitude marine heat wave of 2016 and its impacts on Alaska. *Bull. Am. Meteorol. Soc.*, 99(1), pp. S39-S43.
- Walsworth, T.E., Baldock, J.R., Zimmerman, C.E. and Schindler, D.E., 2020. Interaction between watershed features and climate forcing affects habitat profitability for juvenile salmon. *Ecosphere*, 11(10), p.e03266.
- Westley, P.A.H., Hilborn, R., Quinn, T.P., Ruggerone, G.T. and Schindler, D.E., 2008. Long-term changes in rearing habitat and downstream movement by juvenile sockeye salmon (*Oncorhynchus nerka*) in an interconnected Alaska lake system. *Ecology of Freshwater Fish*, 17(3), pp.443-454.
- Yasumiishi, E. M., Ciciel, K., Andrews, A. G., Murphy, J., & Dimond, J. A. 2020. Climate-related changes in the biomass and distribution of small pelagic fishes in the eastern Bering Sea during late summer, 2002–2018. *Deep Sea Research Part II: Topical Studies in Oceanography*, 181, 104907.



Submitted By
ILIA KUZMIN
Submitted On
3/9/2022 1:02:04 PM
Affiliation

Phone
19072991818
Email
kuzmini1818@gmail.com
Address
P O Box 3433
Homer, Alaska 99603

Hello Mr.Chair and board members my name is ILIA KUZMIN and I'm a permit holder in the Kodiak tanner crab fishery. I would like to ask the board to move the opening date from January 15th to February 1st. There are 2 reasons that affect my ability to go fishing on time and 1. For the past years the cold weather in homer freezes the harbor and it's hard to get out of the harbor 2. Weather is usually better beginning of February. So please consider my request and change the opening date to February 1st...



Greetings to all concerned:

From: Jack & Barbra Donachy

To: Alaska Board of Fisheries
Board Support Section

March 11, 2022

Re: Proposal 282 - Chignik River Salmon and Intercept Fisheries.

Greetings to all:

My wife, Barbra Donachy, and I moved to Chignik Lake in the summer of 2016. Having consistently read and been told that the state of Alaska uses science to manage its salmon runs, we have been shocked and dismayed upon studying how the Chignik run is managed to learn that any notion that “science” is informing run management is a fiction.

An intercept fishery, by its very nature, cannot be supported by data. Board managers confirm this when instead of offering scientific rationale for permitting the interception of Chignik River salmon they reference “tradition” and observe that Area M fishermen “already own boats.”

It should be pointed out that Chignik area fishermen also “already own boats,” and residents here have been relying on the subsistence harvest of Chignik River salmon for untold generations prior to Area M commercially intercepting Chignik River fish.

The other tiresome, unscientific rationale presented again and again by the Board of Fisheries and its associate ADFG biologists is that “we really don’t know what’s causing low salmon returns” to the Chignik River. Of course you don’t know. Simply counting fish at the Chignik River Weir is not the same thing as studying the run. In order to make an honest scientific study, the Board and biologists would need to begin by paring down variables affecting the run. While it’s true that some variables are beyond human control, the most obvious factor the Board and biologists could and *should* control for is the intercept fishery: suspend it until a better understanding of what is impacting the Chignik’s salmon runs can be determined.

From a purely scientific viewpoint, *all* commercial salmon fisheries should be operated



as terminal fisheries.

As to economics, while maintaining the nonscientific status quo benefits fishermen further down the peninsula, it is having a *catastrophic* impact on Chignik fishermen, our communities, and our families. A further point is this: Area M fishermen are taking salmon while they are still growing. A terminal fishery, located in the waters near the Chignik River, would ensure that A) salmon are being harvested at their maximum weight and maximum economic value, B) that escapement goals could be far more accurately managed, and C) that commercial processing/packing plants would have a consistent economic incentive to maintain a viable presence in Chignik Bay.

Barbra and I would like the Board to begin managing the Chignik Run based on science.

We support Proposal 282 as a step toward a more science-based approach.

Sincerely,
Chignik Lake Residents Jack & Barbra Donachy

Jack Donachy
Chignik Lake, Alaska



February 17, 2022

Dear Board of Fish,

Lower the escapement for a year and study the results.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous “over escapement” issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jack Rogers

Castle Dale
84513



February 16, 2022

Dear Board of Fish,

I live and work on the Kenai river, and this measure is extremely concerning. Our Kenai river king salmon are already facing a serious decline, and this proposition would allow for even more incidentally caught kings. All this supports is greed.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water? Where is the logic in that?

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jacquelynn Bowman

Cooper Landing
99572



February 22, 2022

Dear Board of Fish,

I'm from Minnesota and actually have never visited Alaska; however, I have numerous friends that have left to move to Alaska for the fishing and outdoor possibilities.. I believe extending the commerical fishery will greatly impact not just your tourism but also your future residents that are deciding to move to your state. I hope you take this into consideration.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jake Blong



Alaska Board of Fisheries

Board Support Section

P.O. Box 115526

Juneau, Alaska 99811-5526

Subject: Support for Proposal 282

Dear Alaska Board of Fisheries,

Can you help protect our sockeye run? I think it's very important to note that there are no salmon streams that are being monitored for escapement in the Shumagin Island Section and Dolgoi Island Area and the fish they are catching are bound for the Chignik River where the escapement goal is not being met. This modification will greatly improve the chances of meeting the escapement goals in the Chignik Management Area which in turn will protect the sustainability of our Salmon run, not just for the profitability of commercial harvesters but also, more importantly, to conserve the culture and subsistence capabilities of the communities and maintain the balance of the salmon ecosystem. I would like the Alaska Board of Fisheries to approve Proposal 282.

Thank you,

James Anderson

City Council Member

Box 86

Chignik, AK 99564



February 17, 2022

Dear Board of Fish,

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous “over escapement” issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Connell

Marcola
97454



March 11, 2022

Dear Board of Fish,

I m a 20 year Air Force veteran in 1962 I and my family were assigned to ELMendorf AFB after 2 four 4 Yrs I retired in 1975. I hired on with ALASCOM for 20Yrs. I lived in ANC. Retired in 1991 from ALASCOM. I moved Sterling Ak on the Kenai river. I have fished the Kenai for 60 years. The last 15 years has been a disaster King returns below minimum levels. I have had to buy my King a year from a out state commercial fisherman living on Kbeach Rd in the summer. The Board needs to do their job manage the fishery and (stop) the Kenai River commercial fishing. Sincerely Jim.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Fena

Sterling
Sterling
99672



February 22, 2022

Dear Board of Fish,

My brothers and I started a salmon sport fishing guide service on the Kenai River in 1978. Fishing was wonderful in the late "70's" into the "80's". In the "80's" emergency fishing by the Central District commercial fishermen became commonplace. Limited Entry was implemented in 1972 to prevent over harvest, as was the case in the "50's" until the "crash" that came in the early "60's". Allowing commercial fisheries to fish twice a week can sustain a fishery. However, in the "80's & 90's" the use of continuous commercial fishing periods proved to be a great way to produce another "salmon crash" on the Kenai and Kasilof Rivers. Now you want to lower king salmon escapement numbers with Proposal 283 so commercial fisheries can get more emergency fishing time. Apparently greed amongst the commercial fisheries is very difficult to control! ADF&G's incompetence even has produced poor escapement levels for the sockeye salmon, which is largely due to allowing too much emergency fishing periods.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Johnson

SOLDOTNA,
99669



March 10, 2022

Dear Board of Fish,

Please bring this fishery back to what it was in its glory days. Packed hotels, restaurants, and all local businesses thrived during the king season.

The greater good has to be protecting our local economy.

James Nelson

Sterling, Alaska

Resident for 35 years

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous “over escapement” issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Nelson

Sterling

99672



March 09, 2022

Dear Board of Fish,

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Schwanke

Kenai
99611



February 23, 2022

Dear Board of Fish,

Though I am not a resident of your great state, I have been fishing the Kenai River off and on for almost 20 years. I have seen the king population at it's highest and now at it's worst. I have seen the river choked by the commercial fisherman where no sockeye are coming into the river. I have spent two weeks fishing kings and never landing one. You can give reasons for that but we all know the commercial fisherman have decimated the population. As a fisherman of the Kenai and someone who lives Alaska, please don't vote to give any more power or put any commercial fisherman anywhere near the Kenai River.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James White

Butler
41006



February 18, 2022

Dear Board of Fish,

If this Kenai fishery continues on the politically driven path chosen by commercial interests not only fisherman and charter operations the past twenty years, soon there will never be large Kenai kings nor a king run! The entire king salmon fishery in the state needs to be protected and that may involve closing polluck fishing which kills more kings than anything! Managing these fisheries should be a priority void from political and economic interests

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

James Yassick



March 02, 2022

Dear Board of Fish,

Lowering the escapement numbers for Kings I am completely against.

If the Department of fish and game would outlaw catch and release in the Kenai river, then I may have a different opinion but, so many people don't realize how long it takes to revive a king salmon after being fought out and then released immediately which I see most people do. Kings take a long time to revive after being caught and netted. The survival rate on catch and release is extremely low. If you want to guard the escapement numbers of kings, just close it down! Just because catch and release still brings people to the area to Fish, certainly does not help the survival rate. Thank you.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jamie Lyons

Kenai
99611



Submitted By
Jamie Wurtz
Submitted On
3/9/2022 6:54:15 PM
Affiliation

Phone
2067699063
Email
wurtzfisheries@gmail.com
Address
1368 Chuckanut Dr
Bellingham, Washington 98229

As a young aspiring fisherman who has only recently been able to invest in my own boat and license I am greatly concerned about the Board and Departments potential to reduce time and remove area from our fishery. I have been fishing Area M since 2008 in the summer salmon fishery as well as winter cod and crab but more recently my primary source of income and the passion the keeps me working in this area is the salmon fishery.

In the time I have spent in and around Sand point and King Cove I have grown a huge amount of respect for the local fishermen and their efforts to maintain a healthy and environmentally responsible industry, fishing here is the lifeblood of the community, every year people look expectantly towards the salmon fishery as the most important and community driven aspect of their summers. It is in their blood, the long days, working together with your family, sharing salmon with your neighbors and community members. This has not been a new tradition in Area M and False Pass but goes back generations before statehood as the primary way to prepare for a give sustenance to the community that live here year round.

Historically there has not been evidence that these mixed stock fisheries have adversely affected any stock of fish despite multiple management plans by the Board over the past decades. In fact the very attribute of multiple stock means there is a significant protective buffer against any one weak stock.

Alaska has always maintained that mixed-stock marine fisheries, opened in waters where salmon grow to maturity, have as much right to harvest as fisheries opened in streams where salmon originate. Salmon are common property that belong to everyone, not just those situated near salmon freshwater habitat. There is no priority allocation for stakeholders closer to the stream of origin of salmon stocks. Mixed stock fisheries are far more common in Alaska than single stock terminal fisheries and should be recognized and protected by the Board.

Proposal 282 is about allocation, not conservation. When returns to Chignik are unusually low, the Department can use its emergency order authority, as it did in 2018 and 2020, to restrict Area M harvests in an attempt to protect Chignik runs. Given that authority, there is no conservation need to alter the Area M management plans in an out-of-cycle meeting, especially given the Department' forecast that the Chignik runs will meet their escapement goals and allow for significant commercial harvests in Chignik in 2022.

Historically the Board has taken significant actions to reduce multiple fisheries in an effort to increase runs to Chignik primarily targeting Kodiak and Area M fishermen as well as in 2018 and 2020 the department took emergency order actions to further restrict Dolgoi and Shumagin Island area fisheries. These actions failed to lead to corresponding increases in Black Lake returns and without valid scientific data to back up these actions making significant improvements to the Chignik returns.

If you follow the data from the WASSIP studies the proportion of the harvest impact in 2006 and 2007 was in the Dolgoi Island Area (14.5% in 2006 and 4.7% in 2007), which has led the Board and the Department to impose significant restrictions on that fishery. The proportion of the total Black Lake run harvested in the Shumagin Islands Area was 7.0% in 2006, 3.7% in 2007 and 4.7% in 2008. These harvest rates, which, according to WASSIP, were biased high, are in line with those the Board has previously determined do not present conservation or allocation concerns.

Chignik fishermen have long blamed fisheries in other areas for problems with their fisheries, including fisheries in Cape Igvak, the Southeast District Mainland, the Shumagin Islands and the Dolgoi Island Area and have persuaded the Board and the Department to impose significant restrictions on these fisheries. However, those restrictions have not coincided with increased returns to Chignik. For example, in 2019 and 2020, harvest in the June Shumgain Islands and Dolgoi Island Area fisheries were well below average, yet the



returns to Black Lake were still depressed. In 2020, the June Shumagin Islands fishery harvested only 118,596 sockeye and the June Dolgoi Island fishery harvested only 2,521 sockeye. The low returns to Black Lake that year cannot be attributed to these low harvests. Notably, the decline in Black Lake run sizes coincided with a long-term decline in the overall condition of out-migrating Chignik sockeye smolts from 2007 to 2016, to the lowest levels since at least 1993 (see Chignik River System Sockeye Salmon Smolt Sampling Report, 2019-2020 at page 24, Figure 7), and anomalous ocean conditions. The decline in smolt conditions may have been associated with habitat degradation; according to the Chignik Aquaculture Association's Mission Statement, Black Lake has experienced a loss of substantial lake volume and an inlet tributary, the Alec (Scow) River, has been re-routed to where circulation, nutrient input, and fry access into the main basin are compromised. Fortunately, the Department's 2019 and 2020 smolt study showed a significant improvement in the condition of out-migrating smolts (id.) and the anomalous ocean conditions have abated, which might help explain the Department's forecast of 2022 Black Lake returns well above its escapement goal range. The evidence as a whole strongly suggests that recent low Black Lake run sizes resulted from a combination of unusually poor smolt conditions and an unusual ocean environment rather than intercept fisheries.

The real driver for the Shumagin Island June fishery is the availability of Bristol Bay sockeye, which experienced both a record run size and ocean conditions that resulted in their availability in the Shumagin Islands fishery in 2021. As fishermen, we can distinguish smaller, west-migrating Bristol Bay sockeye, in 2021 our catch was overwhelmingly comprised of Bristol Bay sockeye. This is consistent with WASSIP data; in 2007 and 2008, when Bristol Bay sockeye contributed between 73.9% and 89.4% of our harvests, the Black Lake run contributed only 0.2% to 4.7%.

Because ADF&G has the ability to close area and reduce fishing time in the event of an emergency I think it is not prudent to make changes to the current fishing schedule and allocation until there has been enough time to do a thorough analysis and review corresponding data.

A decision that will affect so many peoples livelihoods should be given a thorough vetting. This can be established during the previously designated 2023 meeting schedule when at the same time there will be full review of Chignik management, harvest opportunities, escapement sockeye runs. Any pressing need to act in 2022 as opposed to during in-cycle meeting in 2023 is weakened by ADF&G's forecast that Chignik runs will meet escapement in 2022. The Department's preliminary forecast for Chignik is for an early run of 639,000, with escapement of 400,000 and harvest of 239,000.

Thank you for listening to local fishermen and their concerns, I hope to have a healthy and prosperous summer and with the best for all of our Alaskan fishermen statewide.

Thanks – Jamie and Mia Wurtz

F/V Paragon, Silverbay fisherman in Area M



February 16, 2022

Dear Board of Fish,

I live in Utah. Salmon is an important part of my diet and I want plenty of salmon for generations to come.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous “over escapement” issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Janae Frazer
Bluffdale
84065



February 22, 2022

Dear Board of Fish,

Harvesting as a way to get to abundance makes no sense- practically or economically.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous “over escapement” issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jane Holtan

Brainerd
56401



February 19, 2022

Dear Board of Fish,

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals. This is not in the best interest of the fishery.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Janelle Manion

Kenai
99611



Jason D. Alexander
213 Airport Road
P.O. Box 69
Chignik, AK 99564

January 4, 2022

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

Subject: Support Proposal # 282 (ACR 7)

Dear Alaska Board of Fisheries Members:

As a 40 plus year Chignik commercial fisherman, who has experienced fluctuations in Chignik sockeye runs, never have I seen such a continuation of runs failures as currently occurring. Chignik's the early and late runs are in serious trouble. Since 2018, the early run has repeatedly failed to reach minimum escapement (350K) or even close to the 400K level set by the Department for a commercial fishery.

When Chignik is not achieving escapement in June and July, the Shumagins and the Dolgoi islands should be reduced to less fishing time. These are known harvest areas for migrating Chignik-bound sockeye salmon.

Escapement goals are a priority for run sustainability and MSY, and escapement requirements across fishing areas are to be shared proportionately. Passing Proposal 282 would go a long ways toward ensuring Chignik escapement is reached on poor run years.

Undoubtedly Area M fishermen in the Shumagins and the Dolgoi area would like the Board to make no changes to their current fishing schedule in the Shumagins and Dolgoi area regardless of the impact on the Chignik runs. If the shoe was on the other foot, they might think differently. If Bristol Bay stocks as an aggregate were not meeting escapement goals would the Board permit the south side of Area M to continue to harvest irrespective---probably not. Area M should be required to lessen its impact on Chignik bound sockeye salmon when Chignik escapement deficiencies arise.

I support Proposal 282 and respectfully ask the Board to do likewise.

Thank you

Respectfully,

Jason Alexander

A handwritten signature in blue ink that reads "Jason Alexander".



March 10, 2022

Dear Board of Fish,

I've lived on the Kenai Peninsula for the past 41 years. I used to fish the Kenai with my dad when I was young and the fish were plentiful. Now I hardly fish it at all. I've watched the steady decline on our king salmon and I'm disappointed that my son will never know what the river used to produce.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

The OEG is the OEG for a reason. The escapement threshold was set because that is the minimum number of salmon that need to enter the river so that the fishery can rebuild. I am not willing to give up on the Kenai River king salmon. Please vote no on Proposal 283.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jason Avigo

Soldotna
99669



February 18, 2022

Dear Board of Fish,

While I am not a resident of Alaska, I have travelled to your beautiful state for its world class salmon fishery several times over the past decade. Even when I don't have a trip planned, I stay apprised on the fishing conditions via reports from the Alaska Department of Fish and Game. And those king salmon reports -- and harvest restrictions -- give me pause when I think about Proposal 283.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

The economy of the Kenai Peninsula relies on its salmon fisheries. However, the economics point to the sport-caught fisheries being the economic powerhouse, NOT the commercial fishery. Regardless, we need to rebuild the king salmon runs to support both economic engines. Are you willing to risk an entire species' survival to pull a few sockeye out of the water?

The standard should remain that meeting the conservation needs of the weakest stocks is more important than avoiding the upper limit of another species. Passing 283 would indicate that the Board has abandoned weak-stock management principles.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jason HALE

LITTLETON
01460

Email address: jayhalepal@aol.com
Phone number: 16177925543



February 17, 2022

Dear Board of Fish,

I like to fish down on the kenai.

Kenai River king salmon have not been meeting spawning objectives for years, and Proposal 283 potentially allows the commercial harvest of kings when we haven't clearly met the lower escapement goals.

The Optimal Escapement Goal (OEG) is a higher threshold intended to not only halt salmon decline but also allow the fishery to recover. The Sustainable Escapement Goal (SEG) is the absolute bare minimum number of fish needed for the species to survive and does nothing to improve the fishery. Ultimately, if Proposal 283 is passed, survival of the king salmon fishery in the Kenai River is further threatened.

Currently ADF&G cannot reduce fishing restrictions until the OEG is achieved. If passed, Proposal 283 would allow projected escapements to be utilized rather than actual fish in the river. It's literally putting the cart before the horse; commercial fishing will be permitted before sufficient king salmon have actually made it into the river, based on the OEG.

Most sportfishers know what needs to be done to protect the Kenai River king salmon. When the escapement numbers are not being achieved, there is zero scientifically valid reason to risk a single king salmon's opportunity to spawn.

I thank the Board for the historic actions taken in 2020 to protect the Late Run Kenai River king salmon. Modifications like 283 threaten those protections and is the first step in a slippery slope to lighten the burden of conservation for some users, while maintaining restrictions on others. It disregards the principles of weak stock management and overemphasizes tenuous "over escapement" issues. Finally, this proposal promotes the financial interests of a few entities over the clear need to conserve a species. I oppose Proposal 283 and ask the Board of Fisheries to vote No on this proposal. Stay the course and protect the kings.

Jason Hasegawa

Anchorage
99507