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...making data talk since 1987

Alaska Board of Fisheries

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Dear Board Members:

I am writing this letter to support Proposal 57, "Repeal set and drift gillnet allocations in the Naknek-Kvichak District, as follows: This proposal is to repeal Allocation in the Naknek-Kvichak District, and manage the way it was before allocation was implemented."

Who I am: I was born on a homestead on Lake Iliamna, the 4th of six children. My parents moved us to Naknek in 1959 when I was 4 years old. That was the year my mother started setnetting with her children as crew while my father drifted. In 1975, the first year of limited entry, my parents had been divorced for years, my mother was overwhelmed, and my older siblings had dispersed away from fishing. As a 19 year-old college student, I applied for setnet permits for four family members to fish the four sites we had fished since 1959. (We started with two and added two outside sites in 1969.) I have been fishing those sites with family and friends every season since.

After graduating from college, I enrolled in graduate school and eventually earned a PhD in physiological psychology with a minor in quantitative psychology, and started a second business in research and statistical analysis.

I combined these two careers to tackle and try to reverse the Allocation Plan by explaining the harm it does, balanced by no good that I am aware of.

I am unclear of the intended benefits of allocation, but I hope to show you that setnetters, Alaskans, and local communities are paying a very high price in unintended effects that I think outweigh any potential benefits. The data also show that it is not necessary to impose a fixed percentage on the fleet to ensure equity between gear types; equity is achieved by the amount of gear in the water.

Allocation does not work when one group is mobile and the other is not

The fundamental problem with allocation is that the drift fleet is mobile (and can move between the districts in Bristol Bay) and the setnet fleet is not. Figure 1 shows the variation in the number of drift boats fishing in the Naknek Kvichak (NK) district, and the consistency in the number of setnets. The current allocation split (84%/16%) was based on 10 seasons between 1985 and 1995 (excluding 1986, the one season when only 300 drift boats were registered in the district), the index years. During these years an average of 500-600 drift boats fished in the NK district during the peak of the season.

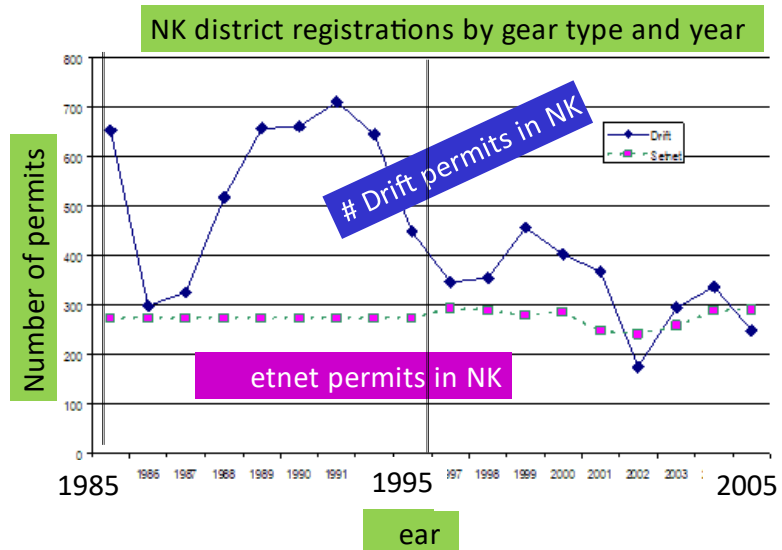
Starting in 1997, when allocation was enforced in the NK district, the number of drift boats fishing the district during the peak of the season dropped well below that average. Since 2016, the average number of drift boats fishing the district during the peak has been around 325. In three of those years, the number of drift boats in the district during the peak has fallen below 300 – and one year, below 200.

It is unreasonable to expect 325 boats to catch the same percentage of the harvest as almost twice as many boats. When the setnet effort remains unchanged and the drift effort falls to half its previous level, the allocation policy directs the biologists to close fishing to the user group that is ahead on allocation. *In every instance that allocation has caused a user group to lose fishing time in the NK district, Naknek setnetters are the first to be closed.*

To make the point even more dramatically, suppose the drift effort fell to 10 boats. How long would setnetters be closed to fishing while those 10 boats caught the fish more than 500 boats are expected to catch? We approach this extreme when the fishery is moved to the Naknek River Special Harvest Area and even more of the drift fleet transfers out of the district, an opportunity that is not available to setnetters because our fishery is limited by permits **and by available fishing sites**.

Before allocation, the mobility of the drift fleet benefited everyone. Drifters distributed themselves to districts according to expected salmon return, maximizing harvest and helping to control escapement. In poor NK years, this meant less competition for fewer fish, benefiting setnetters who could not change districts and the drifters who decided to remain in NK. In big NK years, this meant that setnetters would not be overwhelmed by the fish – the drift fleet would be on hand to help harvest them. But after allocation, this benefit has been reversed. In poor years, with a lower drift effort, setnetters get ahead on allocation and as a result *are shut down*, making an already poor season worse. In good years, with a

1. Drift fleet effort in NK during the peak varies greatly; setnet effort is stable



greater drift effort, the drift fleet might get ahead of allocation and if they get shut down, a) the risk of over-escapement increases and b) setnetters get overwhelmed with fish quantity. When possible, it is best to minimize the feast-or-famine aspect of a fishery. Allocation exacerbates it.

Harvest is most equitable without pre-determined allocation

When allocation began to apply to the NRSHA, after most drifters abandoned the NK district for more productive fishing or gave up and pulled their boats early, the remaining much-reduced fleet (of mostly non-residents) exhausted themselves fishing around the clock or they passed up fishing opportunities to dock up and sleep while setnetters (mostly residents) barred by allocation from fishing their own permits, lined up in their pickup trucks on the beach to watch the drifters scoop up the fish the setnetters had expected a fair share of to see them through the winter.

Is this what a fair distribution looks like? The local permit-holders, those who live in the community and watch over the river all winter, being disproportionately barred from fishing?

At the end of one of these seasons, one drifter complained about how *unfair* it was *to drifters* that those few drifters did not catch the fleet's allocated 84%. He dared to say this to a setnetter who had FOUR openings over the entire peak of the run, compared with drifters who had 15. That was in 2004. In 2005, drifters had 12 openings during the peak, while setnetters had three. In 2006's peak, drifters had 13 openings while setnetters had two. While most of the complaints voiced by drifters were about how tired they were from round-the-clock fishing, one complained that the *fleet* hadn't caught *enough*!

Since most setnetters are residents and most drifters are nonresidents, it might be fair to say in 2004, residents had four openings over the entire peak of the run while nonresidents had 15. In 2005, residents had three openings while residents had 12. In 2006, residents had two openings while nonresidents had 13. What are the benefits of allocation? Do they justify these costs?

As fishermen, we expect some good years and some poor years. Allocation made the poor years even worse because it disproportionately disadvantages the user group with the most Alaskan residents, by preventing them from fishing. After enough seasons crippled by the Board of Fisheries' allocation plan, it is no wonder that local setnet permit holders may be forced to sell their permits to support their families, or, because of being unable to fish their setnet permit in the summer, they are forced to move away from the village to where they can get a non-fishery job in the winter – to support their families. When allocation makes a poor year worse, year after year, it can be financially and emotionally extremely difficult to hang on, waiting for the next good year.

This story shows that catch equity in a district is accomplished by individual fishermen, not by the fleet as a whole (when only part of that fleet can leave the district).

What is the evidence that catch is equitable by user group without allocation?

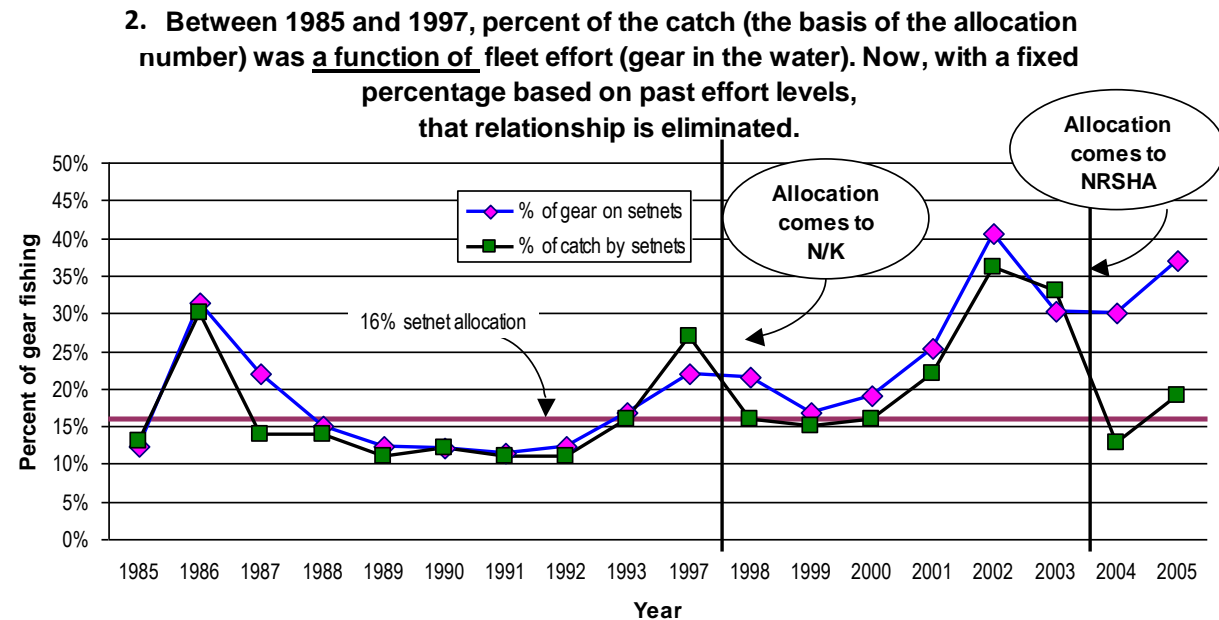


Figure 2 shows three important things¹:

1. Prior to the onset of allocation in the NK district, setnetters had about an average of about 14% of the gear in the water. (The allocation percentages were based on average catch percentages from 1985 to 1995, omitting 1986). The blue line with the pink diamonds shows the percentage of setnet gear in the water. 1986 and 1997 were different. They were both extremely poor years in the NK district and unsurprisingly, many of the drifters chose more promising districts to fish the peak, while setnetters were and are tied to their sites. After 1997 (and after allocation started in the NK district) drifters were less likely to fish the peak in the NK district and as a result, setnetters had an increasing percentage of gear in the water, but our catch potential had been limited by the effort of the drift fleet.
2. Until allocation came to Naknek/Kvichak, catch followed effort. (The green squares on the black lines show percent of catch in the NK district by setnets.) That is, if setnetters had 12% of the gear in the water, they caught about 12% of the fish. Occasionally this relationship broke down. Weather patterns sometimes favor setnetters; sometimes drifters. Also, in poor seasons, drifters tend to stop fishing sooner because of the cost to operate the drift boat. The economics of setnetting are different, so we are likely to fish longer to try to make a season. However, apart from these factors, *this figure shows that after allocation, setnet catch consistently fell below setnet effort* – that is, we didn't catch the percentage of harvest expected based on the percentage of setnet gear in the water.

¹ More recent data are excluded here because I didn't realize that there was an allocation proposal before this year's BOF. I prepared this graph for the 2006 meeting, but did not get a chance to share it. As much as possible with the time available, I've supplemented with more current information. Even though these data are old, they illustrate the impact of the variable drift fleet size. The pattern has not changed except to become more extreme.

3. This separation of effort and catch was dramatically exacerbated when allocation moved into the Naknek River Special Harvest Area (NRSHA). Setnet catch collapsed because even more drifters left for other districts or just stopped fishing for the season, leaving a very small fleet to try to catch 84% of the fish while, at that time, fishing only one-third of their gear. Setnetters were desperate to fish, but had to wait for the drifters to catch their 84% which it seemed to us watching from the beach, that they weren't trying very hard to do. I recall wanting to offer to fish *for* them, and give them whatever I catch so that I could have a chance to fish before they all swim by.

When allocation in the NRSHA has been enforced, setnetters have been almost completely prevented from fishing during the peak of the run.

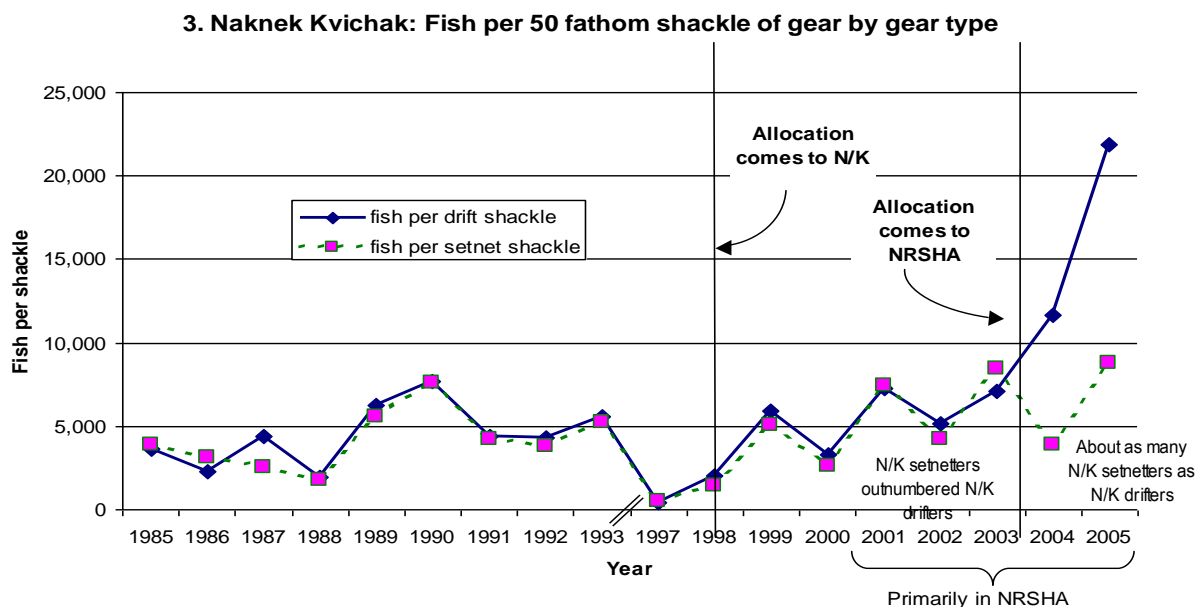


Figure 3 shows that shackle to shackle, on average NK setnetters caught about the same number of fish as NK drifters. Initially, when fishing in the NRSHA, drifters and setnetters fished alternating tides and we stayed about even... until allocation came to the NRSHA and Figure 2 tells the story. At the next NK Board of Fisheries meeting when allocation was on the agenda, a new ruling specified that setnetters would be required to sit idle for *no more than three tides*. That's a lot of idleness during the peak of the season!

In recent years, with large portions of the drift fleet fishing the peak in Nushagak, the drift effort has again been far lower than in the index years from which the allocation percentages were derived. A recent ADFG report² revealed that an average of 1105 drift boats fished at least part of the season in NK during the index years. Since the index years, that average has dropped to 772. Since 2016, an average of 326 have fished *the peak* in NK, down from the 500-600 who fished the peak in the index years.

² <https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2022-2023/bb/Bristol%20Bay%20Salmon%20Fisheries%201975-2021.pdf>

Impact on Setnetters; Impact on Alaskans

When setnetters get less fishing time, their fishing incomes are reduced. In 2005, 70% of setnetters were Alaskan residents, compared with fewer than half of the drift fleet. That number has declined to about 64% of setnet permits held by Alaskans, compared with about 46% of drift permits. Since allocation disproportionately disadvantages setnetters, it disproportionately disadvantages Alaskans.

4. Percentage of Naknek/Kvichak Fishing Income That Stays in AK is Shrinking

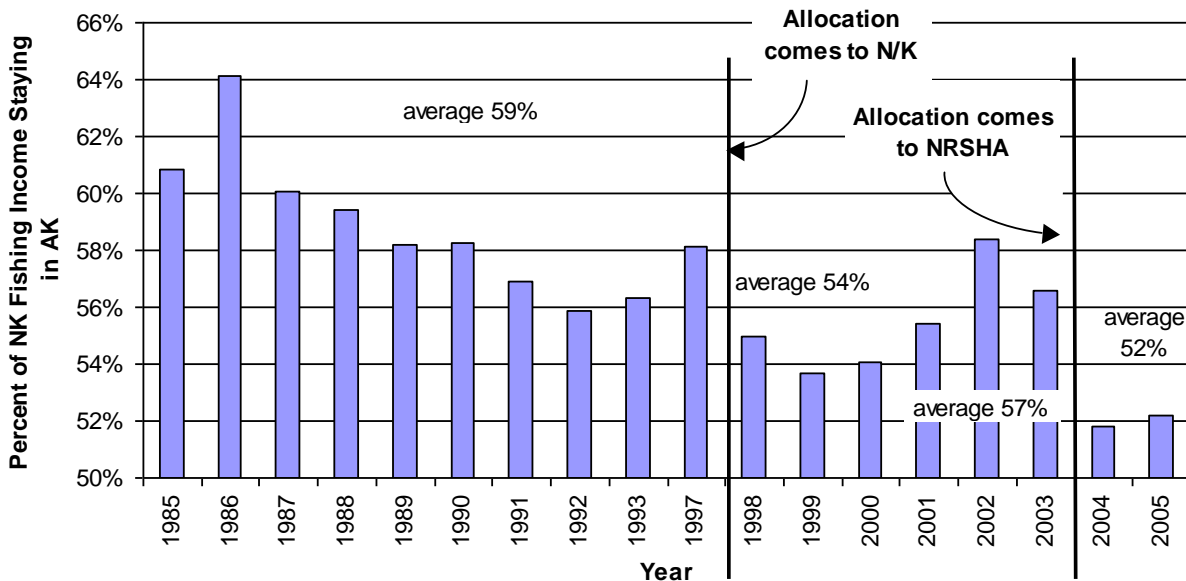


Figure 4 shows the percentage of fishing income earned by NK fishers that stays in Alaska over the years, pre-allocation, post-allocation, and allocation in the NRSHA. It is a diminishing amount, with a steeper decrease since allocation came to Bristol Bay. In the 10 years prior to allocation, almost 60% of fishing revenue stayed in Alaska. When allocation was introduced, that percentage dropped to 54%. It rallied to 57% when allocation was suspended in 2001-2003 in the NRSHA and then dropped to 52% allocation came into the NRSHA.

Former Governor Jay Hammond wrote a letter to the Board of Fisheries in 2004 describing these factors, noting that it had resulted in “a gross violation of Article 8, Section 8a of Alaska’s Constitution which mandates Alaska’s natural resources be managed for the maximum benefit of Alaskans,” adding later that the application of allocation to the NRSHA would be “in clear violation of Alaska’s Constitution and invite litigation, along with unwarranted hardship to resident Alaskans.” (A copy of Jay’s letter is appended in the following pages.)

I agree with Governor Hammond and further argue that allocation in its current form offers no observable benefits to the resource or to Alaskans, and in fact, disproportionately disadvantages local Alaskan fishermen. In the NRSHA, even the mitigation rule that lets setnetters fish one tide for every three tides drifters are allowed to fish is still a hardship to the local communities through its local fishermen. The enforcement of allocation in the district which *always closes Naknek setnetters first* is an

undue hardship for Alaskan and local community members. And even worrying about whether allocation will shut us down when the NK drift fleet is small is a hardship we can do without. Please repeal allocation in Naknek-Kvichak.

Randy Alvarez (the proposal's author) argued that setnetters have caught well beyond the 16% allocation in recent years. Of course, this is because much of the drift fleet has fished the peak in Nushagak leaving a much smaller fleet in NK, *and* the strong returns to the NK district have rendered enforcing allocation non practicable. Rather than worrying every year about whether allocation will shut us down, it would be much better to simply repeal it and let effort determine each user group's catch.

Overall, when regulations harm setnetters, they harm Alaskans. Allocation harms setnetters³.

In summary, allocation isn't needed, it is counter-productive, it introduces political considerations into biological management, and it disproportionately hurts Alaskan. It should be repealed.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'EJ Moore'.

Elizabeth J Moore, PhD

³ I believe Kvichak setnetters may benefit from allocation when we fish in the district. But that is just more evidence that this regulation is unfair – if some groups love it because it helps them and some groups hate it because it hurts them.

Port Alsworth, Alaska 99653

August 10, 2004

Diana Cole
Executive Director
Board Support Section
Box 25526
Juneau, Alaska 99802-5526

Dear Director Cole:

Please convey to all Fish Board members my ardent support for the request filed by Naknek-Kvichak set netters petitioning for a change to proposal 57 adopted by the Board during the 2003 hearing.

While this allocative measure may have been well intended, it has resulted in a gross violation of Article 8, Section 8a of Alaska's Constitution which mandates Alaska's natural resources be managed for the maximum benefit of Alaskans.

This became apparent when during the 2004 season the fishing effort was pulled up into the Naknek River. Of the 169 set netters registered in the Naknek-Kvichak about 85% were Alaskan residents. The majority of these are *local* residents. By contrast most of those 385 drifters were non Alaskans who traditionally catch about 65% of the harvest. Despite set nets being by far the dominate Alaskan resident fishery, 84% of the harvest was allocated to drifters and but 16% to set netters.

This problem was compounded by the fact that rather than allocating on the basis of the comparative amount of each type of gear actually fishing, it apparently was based on the number *registered* to fish. I am told that while virtually all registered set netters fished when able (since, unlike drifters, they had no other option) at times only about 50 boats participated. If true, this would grossly and unfairly distort allocations intent and thereby impose severe economic impact on set netters who were compelled to sit on the beach for several tides while that far less than 385 boats were allowed to catch the 84% allocated to that size fleet..

(over)

Though no members of my family fished this past season, We wish to endorse strongly the petition signed by over 200 Alaskan residents.

To retain the grossly inequitable allocation resulting from proposal 57 would be in clear violation of Alaska's Constitution and invite litigation, along with unwarranted hardship to resident Alaskans.

Please make copies of this letter available o all board members.
Many thanks.

Sincerely yours,

Jay Hammond

cc;

Governor Frank Murkowski
Violet and Arch Wilson