

Submitted by Judd Walker

Proposal for establishing new statistical baseline for determining Optimum Escapement Goals and Maximum Sustainable Yield for sockeye salmon in the Kenai & Skilak lake systems. Thus, creating dual lake escapement counters and goals. Add the restriction of no sockeye salmon fishing above Skilak lake, except for the Russian River and Hidden Lake systems, or by EO.

As a fifty-year resident, during the building of the Kenai Run, and a 20-year drift fisherman, I believe the State of Alaska has a lot of room for improvement in managing resources. Especially concerning escapement goals of the Kenai/Skilak lake sockeye late-run. The state is already on very shaky ground with the federal government trying to manage the fisheries for Maximum Sustainable Yield or MSY, as designated in the Magnuson-Stevens Act. It seems this Board should take the lawsuit UCIDA won over the State of Alaska a bit more seriously.

I fished the glory years from 1981 – 1996. I saw Cook Inlet's true potential. Those years remain no more, but my love of being on the ocean brought me back into drift fishing anyway. Now from 2013-2016, the runs are becoming only weaker. What I have seen the last 2 years are the weakest back to back runs, since I started fishing in 1981. They are also of smaller size than the average sockeye salmon of the 80's. What I have seen, in no way, can be what is mandated in the Magnuson-Stevens Act for managing all federal commercial fisheries of Upper Cook Inlet for MSY. The "ACT" mandates the fishery be managed basically for commercial purposes and would be managed for MSY in Upper Cook Inlet. MSY can in no way be accomplished until we know the correct ratio of fish that should reach each lake in a two lake system.

It was in 1977 thru 1992 that the Kenai showed what it's potential could be. Statistically, this is the time frame that needs and has to be used as the baseline to determine the Optimum Escapement Goal (OEG) to produce the MSY. There is no other better display of what could be maximally produced, than that time frame of catch records from 1982 – 1992. THE TRUE SAMPLE PERIOD then for Optimum Escapement Goal is therefore 1977 – 1988. I find it interesting how the 70's historical spawning data hasn't gotten into the Boards hands for the last 2 meetings, at least. Why are the historical data handouts now leaving out the most important period in the development of the Cook Inlet sockeye run?

I am going from memory, as I don't see that historical spawning data in the handouts or online anymore. In 1977 the escapement of spawners was approximately 340,000 and in 1978 and 1979 it was approximately 400,000. 1982 and 1983 were comprised of mostly 1.3 and even 1.4 aged fish. Large one-year lake fish coming back with approximately a 7 pound harvest average. Both years bring back at least 9 adult fish for every spawner from 1977 thru 1979. 1982 and 1983 produced catches between 3.2 and 5.1 million sockeye salmon, with large 5 year components. Obviously, this is very near the lower end of the Kenai Rivers Optimum Escapement goal....about 400,000 spawners, between 2 lake systems.

Next let's look at the escapement numbers for the 1982 through 1984 period. In 1982 there were approximately 520,000 spawners as I remember, and in 1983 with us fishing almost every

day in the full inlet, there were about 610,000 spawners that escaped. Very close to 600,000 spawners again in 1984. In 1987 the catch now brings back over 18 adult sockeye for every spawner, and again mostly comprised of 1.3 and 1.4 fish. 1988 brings back over 12 fish for every spawner. Mostly 1.3 and 1.4 fish again.

Now the next big return year is 1992. Comes from about 1.5 million spawners in 1987 and about 1,100,000 in 1988, as I remember. About 10 million sockeyes return, about 8 fish per spawner return, but the fish are mostly 2.2 and 2.3 year fish. This is obviously the point where the fish have to stay longer in the lakes, and therefore the returning ratio of adults to spawners is dramatically decreased. It's pretty simple biology, they are not as healthy and too small to maintain higher adult return numbers. This is when the inflection point occurs, and the numbers of returning adults per spawner drops and NEVER returns to that of the late 70's and early 80's on the Kenai River. Also, from here on out management changes and the number of spawners exceeds 1,000,000 every year. Never again will we see over 7-8 adults, per spawner, return again. And the fish will remain smaller when they do return.

My common sense tells me that since Skilak lake, being almost out of the mountains, and Kenai Lake isn't, it will allow more zooplankton to be produced, as there is more sunlight. My deduction from this is that we need to dramatically lower the escapement into both lakes to get back to the much higher production rate of 1.3 and 1.4 fish. Returning adult numbers definitely suggest that somewhere between 400,000 and 700,000 spawners is consistently producing the highest number of returning adults, per spawner. This is the Optimum Escapement goal, 400,000-700,000 fish. Maybe 450,000 – 750,000 spawners. Statistics show once it goes over a million spawners the returning adult ratio dramatically decreases and the length of the rearing time in the lakes increases. With Skilak being the larger producer of sockeye, it should likely account for 60-65% of the total and Kenai 35-40% of the total. That is an estimated guess, but it will definitely work to establish a Kenai Lake return ratio. All the big 7 million plus adult returning years had a large Kenai lake component of returning adults. I have not heard of this issue ever being addressed. I personally witnessed the finning in Kenai lake in 78, 82, 83, 87, 88.

This is where the state needs and has to step up to the plate and put counters within 1/2 mile of the entrance to Skilak lake and the same in front of Kenai lake. There is absolutely no way to know what the Optimum Escapement Goal is, when you have no clue how many fish each lake is producing per spawner. You have to know the ratio per lake is and manage accordingly. It is imperative that counters be placed near each lakes entrance to manage the run to it's MSY. There is no other way. For management to continue putting over 1,300,000 fish past the Soldotna bridge sonar, is not proper management, and the number of returning adults, per spawner, from the last 20 years prove it. This is exactly why the state will likely lose control of managing Upper Cook Inlet. They simply aren't managing for MSY, they are managing from socio and economic pressures, plain and simple.

It is time this Board take serious action to prevent the Federal government from coming in and managing the salmon fishery in UCI. Creating MSY is the most important criticism of the State.

Until the State creates a new counting program, this can never happen. It is better to take small steps when increasing escapements, as we learned from the Kvichak, which was nearly wiped out from years of over escapement. Small steps never happened on the Kenai River. It never had a chance to stay in an escapement range for more than 5 years, which, was continually increased due to the heavy sport fishing pressure and lobby. Escapements skyrocketed before science could truly find what the OEG was to create the MSY. The Susitna issues are not mandated in the Magnusson-Stevens Act to hinder that of the primary and much, much larger Kenai and Kasilof runs. This definitely until pike and parasitic issues are resolved there and then only on a secondary basis. It is still a fishery that needs fish in its district, but not at the expense of substantially lowering the MSY in the primary Central district, which is by far the largest fish producing district

I propose for the benefit of the Kenai River and the State of Alaska the following changes to 5AAC21.360, the Kenai River Late- Run Sockeye Salmon Management Plan.

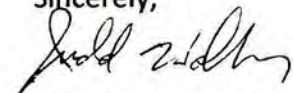
- 1) Meet an Optimum Escapement Goal of 450,000 – 750,000
- 2) A new fish counter will be installed within ½ mile of the mouth of the Kenai River into Skilak Lake. This counter will have a minimum escapement of 450,000, plus whatever run size is projected into the Russian River and other streams between Skilak and Kenai Lakes. Once this counter passes 500,000, plus the estimated size of the Late Russian River run, prior to August 5th, the commercial drift fleet will be opened in the expanded Kenai to Anchor Point corridor 7 days a week from 6 am until 11 pm, until August 10th or later by EO. The drift fleet will also have their normal 2 days of full inlet openers, or a minimum of Area 1, every Monday and Thursday from 7am until 7pm, until August 10th, unless escapement concerns in the Kenai River system will not be met. Kenai subsection Set nets will be open at least 2 days every week, 12 hours each day, from July 8th until August 10th, any additional time would be granted, as needed, to keep the total number of spawners from exceeding 750,000. Skilak Lake will be managed to obtain between 275,000 – 450,000 spawners, every year. If 450,000 spawners is reached by August 5th in Skilak lake, the drift and set-net fisheries will remain open 7 days a week, with at least some type of restrictions on non-regular fishing days, until August 10th. The ultimate goal is to manage to keep 450,000 spawners, or less, annually in Skilak Lake. The Soldotna Mile 19 counter will be used as a metric to implement this plan as well, once models can be created to account for fish caught between there and the first Skilak lake counter.
- 3) A new fish counter will be placed within ½ mile of the mouth of the Kenai River into Kenai Lake. This counters goal is to obtain a minimum of 175,000 spawners by August 5th of every year. The maximum goal for Kenai Lake is 300,000 spawners and will be managed to stay under that number annually.
- 4) The Russian River late-run sockeye sport fishery will be managed to make sure a minimum of 175,000 spawning sockeye reach Kenai Lake.

- 5) All sport fishing for sockeye salmon above the Skilak lake counter is closed, except in the Russian River designated area, or by Emergency Order due to over-escapement into the Kenai lake system.
- 6) Add the language of old number 3 here. Also add here, "to manage the sport fishery so that all Alaskans have a fair opportunity to harvest surplus sockeye salmon on the Kenai River. Once the minimum OEG in Kenai Lake, and the maximum OEG in Skilak lake have been achieved, prior to August 5th, the bag limit will increase to 10 sockeyes, per day, to resident fisherman, below Skilak Lake. The goals of the this sockeye management plan are only in effect until August 15th.

The remaining tier escapements and all language remaining shall be eliminated. A fishery can not be managed on tiers of escapements and projections, based on socio-economic pressures. There is only one way to obtain MSY and that is with one, not three, OEG's.

I hope that this coupled with some serious changes in conservation, such as multiple back to back drift days, on the entire river down to the Warren Ames bridge, will turn the Kenai into a major sockeye and chinook producer again. This is a 2 lake system and we need to find what the escapement balance between the lakes are, what the proper ratio between them is, so that we can increase future runs, on a truly sustainable basis.

Sincerely,



Elbridge (Judd) Walker