

Councilman Norman,

At the beginning of this week, I [read](#) that you have stated that "Sea lions are killing as many as 43 percent of the spring-migrating Chinook salmon in the Columbia River, including threatened and endangered species." If the pinniped impact is actually that high, then pinniped predation approaches the very high mortality of juvenile Chinook that occurs within the federal hydrosystem migration corridor (see attached graphic).

Though I am not sure at all, my guess is that your "43 percent" mortality refers to the "unexplained loss" of Chinook tagged at the Columbia River's mouth to the Pacific, and that do not arrive at Bonneville Dam. I recall Paul Kline mentioning a high degree of "unexplained loss" to me many months ago, but I have yet to see it in print. I will be posting [this](#) story on the [bluefish.org](#) website and am hoping that you can point me to substantiation to link to as I currently have no idea where to find such.

Being that the [bluefish.org](#) website visitors appreciate substantiated facts. I would very much like to see the data, methods and analysis that stand behind the "43 percent" to which you are referring. If this 43% mortality is in reference to a report on "Unexplained Loss" then this would place a cap on how high any estimate of pinniped predation might be. Reading the science behind this will improve my understanding of this important topic and I am hopeful that you or your staff can direct me to the study that you are referring.

Last year's annual [pinniped report](#) (Table 5) suggests that about one tenth of this "43 percent" of spring Chinook are being taken by pinnipeds at Bonneville Dam. This same report also alerts us to an apparent increase of predation by pinnipeds during late summer (Table 6). Pinniped feeding on Snake River Steelhead that arrive at Bonneville Dam in September may have become quite substantial. This is of paramount concern, especially now as Idaho's Steelhead populations are in steep decline. Monitoring of pinnipeds during their migration next month will be well worth the expense.

As I've reported to you earlier, the 2014 Supplemental BiOp's Adaptive Management Implementation Plan (AMIP) includes a simple mathematical formula to alert us when the BiOp's Reasonable and Prudent Alternatives — aimed to address the fact that the BiOp finds the federal hydropower system is putting Idaho's salmonids in **jeopardy** of further decline and a heightened risk of extinction — is not living up to expectations.

For Snake River Steelhead, the "Early Warning Indicator" warning signal of the AMIP has been triggered. I reported this reality to the NW Council during public comment twice already. Meanwhile, NOAA Fisheries has told BPA's Elliot Mainzer that I've done the math wrong. I am 100% certain that the EWI trigger has tripped and have requested that NOAA show proof to the contrary. No such response has arrived nor should it be expected. There is no doubt about the fact of the matter (see spreadsheet [bluefish.org/AMIP_Abundance_and_Trend.xlsx](#) and its graphic included below).

As the holder of the books, so to speak, NOAA Fisheries' Ritchie Graves insists that we await the tail of the 2018 spawning year which typically comprises ten percent of a spawning year count. Mathematically this would not make any difference whatsoever unless an enormous anomaly appeared in the late tail of the run. This insistence on using a June 30 ending date for the steelhead count, was central to the discussion that Mr. Graves brought to my attention alongside Northwest Division Director David Ponganis at the USACE Portland office December 19, 2017.

With that tail of the run now recorded as of July 1, 2018 (and reported by the ACOE on DART and FPC publicly accessible websites) no possible future result could change the fact that this AMIP trigger has been tripped. (In attached spreadsheet, replace 10,540 in cell B58 with the Lower Granite window count of 13,093 and see that the EWI trigger remains tripped.)

It is now known with absolute certainty, that Idaho's Steelhead population has tripped the mathematical formulas laid out clearly by the 2014 Supplemental Biological Opinion (see page 419). There is no refuting this fact (although Mr. Graves says his spreadsheet, which he tells me comes from NOAA's Science Center, shows otherwise).

It is simple mathematics, when we correctly use "the most recent 20 to 30 years of adult return data", as NOAA's BiOp prescribes. Mr. Graves spreadsheet, which he received permission to share with me, limits the data to population counts from 1986-2007, which centers on the poor returns of the 1990s and is certainly not "the most recent 20 to 30 years of adult return data".

Yesterday, I spoke with NOAA's Michael Milstein and again requested that their Science Center correct their spreadsheet. It should conform to their 2014 Supplemental BiOp. Michael apologized for the continued delay that has been ongoing and he will again press this issue to his leadership.

The end result to date, is that NOAA Fisheries continues to refuse reporting the triggering of the Early Warning Indicator to the Regional Implementation Oversight Group (RIOG) as directed by their 2014 BiOp.

By way of this example, I would like this email to be taken as a comment to the NW Council's Fish & Wildlife amendment process. I am suggesting that the Council should consider its ability to oversee the various agencies that are to report to the RIOG (or other such oversight groups as future language creates).

It is somewhat ironic that the Regional Implementation Oversight Group (RIOG) is currently unable to provide this oversight. The BiOp language directs NOAA Fisheries to report to the RIOG, but if they delay in such reporting, who would ever know? That is where bluefish.org has come in to play this time around. The EWI has been tripped and that much is certain.

There is no certainty, however, that an information advocacy group will be watching processes in the future. A day may come when it is merely a school kid with a smart phone, or a senior citizen with a slide rule that brings a similar oversight to the NW Council's attention. These people too, concerned members of the public, should be heard and considered. The public process that the NW Council affords is an obvious venue to avert any future subversion such as we are currently witnessing.

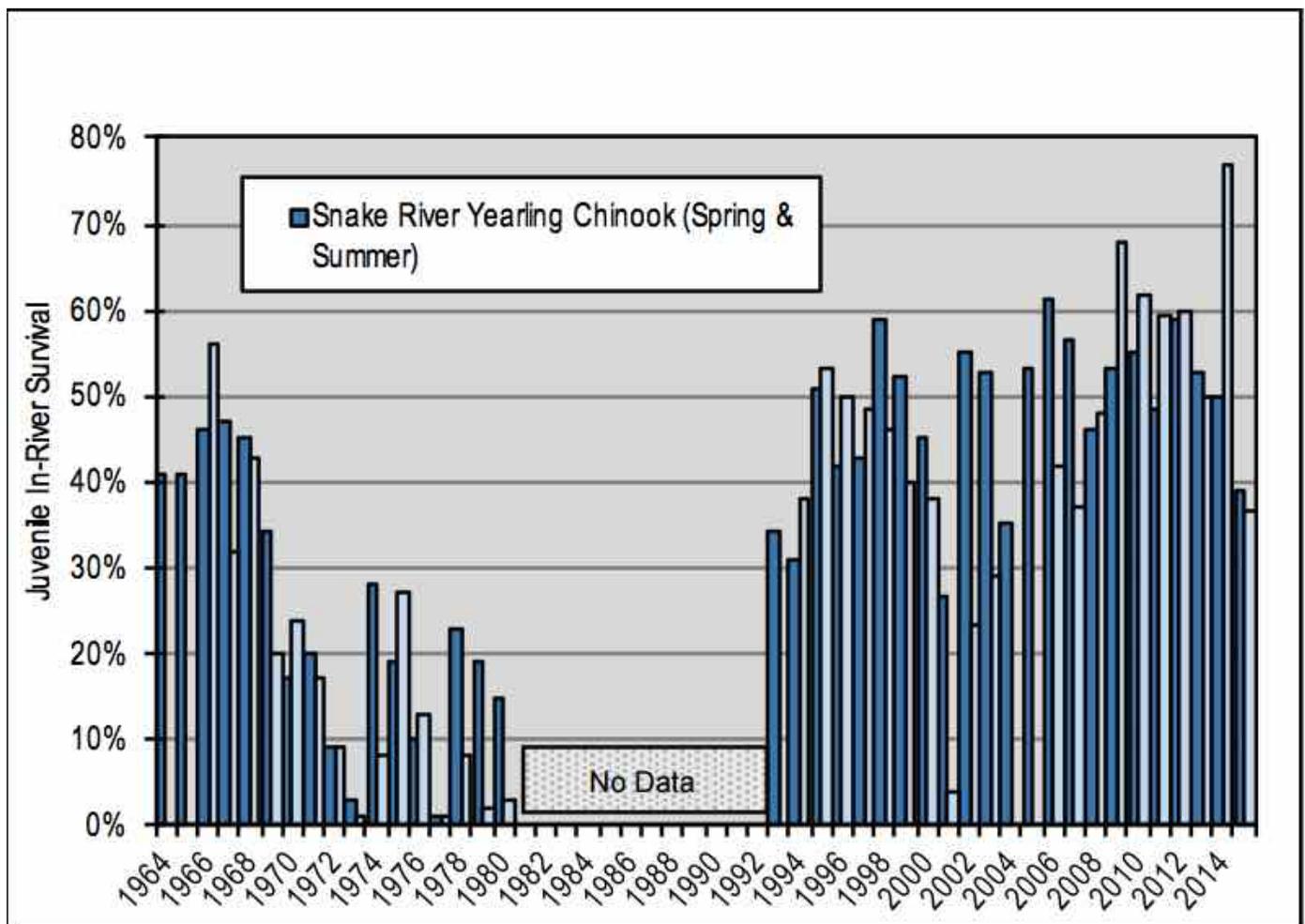
The data set for Snake River Steelhead begins with US Fish & Wildlife Service [Declines in Productivity Make Rebuilding Difficult](#) (Table A-1). The mathematics is easy. Getting NOAA Fisheries to admit the truth of the matter is the difficult part.

Best Regards,

Scott Levy

bluefish.org

promoting an open and honest dialogue concerning the plight of Idaho's wild Salmon and Steelhead.



Detail of a Columbia River System Operations public workshop poster boards displaying Juvenile In-River Survival from 1964-2015. The light blue bars depict Steelhead survival although the legend fails to mention that data.

Natural-Origin Snake River Steelhead Adults at Lower Granite

