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Is the public once again lead to understand that this action should have occurred about 20 years ago, hence the reservoir system on the Snake and Columbia rivers has been operated out of compliance without permit, hence illegally (?), with no consequence to managers, but dire consequence to salmon and the ecology that salmon evolved? My pre-retirement experience as a Federal biologist who was primarily tasked with direct monitoring and finding means of remediation for dam- and reservoir-induced increasing frequencies of exceedence temperatures "safe" for salmon productivity, passage, and riverine ecological function (with wishing for transposed to a slow moving reservoir body of water), 28 years in the Columbia River basin and 8 years in the Colorado River basin, clearly resulted in robust science-based proposals of implementable actions and processes that the Federal decision-makers did not want to go to because not "small status-quo tweeks" (including a few structural band-aids that only temporarily addressed small footprints of effectiveness in area and degrees C or F reduced) to reduce reach-wide reservoir-driven water temperature (such as the recent 2013 and 2015 periods that devastated life-stage mortality on summer Chinook and sockeye salmon and steelhead in the Snake and Columbia river corridors). Federal hydrologists re-dig up the historical water temperature data for the rivers prior to reservoir completion and during dam construction time series in order to argue these rivers continually had hot water periods. This tactic has previously proven to be a scientifically mute point because such data is included in the calibration data used in modeling by the EPA and USACE/BPA-contracted -Pacific Northwest National Laboratories (PNNL)-Battelle. Same result of reservoirs shifting hotter temperature distributions a few weeks, but with greater magnitudes during higher exceedence number of days. Hence, the TMDL for water temperature allots for these natural and un-natural variances with its 7 day allowance in the rule. Please consider the historical data in the correct correlative locations and seasons because you will see that such exceedences were shorter in duration than agencies lead all to believe, with high end magnitudes rarely above the salmon tolerance degrees of 68-72 F or 20 C, of which the rule's allowances provide for. What is missing is that only reservoir evacuations due to breaching and/or drawdown to at least spillway crest which have been routinely and previously analyzed, evaluated at many scrutiny levels, and shown in limited field tests can rectify the water temperature exceedence boondoogle that comes with massive pooling of extremely low velocity water bodies, especially in maintaining stable reservoirs as they become less productive with age. The Technical Management Team (TMT) website will demonstrate in simplest terms the increasing temperature as dam and reservoir passage is added through the Snake and Columbia rivers, including the periods of cooler water releases from Dworshak Dam on the Clearwater. Cool water physically has tendency to sink into iso-layers as the body traverses the fist reservoir... resulting in only Lower Granite functionally having a deeper, cooler body of water 2 months stretching out during the 4 month period of June through September. Once mixed by passage through the dam, and especially if surface weir spilled, the deeper cooler water becomes dissipated and lost as each subsequent reservoir and dam is passed. Temperature regimes and periodicity can also be compared with the non-reservoir Hanford Reach, although inflows to Hanford Reach are regulated by an upriver dam as well. What you get with a truly "natural" or hopefully "normalized" functioning river with respect to temperature is diel cooling with post-dusk ramping in flow influencing the lower daily average degree estimate, the thermal distribution of salmon (can be illustrated in the reports on steelhead tracking with thermal tags), and most important the re-connection to the thermal dynamics due the underlying subsurface flowing water in the more diverse morphological channel, ie water table baseflow, hyporheic, etc. In conclusion, I support what should have been done 20 years ago... the enforcement of legally

abiding by a TMDL under permit and such NPDES requires permanent and/or seasonal manipulations of reservoir surface water elevations, such as breaching dams in the Snake River and drawdowns to spillway crest at a couple critical dams in the lower and mid-to-upper Columbia River. Thank you.