EPA Comments on Draft Biological Opinion for the Leavenworth National Fish Hatchery
April 18, 2017

1. Thank you for the opportunity to comment of the draft Biological Opinion for the Leavenworth National Fish Hatchery. The comments below focus on sections related to the NPDES permit for the hatchery that EPA is issuing. We agree in large part with how the proposed permit limits are described and the conclusions that the proposed permit is not likely to adversely affect fish based on the final proposed permit limits, interim temperature limits and the levels of chemicals used in fish hatchery operations. Our comments on the impacts of interim phosphorus limits and their impacts to pH and fish are included below.

2. Threshold for issuing a take.

EPA believes that the threshold for issuing a take is information that the proposed action adversely affects species. Given the information above, it does not appear that there is sufficient information that the interim phosphorus limits will result in pH levels at a magnitude, duration and frequency that would result in adverse effects on fish. Rather, the information indicates that the interim phosphorus limits will not likely adversely affect fish.

3. [144 – 4 to 14] – Predicting pH levels from interim phosphorus limits; [146 - 24 to 30] Conclusion of harm from interim phosphorus limits; [189-40] Statement of pH exceeding 9.05 in all critical months instead of September alone.

NOAA is using a threshold of pH levels between 6.5-9.0 as not causing adverse effects. We have QUAL2Kw model results that under critical low-flow conditions in September, interim phosphorus limits will result in a maximum pH of 9.05. In other months and non-critical conditions, pH will be lower and within the 6.5-9.0 range which does not cause adverse effects to fish. The draft Biological Opinion also discusses changes in the hatchery operations that will result in phosphorus concentrations likely being lower than what was assumed in the pH response modeling, which would also result in pH being within the 6.5-9.0 range. Given that pH does not have acute effects and exposure to fish, and a pH of 9.05 is likely to be short-term if it occurs at all, this appears to be sufficient information that interim phosphorus limits are not likely to adversely affect fish species.

4. [140 – 29 to 33] – Description of NMFS assumptions on phosphorus discharged from hatchery.

“Therefore, NMFS assumes that the effect of phosphorus from current hatchery operations is similar to the effect of operating at maximum limit allowed under the NPDES permit because the amount of phosphorus in current effluent is unknown and is likely to be equal or less than the amount indicated in the 2006-2011 dataset used by the EPA to set the interim limit (see below for further discussion).”

Is the intent of this sentence the following: NMFS is making a conservative assumption that the hatchery will be discharging at the interim maximum phosphorus limit and assesses the effects of the hatchery discharging at the interim maximum phosphorus limits. Though the hatchery does not monitor phosphorus in its effluent, it is likely to be equal or less than the amount indicated in the 2006-2011 dataset used by the EPA to set the interim limit …?