

February 25, 2003

Mr. Mark Walker
Director, Public Affairs Division
Northwest Power Council
851 SW Sixth Ave., Suite 1100
Portland, OR 97204

Dear Mr. Walker:

Chelan Public Utility District (the District) would like to take this opportunity to comment on the Council sponsored ISAB review of flow augmentation.¹ We appreciate the Council's process in trying to unravel a very complicated and controversial subject.

The ISAB's conclusions are based solely on information obtained in the lower Snake River basin. We understand that the ISAB had very little time to explore information outside of that basin, and most of the relevant information was generated there. However, the mid Columbia (defined as the river upstream of the Yakima to Grand Coulee Dam), has very different riverine dynamics, and consequently potential flow effects on fish. While the ISAB does not state that the effects observed or theorized on the Snake apply to the mid-Columbia, we strongly suggest that the report state this fact emphatically because of the potential misuse of the information or theories in relation to the mid-Columbia. We also call into question using this information in relation to the lower Columbia River as well.

We agree with the ISAB's contention that other factors besides gross flow augmentation need to be evaluated in relation to effects on juvenile fish survival. We remind the Council that, as pointed out by Giorgi et al 2002,² there still has been no empirically tested flow-survival indices produced in the Columbia Basin. We would also like to point out the "broken stick" model's primary source for information below the potential flow threshold level was generated by estimates made in 2001. In 2001, with flows between April and August the lowest on record, other factors besides flow may have played an important role in the survival estimates that were generated. Factors like the lack of spill at the projects and earlier, higher temperatures may have increased predator activity and increased residualism in steelhead. We understand that these factors may be linked to flow, but are not necessarily dictated by it.

¹ Bilby et al. 2003. Review of Flow Augmentation: Update and Clarification. Document ISAB 2003-1. Independent Scientific Advisory Board for NWPPC, NMFS, and Columbia Basin Indian Tribes. Portland OR.

² Giorgi et al. 2002. Mainstem Passage Strategies in the Columbia River system: Transportation, spill, and flow augmentation. Unpublished report prepared for the NWPPC, Portland OR

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Mr. M. Miller
ISAB comments

The ISAB raises excellent questions and subsequent challenges to obtain the necessary information to determine what the causative effects of lower survival at lower flows. However, we do not agree that when implementing potential changes, like in the daily fluctuations of flow (one hypothesis) we will be able to determine immediately if this is affecting survival. The suite of factors affecting survival (and the ability to parse out these factors in our estimates) appears to be too integrated to fully understand the real cause and effect relationships that exist. This will make it difficult to understand whether the changes we make are increasing survival.

The District agrees that the causative mechanisms affecting survival below potential flow thresholds need to be identified with a unified scientific approach (methodologies) that is regionally accepted. The ISAB report has no examples on how this could be accomplished (we recognize that this was potentially beyond the scope of this report). This is a very important point, however, and we encourage the Council to pursue this issue.

While the District commends the ISAB for identifying alternative hypotheses concerning other mechanisms within the hydrosystem that may be affecting juvenile fish survival, like reducing the daily fluctuations of flow, we are cautious that new paradigms may be created that could have large effects on how the hydrosystem is run, ultimately costing rate payers more money than currently through the flow augmentation paradigm. Again, we feel it important that there are distinctions made concerning how this information should be used.

If you would like to discuss this further, I can be reached at (509) 663-8121.

Best regards,

Chuck Peven
Fish and Wildlife Supervisor

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