

Interactive comment on “Reviews and syntheses: Dams, water quality and tropical reservoir stratification” by R. Scott Winton et al.

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We thank anonymous referee #1 for this very thoughtful and constructive review of our manuscript. We are pleased to read see that he or she found the work interesting and had suggestions to improve its readability and impact.

We would like to briefly address the criticism of section 3, which the referee found to be overly long and of questionable relevance to the broader goals of this paper focused on dams and water quality. During our literature review we found examples of confusion about tropical lake stratification behavior in journals and modern textbooks. Given that the literature shows that stratification behavior is of utmost importance for understanding dam effects on water quality, it is key that we provide some quantitative

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analyses to carefully dispel some of these misconceptions.

As anonymous referee #2 points out in his or her comments: "...the paper makes a further important step in comparing some traditional held beliefs on the effect of tropical reservoirs on water quality with more recent ideas supported by physical models. This is a key contribution as it separates conjecture from evidence based conclusions for dams holding back the largest volumes of water in the tropics."

We certainly appreciate the suggestion from #1 that the information in section 3 could "...be delivered more efficiently..." and will consider shortening it, potentially adding some technical information to the supplement where we had already relocated roughly 700 words prior to initial submission. We will also look for ways to communicate more clearly the section's importance for the broader paper goals of understanding water quality effects of tropical dams.

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