

February 12, 2021

To whom it may concern,

This submission provides comments on the proposal for a Canadian dam to be built within the Koochanusa Reservoir (BGC Engineering 2020). While we certainly understand the frustrations of those living around the Koochanusa reservoir, as it stands, the proposal is of concern in several respects. If this proposal moves forward, assessment would be required locally, regionally and system-wide to identify environmental consequences that it would create, and to better understand the linkages and trade-offs that would need to be considered.

Locally, the proposal would need a thorough environmental impact assessment due to the likelihood of negative ecological consequences. A bifurcated waterbody may damage fish habitat significantly. How would fish passage within the reservoir be accommodated? We are unaware of proposed solutions for this issue. There would be consequences for upstream and downstream populations including sturgeon. Another concern involves the potential for selenium and other heavy metals that might accumulate in sediment within the nested reservoir becoming a long-term source of contamination. Selenium is already a grave concern in this river system.

Regionally, the proposal would need to be considered within a broader analysis of the Kootenay River basin. Removing that amount of storage unilaterally would have significant consequences downstream. The flow regime of the Kootenay River would be modified substantially with consequences for fish habitat, power production, and flood-risk management. Fluctuations in Kootenay Lake water levels would increase resulting in a number of associated management questions. This proposal should not be assessed in isolation. Rather, it must be considered in conjunction with changes it would bring about in other parts of the Kootenay River system, down to Castlegar.

Lastly, proposals such as these should be seen and assessed as part of system-wide changes that are needed to begin to reverse longstanding environmental damages that have resulted from dams and reservoirs and particularly those authorised under the Columbia River Treaty. Generally speaking, improving environmental conditions within Canada's Upper Columbia Basin will require a reduction in the compulsory and prescribed burden of water storage within Canada's Columbia Basin reservoirs. The Koochanusa Dam proposal would effectively apportion a large component of this potential reduction in storage to one reservoir ahead of all the others. In our view, it would be inappropriate to preclude other options *a priori* by focusing on one set of values in Koochanusa without consideration of the many competing needs that exist across the system. Science-based simulation modelling is needed to support such far-reaching interventions so that the trade-offs involved can be adequately understood.

We have previously suggested that a new governance arrangement is needed within the Kootenay system, and within the larger Columbia system both within Canada and between Canada and the US. The lack of an effective and inclusive system-wide mechanism for assessment of this dam proposal is an example of why a new governance arrangement is needed. Proceeding unilaterally with major changes within one reservoir would be unworkable and unethical without a system-wide analysis respecting all affected environmental values and communities.

These comments are provided by the Upper Columbia Basin Environmental Collaborative (UCBEC). We are a partnership, comprised of a cross-section of environmental voices from the Upper Columbia Basin. We represent provincial, regional and local environmental organizations, supported by select scientific, technical and policy experts. Further background on UCBEC and our proposals for a renegotiated Columbia River Treaty can be found here: <https://kootenayresilience.org/columbia-river-treaty>

Thank you for considering these comments.

Reference

BGC Engineering 2020. *Lake Koocanusa High Level Assessment of a Proposed Dam*. Final draft report prepared for the BC Ministry of Energy Mines and Petroleum Resources, November 19 2020, 45 p plus two appendices.

Sincerely,
Dr. Martin Carver
Lead / Facilitator
Upper Columbia Basin Environmental Collaborative (UCBEC)
Nelson, BC CANADA