### UCBEC Presentation at PNWER – Spokane, WA – July 25, 2018

Greg Utzig - Nelson, BC . been living and working as an ecologist in the basin for over 40 years

I am here representing the Upper Columbia Basin Environmental Collaborative . a group of local, regional, provincial and international environmental organizations with programs in the Columbia Basin.

As an ecologist, I had the opportunity to be an author of a 2011 summary of the environmental costs of dam construction resulting from the implementation of the Columbia River Treaty in Canada. called simply the Dam Impacts Report. available online.

That report summarizes the destructive environmental legacy of this treaty in British Columbia . it speaks to the lack of consideration of environmental impacts before dam construction, and the ongoing environmental losses continuing today . losses that include extensive areas of wetlands and riparian forest, as well as many miles of productive river and stream habitat.

These are in addition to the **annual** losses of over a million salmon and steelhead not crossing the border due to the Grand Coulee dam

In contrast to many of the other speakers here today . we are **NOT** asking to take more from the river, be it salmon, irrigation water, cheap electicity, more flood protection, or revenue from selling water storage.

**BUT rather**, we are asking for a renewed treaty that considers **what we can give back to the river ecosystems** –

**to replace** fluctuating reservoirs, barren wastelands and dust storms with productive floodplain forests and productive aquatic habitat.

We want to see **Ecosystem Function** added as a third primary purpose of the treaty, and for the restoration of healthy ecosystems to be a consideration in **all** management decisions on the Columbia River System

To us this means **NOT** committing all the storage capacity in the Canadian reservoirs for economic gain or a specific purpose, but reducing human demands for such storage.

I also recently had the privilege to participate in the Mid-Arrow study which has examined various alternatives for balancing flood control, electicity production and improving environmental conditions in the Arrow Reservoir . also available online.

It is clear that we dong have all the answers today . I cang say exactly what reservoir management regime will ultimately create the optimal mix of benefits.

However, by renewing the treaty with built in flexibility, we believe that through **experimentation** and **Active Adaptive Management**, we can begin to better understand what changes will result in improved ecosystem function, while also building resiliency to climate change.

In closing . the Collaboratives members are asking for negotiations to refrain from thinking of Columbia River water as a commodity to be bought and sold, but to consider the river as a living ecosystem, to not inflict further injury to the system, but provide opportunities for renewal and recovery.

#### **Dam Impacts Report**

www.sgrc.selkirk.ca/bioatlas/pdf/FWCP-CB Impacts Summary.pdf

#### **Mid-Arrow Report**

https://engage.gov.bc.ca/app/uploads/sites/6/2017/07/Mid-Arrow-Report REV3.0 MEM-Review Apr 13 17.pdf

https://engage.gov.bc.ca/app/uploads/sites/6/2017/07/Mid-Arrow-Scen3 draft 4-24-17.pdf

# Improving Ecosystem Function in the Canadian (Upper) Columbia Basin

Upper Columbia Basin Environmental Collaborative (UCBEC)
Summary of Discussion Paper<sup>1</sup> – March 21, 2018

The purpose of this discussion paper summary is to present potential revised goals associated with dam operations to improve environmental values in Canada's Columbia Basin. The scope of the discussion paper includes reservoirs and reaches of the Columbia, Kootenay and Pend-d'Oreille Rivers affected by hydroelectric dams. The goals focus on improving terrestrial, wetland and aquatic ecosystems within Canadian reservoir footprints and improving large riverine habitats in and along the river reaches downstream of the impoundments. Previous studies have shown that construction of dams and flooding of numerous reservoirs has had major negative impacts on ecosystems in the region.

The focus is on *ecosystems* and *habitats*, rather than a single-species approach. The ecosystem restoration goals described are complementary to, and potentially prerequisites for, returning salmon to the Upper Columbia Basin. Whereas projected climates pose significant risks to the successful return of salmon, opportunities to achieve the ecosystem restoration goals identified here are not jeopardized by climate change. To the contrary, these measures would increase the resilience of aquatic, wetland, riparian and upland ecosystems to climate change, and therefore may strengthen separate efforts to return salmon to the Upper Columbia Basin.

Some of the suggested measures can be realized without modification of the Columbia River Treaty (CRT), while others may require modification of the Treaty itself, or at least side agreements between the two parties to the Treaty. The initiatives presented here can contribute to CRT negotiations (and Non-Treaty Storage Agreements), but they also provide potential input into routine reservoir operations planning carried out by BC Hydro, the US Army Corps of Engineers, Bonneville Power and other relevant dam managers. The goals and measures identified here have not been prioritized, however UCBEC intends to prioritize them following discussions with various levels of government, First Nations and other stakeholders.

## **Summary of Proposed Measures to Improve Ecosystem Function (EF)**

- Add Ecosystem Function (EF) as a third and equal primary purpose of the CRT.
- Ensure equal and effective representation of EF objectives in all dam operations and related decision-making.
- Increase operational flexibility for all the dams in the upper Columbia and Kootenay systems to allow for experimentation under an "active adaptive management" program to explore changes that will restore and/or enhance terrestrial, wetland and stream ecosystems and habitats within reservoir footprints and river reaches downstream of dams (including peaking impacts).
   Experimental implementation of the Mid-Arrow third scenario<sup>2</sup> provides a starting point for such exploration.
- Explore greater coordination between the US and Canada regarding operations on the Kootenay River system, including the Libby Dam, with a focus on increasing EF throughout the system.
- Significantly increase secure long-term funding to the FWCP-CB and other ecosystem programs like the Creston Valley Wildlife Management Area to enhance and expand ecosystem restoration and environmental impact mitigation activities in the Upper Columbia Basin.

A complete version of the discussion paper is available from UCBEC by emailing a request to: aqua@netidea.com

<sup>&</sup>lt;sup>2</sup> https://engage.gov.bc.ca/app/uploads/sites/6/2017/07/Mid-Arrow-Scen3\_draft\_4-24-17.pdf