



OVERVIEW

After the devastating flood of 1948 near the City of Vanport, the U.S. and Canada partnered to create the Columbia River Treaty (CRT). This Treaty is a joint agreement concerning the development, regulation and management of the Columbia River to coordinate flood control and maximize hydropower energy production.

The Columbia River Treaty has a minimum length of 60 years that will be met on September 16, 2024 with no specified expiration date. With ten year's notice, the U.S., Canada, or both may decide to terminate the Treaty. If neither country gives notice of termination, the countries may decide to renegotiate or consider improvements by mutual agreement at anytime during the life of the CRT. With no termination, the Treaty will continue indefinitely, except for the Annual Assured Flood Control which expires in 2024. When enacted, the U.S. paid \$64.4 million for the operation of the Assured Annual Flood Control through 2024 to be replaced by Called Upon Flood Control to be paid per call.



HUGH KEENLEYSIDE DAM

WHAT HAPPENS AFTER 2024?

The Treaty continues indefinitely; however, in 2024, the coordinated flood risk management provision changes to a less-defined approach. In 2024, the Assured Annual Flood Control will be replaced with Called Upon Flood Control. This on-call use of Canada's reservoirs, can be made once the U.S. has made effective use of their own reservoir storage and Canada must be compensated for the operational and economic cost of each flood control call.

Currently, under the Treaty, U.S. and Canadian entities coordinate to maintain and adjust reservoir levels as needed and to maximize power generated.

Under the Columbia River Treaty, the U.S. pre-paid Canada for Assured Annual Flood Control until 2024, which denotes that Canada will reserve 8.45 million acre feet of assured annual water draft at all three of their CRT reservoirs. Under Called Upon Flood Control, Canada is not required to reserve any water draft.

The U.S. and Canada have different perspectives on how the called upon operation for coordinated flood risk management should be implemented after 2024. According to the U.S. the flood control can be called upon once river flows exceed 450,000 cubic feet per second (cfs) measured at The Dalles Dam and only eight storage reservoirs in the U.S. need to be effectively used before the U.S. can call Canada for flood control. From the Canadian perspective the U.S. can request on call flood control once The Dalles dam exceeds 600.000 cfs and has effectively used all possible storage in the Basin. This ambiguous interpretation of the Called **Upon Flood Control will cause implications** for quick and efficient flood control.

WHAT HAPPENS IF THE TREATY IS TERMINATED?



- BC Hydro takes over operation of Mica, Keenleyside, and Duncan dams for the benefit of Canadian power
- The U.S. and Canada would coordinate Libby Dam operations
- Canadian Entitlement would end (Iteration 1 describes an annual value of \$229 million to \$335 million, dependent on the price of energy, that Canada would lose)
- Called Upon flood control would remain in place
- Kootenay Diversion rights remain
- U.S. hydropower generation will be more difficult to predict and control

In June 2012, an extensive simulation was done by the U.S. to predict the outcomes of termination and continuation of the Treaty after 2024. This study is known as Iteration 1. More iterations were intended to follow, but no subsequent joint iterations have been done. The results of Iteration 1 are below:

- More frequent Called Upon Flood Control requests compared to if the Treaty continues
- Potential higher Called Upon payments for the U.S. (\$4 million to \$34 million per request)
- Higher peak flows resulting in increased flood risk

- Hydropower generation annual revenue increase of \$180 million to \$280 million (Canadian decrease in revenue of about \$220 million to \$320 million)
- No significant change in Snake River flows (Biological Opinion objectives would likely be unaffected)
- Change in the Columbia River flows may have an effect on meeting targets for fish and salmon protection flows
- Predicted increase in number of times
 U.S. reservoirs areunable to fully refill. This
 has implications for salmon flows,
 resident fish, water availability for
 irrigators, and recreational users.
- Annual energy production remains unchanged, but monthly energy production varies more and thus, is less predictable
- Ability to meet firm load within the critical water-storage sequence diminishes by approximately 225 megawatts and the critical period is shortened from four years to one year
- U.S. would keep, on average, 300-500 megawatts of hydropower energy annually and 1300-1500 megawatts of hydropower generating capacity

SOURCE; U.S. ENTITY



NEGOTIATIONS TIMELINE

Negotiations begin in Washington, D.C. August British Columbia October Oregon December British Columbia **February** Washington, D.C. April British Columbia June Washington, D.C. September

British Columbia

Negotiations for the Columbia River Treaty began in May of 2018. Since then seven more meetings have taken place.

This paper identifies the state of affairs if no new changes are agreed upon during the current round of negotiations. The future timeline of conclusions are currently unclear.

COLUMBIA BASIN



RESOURCES

- engage.gov.bc.ca
- nwcouncil.org
- crt2014-2024review.gov
- critfc.org
- fas.org
- thebasin.ourtrust.org