What is the Columbia River Treaty?

The Columbia River Treaty (CRT) is an international agreement between Canada and the United States for the joint development, regulation and management of the Columbia River in order to coordinate flood control and optimize hydroelectric energy production on both sides of the border. The CRT was ratified in 1964.

The CRT has no specific end date, and most of its provisions will continue indefinitely without action by the United States or Canada. The CRT does, however, have a minimum length of 60 years. Thus beginning in September 2024, either nation can terminate most provisions of the Treaty with at least 10 years’ written notice (i.e., starting as early as 2014).

The CRT can be modified at any time by mutual agreement of both nations.

If the CRT is not terminated or modified, most of its provisions would continue, with the exception of the “Assured Annual Flood Control” provisions which are scheduled to expire in 2024 (unless re-negotiated) and transition automatically to a different type of flood control referred to as “Called-Upon” flood control operations.
Why Was the CRT Signed?

Canada and the U.S. were facing two major challenges in the Columbia River Basin (Basin) after WWII. In addition to an increasing population, the "untamed" Columbia River was causing periodic and sometimes devastating flooding. Simultaneously, an upswing in the economy increased the need for energy sources.

In order to meet these challenges, the two countries ratified the CRT in 1964. Under the CRT, Canada agreed to build three storage dams in Canada:

1967: Duncan Dam (Duncan Reservoir);

1968: Hugh Keenleyside Dam (Arrow Lakes Reservoir)

1973: Mica Dam (Kinbasket Reservoir)

1975: The CRT also allowed the U.S. to build Libby Dam in Montana, which created a reservoir, Kootenusa, that extends 67 kilometres into Canada. Operations at Libby are under the jurisdiction of the U.S. entities.

Key Provisions of the Columbia River Treaty

DOWNSTREAM POWER BENEFITS

Power that can be generated in the U.S. portion of the Basin as a result of the additional water storage provided by three dams in Canada through the CRT is referred to as downstream power benefits. The downstream power benefits are a modeled calculation in megawatts of electricity. The CRT requires that these downstream power benefits be shared equally between both countries.

The downstream power benefits from the operation of Libby Dam are allocated differently. They accrue to the country in which the benefits occur: Canada keeps the power benefits derived in Canada and the U.S. keeps the power benefits derived in the U.S.

THE CANADIAN ENTITLEMENT

Canada’s share of the downstream power benefits is called the Canadian Entitlement. It is calculated as half of the forecast additional hydroelectric energy generated by power plants on the Columbia River in the U.S. that result directly from the operation of CRT dams in Canada. Under the Canada-BC Agreement, these benefits are owned by the Province. Canada sold the first 30 years of its Canadian Entitlement to a consortium of utilities in the U.S. for $254 million US. That agreement expired in phases and the Province of BC now receives the Canadian Entitlement, worth approximately $120 million US annually.

WHO IMPLEMENTS THE CRT?

Entities from both countries were appointed to implement the CRT on behalf of their governments. The U.S. entities are the Bonneville Power Administration and the U.S. Army Corps of Engineers. The Province of BC designated BC Hydro as the Canadian entity.

2024: EITHER COUNTRY MAY TERMINATE

The CRT has no official expiry date, but has a minimum length of 60 years, which is met in September 2024. It is possible that one or both countries may wish to renegotiate parts or all of the CRT, or terminate it entirely. If neither country terminates it, the current CRT will continue indefinitely, with the exception of the Assured Annual Flood Control provisions which expire in 2024. By mutual agreement, parts or all of the CRT could potentially be renegotiated at any time.

Columbia River Treaty Timeline

Disastrous floods on the Columbia River kill 41 in the U.S., destroy a community of 18,000 south of the border and leave thousands homeless. Trail, BC, is heavily flooded, and homes and properties are damaged. Both countries finalize water storage site selection and continue negotiating the CRT. The CRT is ratified at the Peace Arch. Mica Dam is completed.

1944
1948
1960
1961
1963
1964
1967
1968
1973

Canada and the U.S. begin studies in the Basin to address flood control and growing power demands.

Canada and the U.S. sign the CRT.

The Canada-BC Agreement is signed.

Duncan Dam is completed.

Hugh Keenleyside Dam is completed.

Libby Dam is completed.
FLOOD CONTROL

The CRT prescribes two primary types of flood control provisions.

1. Assured Annual Flood Control

   Under the CRT, Canada agreed to provide 8.45 million acre feet of assured annual water draft at the three Canadian CRT reservoirs for flood control purposes. This would continue for 60 years in exchange for a one-time payment of $64.4 million US. This Assured Annual Flood Control provision expires automatically in 2024 even if the CRT continues.

2. On Call Flood Control

   On Call Flood Control is designed to be used during periods of very high inflows. The U.S. can request that Canada provide On Call storage in addition to the Assured Annual Flood Control provision. This means Canada would provide additional storage at Canadian reservoirs over and above what the CRT prescribes for Assured Annual Flood Control. In order for the U.S. to request On Call Flood Control, it must first make effective use of its own reservoir storage space, flows must exceed target levels at the Dalles Dam in the lower Columbia River near Portland and Canada must be compensated for operational costs. The On Call Flood Control provision remains in effect as long as the CRT dams exist, even if the CRT is terminated. After 2024, the On Call Flood Control provision will be referred to as Called Upon Flood Control.

Canadian entity:

Government of BC recommendations on the Columbia River Treaty

In November 2011, the Province initiated a Columbia River Treaty Review (Treaty Review) process to evaluate future decision options, including possible continuation, amendment or termination of the Treaty. After a two year Treaty Review consisting of extensive consultation with the public, local government officials, First Nations on a government-to-government basis, and hydro facility operators, and completing a series of technical studies, the Government of British Columbia made the decision to continue the Columbia River Treaty and seek improvements within its existing framework. The decision includes 14 principles that will guide British Columbia in any discussions on the future of the Treaty with Canada and the United States. Visit http://engage.gov.bc.ca/columbiarivertreaty(bc-decision/) to review this decision.

US entity:

Regional recommendation for the future of the Columbia River Treaty after 2024

Review the US entity report here:

www.bpa.gov/Projects/Initiatives/Pages/Columbia-River-Treaty.aspx
www.engage.gov.bc.ca/columbiarivertreaty(bc-decision/
Roles and Responsibilities

The Columbia River Treaty (CRT) was agreed to by the Province of BC and the Canadian and U.S. federal governments. Both federal governments, as well as the Province, have specific roles under the CRT.

**United States**
Under the U.S. constitution, only the President can make decisions on international treaties, based on the advice and consent of the Senate.

**Canada**
The 1963 Canada-BC Agreement transferred the rights and obligations under the CRT to the Province of BC. It also requires that Canada obtains the concurrence of the Province prior to issuing any notice of termination. It does not specify exact roles for the federal government around termination and renegotiation, but any substantive changes to the CRT will require federal government involvement.

**Province of BC**
The Canada-BC Agreement transferred the rights and obligations under the CRT to the Province. Any substantive changes to the CRT will require provincial government involvement.

The Province has committed to undertake consultations with affected stakeholders and Basin residents around potential changes to the CRT.

**Columbia Basin Trust**
The Trust’s primary role in regards to the CRT is to act as an information resource for Basin residents, First Nations and local governments. The Trust is also working with provincial and federal government agencies to provide advice on meaningful consultation processes with Basin residents and local governments on any process to amend, renew or terminate the CRT.

The Trust is not a decision-maker with regards to the CRT and we are not advocating for any specific future outcomes, other than to ensure Basin residents are meaningfully consulted through the process.

What Can I Do?

- Learn more about the history of the CRT and build your understanding and awareness of how your community and region was affected by the CRT.
- Prepare to engage in positive and productive dialogue on the future of the CRT.
- Learn more at ourtrust.org/crt.
- Participate in the Province’s CRT engagement process
The Columbia River Basin

Major mountain ranges and large volumes of precipitation provide the foundation for the Columbia River Basin. The large volumes of annual runoff, combined with changes in elevation—from the river’s headwaters at Canal Flats in BC’s Rocky Mountain Trench, to Astoria, Oregon, where the river flows into the Pacific—make the Columbia one of the most powerful rivers in North America.

Fifteen per cent of the total Basin area is in Canada, and the Canadian portion of the Basin contributes approximately 30 to 40 per cent of the average river flows and an even higher proportion of peak river flows.

Benefits and Impacts in the Canadian Columbia Basin

BENEFITS

• The Province of BC receives approximately US$120 million each year in downstream power benefits.
• The increased water storage and regulated flows resulting from the CRT dams led to the development of hydroelectric projects such as Kootenay Canal Generating Station (1976), Revelstoke Dam (1983) and Arrow Lakes Generating Station (2002).
• Canada received $254 million in Canadian Entitlement and a 60 year pre-payment of assured annual flood control worth $64.4 million.
• Dam construction provided employment opportunities for several thousand people over several years and continues to provide ongoing employment opportunities.
• There was increased economic activity in local communities during construction.
• Industry and communities across the province have benefited from low-cost hydroelectricity.
• Canadian communities benefit from flood control provided by the CRT.

IMPACTS

• Some communities were lost or changed forever and local businesses and private properties were impacted.
• Approximately 650 km² (231 mi²) of valley land, and over 500 km² (193 mi²) of lakes, rivers, ponds, streams and related fish, wildlife, waterfowl, bird and other species habitat were flooded.
• Agriculture and forestry activities have been limited due to the loss of fertile, low-elevation land.
• Approximately 2,300 people along the Arrow Lakes, Duncan and Koocanusa reservoirs were relocated.
• Numerous First Nations’ cultural and archeological sites were submerged.
• Ecosystems were altered, impacting fish and wildlife values, and reducing habitat availability.
• Transportation routes were altered or eliminated.
• Dust storms on reservoirs can negatively impact human health.
• Fluctuating water levels limit recreation and development opportunities.

The Columbia River Treaty

The Columbia River Treaty (CRT) addressed two main issues facing Canada and the U.S.:
• It increased the ability to regulate river flows and reduced the risk of flooding; and
• It optimized hydroelectric energy production for both countries.

The Canadian Columbia River Basin generates approximately 50 per cent of the total hydroelectricity produced in BC, producing low-cost, zero-carbon electricity.

ourtrust.org/crt