

Columbia River Treaty



History

Creation of the Columbia River Treaty



Canada and the United States were facing two major challenges in the Columbia Basin after the Second World War.

- ♦ The "untamed" Columbia River was causing periodic and sometimes devastating flooding, and
- ♦ an upswing in the economy and population increased the need for additional energy sources.

To solve these challenges, water needed to be stored in the upper Columbia Basin. In 1964, Canada and the United States ratified the Columbia River Treaty (CRT). The two purposes of the CRT are:

- ♦ to coordinate flood control, and
- ♦ to optimize electrical energy production in the Columbia River Basin in the United States and Canada.

Under the CRT, Canada agreed to build three storage dams - Keenleyside, Duncan and Mica - in the Canadian Columbia Basin. A fourth dam - Libby Dam - was built in the United States, with its reservoir backing up into B.C.

The storage reservoirs in Canada hold 15.5 million-acre feet of water - all of which is useable for power production. The Treaty storage is equivalent to the amount of water stored in a three-dimensional city block running the entire length of Canada.

Canada and the United States referred to the International Joint Commission (IJC) the problem of determining whether or not a greater use of the waters of the Columbia River system would be feasible and advantageous to both countries. The IJC established the International Columbia River Engineering Board to carry out water management studies in the Basin.

The Engineering Board confirms a number of sites in Canada for the construction of large storage reservoirs to be used to regulate the Columbia River to the benefit of both countries.

January 17, Canada and the United States sign the Columbia River Treaty.

July 8, Canada and British Columbia sign an agreement giving British Columbia the benefits expected from the Columbia River Treaty and requiring British Columbia to pay for the expected costs.



Duncan Dam built

1944

1948

A disastrous flood on the Columbia kills 41 people, makes homeless 38,000 and destroys a U.S. community of 18,000.



1959

1960

Negotiations regarding the selection, construction and joint use of projects commences.

1961

1961-1964

Negotiations continue between the governments of the United States, Canada and British Columbia on improvements to the Columbia River Treaty and the sales of the downstream power benefits in the United States.

1963

1968

1964

January 22, a protocol is agreed upon between the two countries. September 16, President Lyndon Johnson, Prime Minister Lester Pearson and Premier W.A.C. Bennett met at the International Boundary at Blaine, WA and Douglas, B.C. to ratify the Columbia River Treaty and the Protocol.



Arrow Dam (later renamed Keenleyside after B.C. Hydro's first co-chairman) built.

The people of the Columbia River Basin come together to press the Province for recognition of the negative impacts of the Columbia River Treaty on their region.

The Columbia Basin Trust Act creates the Columbia Basin Trust (CBT) to provide social, economic and environmental benefits to the region most adversely affected by the Columbia River Treaty.

The Columbia Basin Trust establishes a Water Advisory Panel of experts to provide advice about the Columbia River Treaty and other water related issues in the Basin.

Earliest date the Columbia River Treaty can be terminated.

1969

early 1990s

1995

2003

2024

1973

Mica and Libby dams built.



1992

Local governments in the Basin coordinate their efforts at the regional district and tribal council level and meet as the Columbia River Treaty Committee.

2002

The Columbia Basin Trust formally appoints a Water Initiatives Committee to move forward with CBT's mandate in the area of water.

2014

Earliest date of notification that either Canada or the United States must give to terminate the Columbia River Treaty. However, the Treaty can be renewed at any time by agreement between both parties.

treaty timeline

the downstream benefits

Generally, the downstream benefits are the difference between the amount of electricity generated at U.S. power plants "with and without" the use of the storage in the Columbia River Treaty dams.



In exchange for the storage of floodwater under the Columbia River Treaty (CRT/Treaty), Canada received US\$64.4 million. In addition, Canada is entitled to one half of the extra power generated at U.S. power plants on the Columbia River (the downstream benefits) that result from the operation of the storage sites in Canada. The Province of B.C. owns this "Canadian Entitlement of Downstream Benefits". The Province sold the first 30 years of these benefits to a group of U.S. utilities for US\$254 million. The money helped pay for the construction of the three Treaty dams in Canada. These sales agreements expired in 1998, 1999 and 2003 (the anniversaries of the scheduled in-service dates of the dams). Nine per cent of the downstream benefits returned to B.C. in 1998; 46 percent more in 1999; and the remaining 45 per cent in 2003. It is estimated the Province of B.C. will receive approximately US\$5 to \$9 billion for the remaining years of downstream benefits.

There is no official "expiry date" for the CRT. The annual Treaty flood control requirement only goes to 2024, while very large flood control is required as long as the CRT dams are in operation. The power part of the CRT can be terminated or re-negotiated in 2024, if notice is given ten years prior (2014).



TREATY ENTITIES

To ensure that the provisions of the Treaty are met, the CRT required the appointment of entities from both Canada and the United States.

- ♦ The B.C. Government appointed B.C. Hydro
- ♦ The U.S. Government appointed the Bonneville Power Administration and the Army Corps of Engineers (Pacific Northwest Division)

OPERATING PLANS

Two main operating plans guide hydro system operations under the CRT.

- ♦ The **Assured Operating Plan** (AOP) is developed for a six-year period to guide flood control and power generation operations.
- ♦ The **Detailed Operating Plan** (DOP) is prepared annually and updates the AOP using updated reservoir level information gathered from weather stations along the Columbia
- ♦ The Treaty sets out provisions for the appointment of a Permanent Engineering Board (PEB) consisting of two Canadian (one federal and one provincial) and two American members.
- ♦ The PEB is responsible for reviewing the plans and operations by the entities and reporting whether the intent of the Treaty is being met.

The Treaty requires the appointment of entities. In Canada, B.C. Hydro and the Province of B.C. are the Canadian entity. In the U.S., there are two agencies that form the entity. They are the Administrator of the Bonneville Power Administration (BPA) and the Division Engineer, North Pacific Division, US Army Corps of Engineers. Entities are responsible for overseeing the conduct of the Treaty.

Impacts



During the creation of the Columbia River Treaty, there was a lack of consultation with the residents of the Canadian Columbia Basin, even though they were most impacted. When the water started rising behind Keenleyside, Duncan, Mica and Libby dams:

- ♦ 2,300 people along the Arrow Lakes, and the Koocanusa, Duncan, and Kinbasket reservoirs were displaced.
- ♦ Sixty thousand hectares (600 square kilometres) of high value, valley bottom land was flooded.
- ♦ Numerous First Nations archaeological and burial sites were submerged or buried. Areas that were critical to the cultural, economic and environmental well being of the region were lost.

The region is still burdened with the on-going impacts from the rise and fall of water levels.

- ♦ Recreation on the reservoirs is limited because of the large seasonal fluctuations of the water levels.
- ♦ Loss of key wildlife habitat, species, and populations have been impacted by increased pressures on low elevation areas.
- ♦ Dust storms around reservoirs impact human health.
- ♦ Transportation infrastructure in the region is more complex and difficult to maintain.
- ♦ Agriculture and forestry activities in the region are limited due to the loss of fertile low elevation land.



The Columbia River Treaty also provided benefits:

- ◆ Communities in both Canada and the U.S. are now better protected from extreme floods.
- ◆ British Columbia used its income to construct the dams.
- ◆ Additional water storage led to the subsequent development of hydropower generation.
- ◆ Short-term employment building and operating the dams and hydropower projects.
- ◆ Low-cost electricity primarily to areas of high consumption like the Lower Mainland.

The Columbia River provides about 50 per cent of the total hydroelectric power produced in British Columbia.

Benefits

The Columbia Basin Trust was created in recognition of the

absence of local input, drastic social upheaval, and permanent environmental and economic losses that resulted from the creation of the Columbia River Treaty dams.

By the early 1990s people became aware that an opportunity for public involvement might at last present itself. The sale of the first 30 years of B.C.'s share of the downstream benefits was about to expire. Residents of the region were determined to have a voice in the matters concerning environmental, economic and social health. The Columbia Basin Trust was created in that spirit.

In the early 1990s leaders from First Nations, local communities and the Province of B.C. worked cooperatively on an agreement recognizing the impacts to the region. In 1995, Columbia Basin Trust was created with a unique mission to **support efforts by the people of the Basin to create a legacy of social, economic and environmental well-being and to achieve greater self-sufficiency for present and future generations.** The Columbia Basin Trust was endowed with \$295 million from the Province of B.C. (approximately five per cent of the total downstream benefits owned by the Province of B.C.).





During the creation of the Columbia Basin Trust there was extensive public consultation with Basin residents that resulted in the creation of the Columbia Basin Trust Management Plan. This plan is the guiding document for the principles of investing the initial endowment and creation of programs to support the social, economic and environmental well-being for the residents of the Canadian Columbia Basin

Using this plan as a guiding document, CBT along with our power partner Columbia Power Corporation, made investments into upgrading existing hydroelectric facilities on the Columbia River system as well as building new generating stations on existing dams.

Part of the public consultation that was carried out with Basin residents in the creation of CBT clearly pointed out that one of the priorities for Columbia Basin Trust should be to "prepare" the residents of the Columbia Basin for the potential renewal or renegotiation of the Columbia River Treaty when that opportunity occurs on 2024. In order to carry out this mandate CBT has allocated staff and financial resources to its Water Initiatives Program. In addition, CBT has designated a board committee to oversee the program and appointed an advisory panel of outside experts to assist in the development of its water related programs. The Columbia Basin Trust is currently involved in a number of initiatives across the Columbia Basin to ensure that the views and values of the people of the Basin are a key component of any renewal or re-negotiation process for the CRT.

Water Initiatives



The Columbia Basin Trust is a Crown corporation created in 1995 to support efforts by the people of the Canadian Columbia Basin to create a legacy of economic, social, and environmental well-being and to achieve greater self-sufficiency for present and future generations.

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