



Columbia River Treaty Frequently Asked Questions (FAQs)

Spring 2012

Columbia River Treaty

1. What is the Columbia River Treaty?

The Columbia River Treaty is a trans-boundary water management agreement between the United States and Canada signed in 1961 and ratified in 1964.

The Treaty optimizes flood management and power generation, requiring coordinated operations of reservoirs and water flows for the Columbia River and Kootenay River on both sides of the border.

It does not have a specified end date, however, the Treaty can be terminated on or after September 16, 2024 provided that either Canada or the United States has given at least 10 years notice of their intention to terminate.

2. What are the Canadian and U.S. Entities

The U.S. Entity is made up of the Bonneville Power Administration and the United States Army Corps of Engineers. The Canadian Entity is BC Hydro.

The Columbia River Treaty is implemented by the entities. Together, they work cooperatively and are responsible for the daily operations of the reservoirs and hydroelectric facilities.

The Province of British Columbia is the Canadian Entity to manage the Canadian Entitlement, Canada's half share of the downstream power benefits.

3. What are the benefits to British Columbia from the Columbia River Treaty?

The Columbia River Treaty has brought significant flood control and power benefits to British Columbia.

at-site electricity generation	<ul style="list-style-type: none"> • Mica dam and Arrow Lakes Hydro plant
Canadian Entitlement (Canada's share of the downstream power benefits)	<ul style="list-style-type: none"> • average 1,320 megawatts capacity and 4,540 gigawatt hours of energy to BC border over last 10 yrs • worth \$120-300M annually
Canadian Columbia River Basin region	<ul style="list-style-type: none"> • provides 44% of total electricity produced in BC
development of additional generating facilities	<ul style="list-style-type: none"> • Kootenay Canal Plan (1974), Revelstoke Dame (1984), Arrow Lakes Generating Station (2002), Brilliant Expansion project (2007)
flood damage reduction	<ul style="list-style-type: none"> • particularly around Trail, Castlegar, Revelstoke and Creston
jobs/economic stimulus	<ul style="list-style-type: none"> • generating facilities provide jobs, spin off industries, services from ongoing operations/periodic upgrades
Libby Dam	<ul style="list-style-type: none"> • constructed in 1973 • regulates water flow on the Kootenay River • resulting reservoir: Lake Koocanusa
power generation	<ul style="list-style-type: none"> • assured winter flows for power generation

4. What flood control is provided under the Columbia River Treaty?

The Columbia River Treaty prescribes two main types of flood risk management:

1. Assured Annual Flood Control

Canada agreed to provide 8.45 million acre feet (increased to 8.95 million acre feet in 1995 due to a reallocation of storage from Arrow to Mica) of assured annual water storage for flood control purposes for 60 years at the three Treaty reservoirs [Duncan, Arrow Lakes (Keenleyside), and Kinbasket]. This expires automatically in 2024.

2. On Call Flood Control

On Call Flood Control is intended to be used during periods of very high water inflows. Under certain specified conditions the United States can request that Canada provide On Call storage in addition to the Assured Annual Flood Control to prevent flooding. In this event, Canada would provide extra storage at Canadian reservoir

For each request the United States must pay the operating costs and any B.C. economic loss. This provision remains in effect as long as the Columbia River Treaty dams exist, even if the Columbia River Treaty is terminated.

5. What are the impacts to British Columbia from the Columbia River Treaty?

Although the four dams [Duncan, Mica, Arrow (Hugh Keenleyside), Libby] improved flood control and power production, the resulting reservoirs in Canada flooded 60,000 hectares (231 square miles) of valley bottom land.

Flooding impacted traditional First Nations' sites, agricultural and forestry areas, displaced a dozen communities, including approximately 2,300 people, and impacted fish and wildlife habitat.

The rise and fall of reservoir levels continue to affect the surrounding ecosystems, cultural and recreation interests. In recognition of the long term impacts in the region as a result of the Columbia River Treaty and the Columbia River Treaty dams, Columbia Basin Trust (a Crown corporation) was created in 1995 to support social, economic and environmental well-being in the Columbia River Basin.

6. What are downstream benefits?

As a result of the water flow management from B.C. storage reservoirs additional power can be generated in the United States. This power, is downstream power benefits.

Downstream power benefits are computer modeled and calculated using procedures set out in the Treaty and are defined six years in advance. They are not calculated based on actual amount of downstream power generated. These benefits are shared equally between both countries.

7. What is the Canadian Entitlement?

Canada's half-share of the downstream power benefits is called the Canadian Entitlement. Under the 1963 Canada-British Columbia Agreement, these benefits are owned by the Province of British Columbia.

Under the Columbia River Treaty, the United States provides the Canadian Entitlement to British Columbia as energy and capacity, not money. Over the last ten years (2000-2010) the average annual Canadian Entitlement has been approximately 1,320 megawatts capacity (about 11% of BC Hydro's total capacity) and approximately 4540 gigawatt hours of energy.

Powerex sells the Canadian Entitlement at market value to either BC Hydro or utilities in Alberta or United States.

When the Columbia River Treaty was ratified in 1964, the Province of British Columbia sold the first 30 years of the Canadian Entitlement to a consortium of utilities in the United States for \$254 million and used the money to finance the construction of the three Columbia River Treaty dams. Those agreements expired in phases (1998-2003) and the Province now receives all of the Canadian Entitlement. The Canadian Entitlement is worth approximately \$120 - \$300 million annually,

depending on power market prices, and goes into the Province's general revenue account.

The Canadian Entitlement continues as long as the Columbia River Treaty is in place.

If the Columbia River Treaty is terminated, the Canadian Entitlement ends.

8. How has the United States benefitted from the Columbia River Treaty?

Canadian Columbia River Treaty reservoir storage reduces flood flows in the United States and increases generation at United States hydroelectric projects by reducing spill and shifting energy generation to high value time periods, providing billions of dollars of power benefits.

Columbia River Treaty dams more than doubled the amount of Columbia River basin reservoir storage. Canadian reservoir storage reduces the need to make use of reservoirs at United States' dams to manage spring flood risks, fish protection and other needs.

9. What is Columbia Basin Trust?

Columbia Basin Trust is a Crown corporation that was created in 1995 to support social, economic and environmental well-being in the Canadian portion of the Columbia River Basin - the region most affected by the Columbia River Treaty and the Columbia River Treaty dams.

In recognition of these impacts, the Province established Columbia Basin Trust under the Columbia Basin Trust Act and provided an endowment of \$321 million: \$276 million to invest in hydroelectric projects, \$45 million endowment to invest in other projects or for loans, as well as \$2 million per year from 1996 to 2010 for operations.

Columbia Basin Trust manages the endowment through its Investment Program which provides funding for its Delivery of Benefits activities. Currently, Columbia Basin Trust provides \$20 million annually in support of the efforts of the people of the Columbia River Basin to create a legacy of social, economic, and environmental well-being and to achieve greater self-sufficiency for present and future generations.

10. What is Columbia Power Corporation?

In 1994, the Province formed Columbia Power Corporation to hold expansion rights to both the Brilliant Dam and Waneta Dam purchased from Teck Cominco Metals Ltd.

British Columbia committed to provide \$250 million over a ten-year period for the development of three power projects in the Columbia Basin, in partnership with Columbia Basin Trust.

These projects were: the addition of power generation at Hugh Keenleyside Dam, owned by BC Hydro, and the expansion of generating capacities at Brilliant Dam and Waneta Dam.

The partners purchased Brilliant Dam from Teck Cominco in 1996. Currently the Columbia Power Corporation and Columbia Basin Trust partnership, along with FortisBC, is involved in the 335 MW Waneta Expansion Project.

11. What is the Columbia Basin Fish and Wildlife Compensation Program?

The Columbia Basin Fish and Wildlife Compensation Program compensates for the impacts to fish, wildlife and their supporting habitats affected by BC Hydro owned and operated generation facilities. The Fish and Wildlife Compensation Program is delivered through a joint partnership that includes BC Hydro, the Province and Fisheries and Oceans Canada.

Since 1995, the Columbia Basin Fish and Wildlife Compensation Program has invested about \$4 million annually in fish and wildlife projects in the Columbia Region.

The approximately 600 conservation and enhancement projects are delivered with the support of partners including, First Nations, businesses, local communities and environmental groups and are approved each year by a regional steering committee.

Columbia River Treaty 2014 Review

12. What is the Columbia River Treaty 2014 Review?

Either Canada or the US can unilaterally terminate most of the provisions of the Columbia River Treaty anytime after September 16, 2024, providing at least ten years' notice is given. The latest date to provide termination notice for September 2024 is September 2014.

Government agencies in both Canada and the United States have begun examining future Columbia River Treaty options. The Ministry of Energy and Mines Columbia River Treaty 2014 Review Team is leading the Province's 2014 Review.

It will conduct an analysis of the economic, environmental, social, financial, legal and hydrological impacts of the Columbia River Treaty in order to make a comprehensive decision on whether or not to give notice of termination. Consultations with Columbia River Basin residents and First Nations will be conducted and the Province will seek to understand United States' interests.

13. Why is British Columbia leading the Columbia River Treaty 2014 Review?

The Canada-British Columbia Agreement (1963) transferred most Columbia River Treaty benefits, rights and obligations to the Province.

The Columbia River Treaty and related responsibilities and obligations for Canada and British Columbia are as follows:

Jurisdiction	Columbia River Treaty	Non-Treaty
British Columbia	Recipient of Treaty Benefits, responsible for Treaty obligations	Licensing water users
	Responsible for management of Treaty reservoirs	Water quality standards
	Owner of BC Hydro (Canadian Entity) and power generation	Regulation of power generation
	Impact mitigation	Management of natural resources
	Nominates a member of Permanent Engineering Board, which reviews and reports on operations under the Treaty	
Canada	Signatory to Treaty	Trans-boundary waters
	Approval of changes to Treaty	Canada-US relations
	Appoint Canadian Permanent Engineering Board members	

14. Who negotiates international treaties like the Columbia River Treaty?

International treaties like the Columbia River Treaty are within the jurisdiction of the federal government. The Canada-British Columbia Agreement (1963) allocated most Columbia River Treaty rights, benefits and obligations to the Province.

The Canada – British Columbia Agreement requires Canada to obtain the concurrence of the Province before amending or terminating the Columbia River Treaty.

15. Why are the dates 2014 and 2024 important?

The Columbia River Treaty has no specified expiration date. Either Canada or the United States can unilaterally terminate the Columbia River Treaty any time after 16 September 2024, provided written notice is filed at least 10 years in advance.

This suggests a “notice date” of 16 September 2014, but this can be done earlier or later.

Both British Columbia and the United States are considering options to determine whether or not to give notice.

Regardless of this, Assured Annual Flood Control expires automatically in 2024 and converts in 2024 to a Called Upon operation of Canadian storage space as may be needed by the United States for flood risk management.

16. What are the Columbia River Treaty Phase 1 studies and what scenarios did the studies consider?

The Columbia River Treaty Phase 1 studies were a joint effort between the United States and Canadian Entities. The United States Entity consists of the Bonneville Power Administration and the US Army Corps of Engineers. The Canadian Entity is BC Hydro.

These initial studies were designed to begin a learning process regarding power and flood control conditions after 2024.

The studies did not include actual operations for fisheries and other uses. Both Entities will be further examining other objectives in future studies.

17. Who will the Province involve in the Columbia River Treaty 2014 Review?

The Columbia River Treaty 2014 Review will include engagement with First Nations, stakeholder groups and the public, including youth.

The Ministry of Energy and Mines Columbia River Treaty 2014 Review team is working with many key stakeholders, including Columbia Basin Trust and the Local Governments’ Committee, to assist with public and First Nations’ engagement and consultation.

The Columbia River Treaty 2014 Review Team is also working with the Federal government and other provincial agencies to ensure a streamlined, effective approach to the Review.

18. Will First Nations be consulted as part of the Columbia River Treaty 2014 Review?

First Nation consultation is a key component of the Columbia River Treaty 2014 Review and will be a separate consultation process.

Canada and BC have signed an MOU to coordinate Aboriginal consultations as part of the Review. This consultation process will help inform Canada and BC’s recommendations to decision makers.

19. What is BC Hydro’s role in the Columbia River Treaty 2014 Review?

BC Hydro is the Canadian Entity responsible for the implementation of the Columbia River Treaty and the operator of the Columbia River Treaty dams in Canada.

BC Hydro is working closely with the Ministry of Energy and Mines Columbia River Treaty 2014 Review Team and is providing technical support to the Columbia River Treaty review process.

20. What is the federal government’s role in the Columbia River Treaty 2014 Review?

The Canada-British Columbia Agreement (1963) transferred most treaty rights and obligations to the Province.

Although this agreement retains Canada’s constitutional jurisdiction for international treaties, it requires Canada to obtain the concurrence of the Province before terminating or amending the Columbia River Treaty.

Canada and British Columbia are cooperating in the review and any future decisions.

The federal government supports British Columbia’s lead role in the Columbia River Treaty 2014 Review, however each government will have their own decision making process.

21. What is the United States doing to review the Columbia River Treaty?

The Bonneville Power Administration and the US Army Corps of Engineers are responsible for implementing the Columbia River Treaty on behalf of the United States.

They are conducting a multi-year review process, the 2014/2024 Columbia River Treaty Review, to consider options in advance of 2014 in order to be able to make a recommendation to the United States Department of State on whether or not to give notice to terminate the Columbia River Treaty.

Information on the 2014/2024 Columbia River Treaty Review can be found at www.gov.bc.ca/columbiarivertreaty

Columbia River Treaty 2014 Review Public Engagement

22. What are the objectives of the Columbia River Treaty 2014 Review public engagement?

The objectives of the Columbia River Treaty 2014 Review public engagement process are to:

- Increase Columbia River Basin residents' awareness and understanding of the Columbia River Treaty;
- Confirm residents' values and interests regarding water management under the Columbia River Treaty;
- Inform residents of the options being considered for the Columbia River Treaty after 2024;
- Inform residents of the implications of various scenarios associated with various interests;
- Receive residents' input and feedback on the scenarios as well as input and feedback on additional opportunities and issues that could be considered during the Columbia River Treaty 2014 Review; and
- Report back to residents on how the Province has considered their input.

23. How does the Columbia River Treaty 2014 Review build on past engagements with Columbia River Basin residents on water interests?

The Columbia River Treaty 2014 Review Team will review residents' values and interests articulated in past community engagements on water management issues in the Columbia River Basin.

These include the Water Use Planning process (2000-2007) and the Non-Treaty Storage Agreement consultations (2011) carried out by BC Hydro, and the recent Columbia Basin Trust community information sessions on the Columbia River Treaty (2011-12).

We acknowledge the considerable time and effort invested in previous engagement processes and intends to build on the information already gathered in carrying out the Columbia River Treaty 2014 Review public consultation process.

24. How will the Province engage with residents of the Columbia River Basin?

We will engage through the Columbia River Treaty Review website at www.gov.bc.ca/columbiarivertreaty, community meetings in Spring and Fall 2012, and a youth event in Fall 2012.

25. What is the Columbia River Treaty Local Governments' Committee?

The Columbia River Treaty Local Governments' Committee was formed in 2011. The regional districts of Central Kootenay, Columbia Shuswap, East Kootenay and Kootenay Boundary each appointed two members to the committee. The Village of Valemount and the Association of Kootenay Boundary Local Governments each appointed one member.

The Columbia River Treaty Local Governments' Committee will work with Columbia Basin Trust to create education and awareness activities in the region. They will help the Province understand regional views, values and interests with respect to the Columbia River Treaty.

