



Negotiations to Modernize the Columbia River Treaty
Agreement-in-Principle Content
Public Document

The Agreement-in-Principle (AIP) announced by Canada and the United States on July 11, 2024, reflects their understanding of negotiations to modernize the Columbia River Treaty (CRT) regime and their agreement-in-principle on the key elements of a Modernized Treaty as of that date.

This public document was created to describe those understandings and key elements. Additional matters may arise during the course of the continued negotiations or in the drafting of the CRT text that may result in further development of those understandings and key elements.

This document contains sections describing updates and changes that Canada and the United States have mutually determined, in principle, to incorporate into a modernized CRT. They cover flood risk management; Canadian flexibility, power coordination and transmission; compensation; power benefit sharing; ecosystem considerations; and time periods.

Since these understandings include elements not present in the existing Treaty, Canada and the United States will work together to reflect these new elements in the preamble of the Modernized Treaty. Updated elements to include are ecosystem health, Indigenous and Tribal cultural values, and adaptive management.

Note: italicized terms can be found in the Glossary on page 11 and are working definitions as understood by Canada, provided to assist with comprehension of this document.

Flood Risk Management (FRM)

Pre-planned FRM

Currently, Canada provides 8.95 million acre-feet (MAF) of dedicated, pre-planned FRM through all the Canadian CRT projects (Keenleyside-Arrow, Mica, Duncan). However, the CRT provisions requiring pre-planned FRM also provide for their expiry on September 15, 2024. At that point, there is a switch to an ad-hoc system described in Article IV(3) of the CRT, commonly known as “Called Upon” flood control.

Canada and the United States plan to update the pre-planned (also known as “assured”) flood risk management operations with Canada, providing the U.S. with **3.6 MAF of pre-planned FRM for the Arrow Reservoir through to Operating Year 2044.**

Implementation of the pre-planned 3.6 MAF operation at Arrow would be accomplished by the *Entities* in the same manner as the current storage:

- this volume would be evacuated according to an agreed *Storage Reservation Diagram* (SRD);
- *coordinated refill* of Canadian projects for U.S. FRM purposes would continue in the same manner as today, with *proportional* refill to manage downstream flows. The U.S. Entity is expected to submit an updated *Flood Control Operating Plan* corresponding to the 3.6 MAF FRM. In coordinating the operation of all Treaty storage for all purposes, every effort would be made to minimize flood damage in the United States and Canada.

Called-Upon Flood Control

Canada and the United States have mutually determined to develop a process to enhance the understanding of each other's positions regarding *Called-Upon* flood control.

Kootenay Lake Flood Risk

The U.S. Army Corps of Engineers (USACE) is expected to continue to cooperate with Canada on requests for variation of Libby Dam's operations, including providing a process for Canada that allows Canada to submit requests for in-season Libby operational variance alternatives to assist in meeting its flood risk objectives on Kootenay Lake.

Such cooperation is intended to consider any recommendations of the Kootenay/Kootenai River Transboundary Collaborative Workgroup (KTCW, described below), once established, to incorporate Canadian flood risk concerns downstream of Libby Dam.

Kootenay Lake flood damage elevation is important to both countries, as it provides a basis for planning considerations when managing Libby discharges to achieve the operating purposes of Libby Dam, including its fisheries operations.

Canada and the United States have determined to work via appropriate mechanisms to identify flood-stage elevations at key locations in Kootenay Lake (Canada's evaluations have shown damage can begin at 534 m (1,752 ft)).

Canadian Flexibility, Power Coordination and Transmission

Canadian Flexibility (Specified Operations (SO) and SO Volume)

Canadian flexibility allows Canada to undertake Treaty operations for domestic priorities, such as environmental, Indigenous cultural values and socioeconomic purposes.

Canada and the United States expect to implement this through “Specified Operations” (SO), which is the set of specific operating rules and criteria that arise from changing the operation of Canadian storage to meet Canadian objectives. The SO Volume is the quantity of Canadian storage that can be used for the purpose of an SO.

Both the SO and the SO Volume are determined by the Canadian Entity,¹ subject to process steps outlined in the Assured Operating Plan Process.

The SO Volume available to Canada for the first 15 years after *entry into force* of the Modernized Treaty is 0 to 4.0 MAF. In subsequent years, the SO Volume available to Canada is 0 to 5.0 MAF.

The particular SO and SO Volume determined by the Canadian Entity will affect the actual downstream power benefits in the U.S. The SO Volume will result in a reduction in power benefit sharing with Canada (Canadian Entitlement: see below) of 6.5% per MAF specified in an SO.

Assured Operating Plan (AOP) Process through Operating Year 2044

Canada and the United States intend AOPs to be the same as the last AOP in the *Interim Period*, subject to changes:

- to integrate an SO;
- to incorporate an updated record of Columbia River Basin flows (referred to by the Entities as “*modified flows*”);
- to incorporate the *upper rule curves* associated with pre-planned flood control from Arrow; or
- agreed to by the Entities.

Each AOP with an SO would be developed by the U.S. and Canadian Entities and finalized at least four years in advance of the applicable operating year.

¹ The Province will direct the Canadian Entity in the determination of the SO.

Transmission

Existing Transmission

U.S. Capacity 1,120 MW South-to-North Transmission: the U.S. Entity intends to transfer 1,120 MW of long-term firm Point-to-Point (PTP) legacy transmission service associated with the Treaty to an entity designated by Canada. The U.S. Entity will provide Canada with Open Access Transmission Tariff service to satisfy delivery of the Canadian Entitlement obligation consistent with the Modernized Treaty.

Transmission Expansion

BPA and an entity designated by Canada intend to initiate, through normal processes, a transmission study to consider an upgrade to the B.C.-to-U.S. eastern intertie. The study may consider developing a new 500 kV circuit between BPA's Bell Substation (near Spokane, WA) and the B.C./U.S. border, which would require BC Hydro to build an interconnecting line from the B.C./U.S. border to a new 500 kV substation assumed to be near the Nelway Substation (east of Trail, B.C.). A plan of service would be needed to determine if the facilities would provide sufficient capacity to allow for providing up to 1,000 MW of firm Northbound and up to 1,000 MW of firm Southbound rights to get to and from the B.C./U.S. border at BPA's Bell Substation.

Compensation through Operating Year 2044

Compensation – Pre-planned FRM

The United States is expected to compensate Canada for preplanned FRM by providing US\$ 37.6 million per year, indexed to inflation (based on the U.S. Consumer Price Index or equivalent). Such compensation is expected to begin the first year in which Canada provides the pre-planned FRM, which can be as early as this operating year. Such compensation is expected to end after Operating Year 2044. Delivery of the pre-planned FRM operation will end when compensation ends.

Additional Compensation

The U.S. is expected to provide additional compensation of US\$ 16.6 million per year, indexed to inflation (using the U.S. Consumer Price Index or equivalent) with compensation commencing when the Modernized Treaty comes into force.

The additional compensation to Canada is in recognition for the additional benefits the U.S. receives through coordinated operations. While these benefits have not been enumerated in

negotiations, Canada notes that the U.S. has described in public forums benefits the CRT brings to navigation, irrigation, fisheries and recreation.

Power Benefit-Sharing – Power Coordination through Operating Year 2044

The Canadian Entitlement amounts that began on August 1, 2024, and continue through July 31, 2044, are shown in the table below. These amounts are expected to be reduced by 6.5% per MAF of SO Volume unilaterally chosen by Canada (see Canadian flexibility section above).

Operating Year	Capacity (MW)	Energy (aMW)
2025	660	305
2026	660	305
2027	660	305
2028	660	305
2029	660	305
2030	590	278
2031	573	225
2032	565	225
2033	558	225
2034	550	225
2035	550	225
2036	550	225
2037	550	225
2038	550	225
2039	550	225
2040	550	225
2041	550	225
2042	550	225
2043	550	225
2044	550	225

Ecosystem Considerations

In addition to the Canadian flexibility through the Specified Operation, Canada and the United States have included other environmental objectives as part of Treaty modernization.

Kootenay/Kootenai Transboundary Coordination

The intent is to create a collaborative group, the Kootenay/Kootenai Transboundary Collaborative Workgroup (KTCW), to facilitate transboundary efforts around each country's interests to provide a forum for sharing, exchanging, and collaborating on scientific and Indigenous knowledge and other information to inform planning and management processes in the Kootenay/Kootenai Basin.

A binational sub-committee is expected to develop a recommended governance plan, and short- and medium-term workplans. These workplans can inform a broad range of management and planning processes in the sub-basin.

Canada and the United States, subject to the availability of funding, intend for the KTCW to begin its work on a provisional basis in the period between concluding the text of a Modernized Treaty and its entry into force, if all participants of the KTCW are amenable.

Note: the geographic scope of the KTCW is the Kootenay/Kootenai River system in Canada and the U.S.

Joint Ecosystem and Indigenous and Tribal Cultural Values Body (JEB)

This would be a new body under the CRT. The purpose of the JEB is to enhance ecosystem health and integrate Indigenous and Tribal cultural values in decision-making by making formal recommendations in line with its terms of reference and workplan and applying a One River approach in its work. To Indigenous Nations and Tribes, the One River approach reflects the sacred duty to improve intrinsic ecosystem health for all living things from the Columbia River's headwaters to the estuary at the Pacific Ocean. Indigenous and Tribal knowledge holders are expected to provide guidance on the One River approach.

JEB Membership

Canada and the United States intend the JEB to be made up of representatives of Indigenous Nations and Columbia Basin Tribes.

There would be equal representation from Indigenous Nations and the Tribes and between Canada and the United States (for Canada that includes representation from the Province of British Columbia) in the JEB. The JEB would be co-chaired by Indigenous Nations and Tribes. The United States and Canada, including representation from the Province of British Columbia,

are expected to participate in all aspects of the JEB's work except making decisions on recommendations.

Creating the JEB

A JEB Preparatory Committee is expected to be created. Canada and the United States intend the JEB Preparatory Committee to begin its work prior to entry into force of the Modernized Treaty. The Preparatory Committee is expected to develop:

- an initial governance structure;
- terms of reference; and
- an initial work plan for the JEB, including an adaptive management program.

The countries understand that, in developing its workplan and beginning its work, the JEB Preparatory Committee is expected to collaborate with the Kootenay/Kootenai Transboundary Collaborative Workgroup. The JEB Preparatory Committee may inform its work, as appropriate, through interactions with additional stakeholders and transboundary groups.

JEB Work and Recommendations

The JEB is expected to prepare a workplan that will include an adaptive management program (see below) and begin implementing its workplan no later than one year after entry into force of the Modernized Treaty.

The JEB is expected to make its recommendations by consensus of its Indigenous Nations and Tribal representatives. The JEB's recommendations would be provided to the Parties (the Governments of Canada and the United States), the Entities, and agencies of the Province of British Columbia and other entities, as appropriate, with the intention of informing their decision-making.

Recommendations by the JEB, which will be made available to the public, will pertain to the mainstem Columbia River. In preparing those recommendations, the JEB may consider the relationship of the tributaries to the mainstem Columbia River, consistent with the One River approach. When Parties and Entities receive recommendations from the JEB, they will either implement the recommendations or explain in writing why they will not implement the recommendations in whole or in part.

The JEB will provide a forum for collaborating on salmon reintroduction.

Adaptive Management

The Adaptive Management program will include:

- objectives, study topics, a review of existing data and gap analysis, and data collection methods, including establishing environmental baseline data;
- a long-term monitoring regime; and
- identification of performance measures, and the changes to them that would trigger a recommendation by the JEB for a review of operations (including storage and flows) in both countries.

In implementing the Adaptive Management program, the JEB will strive to utilize, and not duplicate, existing, ongoing monitoring programs in the Columbia River Basin.

Anadromous Fish Flow Augmentation – 1-1.5 MAF

For the purpose of augmenting and providing certainty of spring and summer flows for migrating anadromous fish in the U.S. and Canada through Operating Year 2044, Canada intends to make reasonable efforts to:

- store 1.0 MAF annually in Canadian reservoirs by mid-April; and
- release the 1.0 MAF annually within the May 1 – August 7 salmon and steelhead migration period, through a long-term enabling agreement.

In any water year forecast of water conditions for the April – August period at The Dalles, Oregon, is below the 20th percentile, Canada intends to make reasonable efforts to store an additional 0.5 MAF of fish flow augmentation water by April 30 and release it within the May 1 – August 7 anadromous fish migration period, through a long-term enabling agreement.

The United States and Canada intend to report annually to the JEB anadromous fish flow augmentation operations for each previous operating year and how the volumes were used to meet specific objectives for different populations of anadromous salmon and steelhead.

The JEB may review fish flow augmentation operations in conjunction with other operations at dams in the U.S. and Canada and make recommendations for changes to the objectives to maximize benefits for anadromous species in both countries while improving, to the extent possible, other fish populations; and to mitigate the impacts of climate change on fish.

The JEB is expected to review anadromous fish flow augmentation operations and effectiveness and make recommendations, if any, to improve the effectiveness of aiding in overall salmon and steelhead survival.

Salmon Reintroduction

Both countries, consistent with existing authorities, are independently supporting phased reintroduction feasibility studies outlined in the July 2015 Joint Paper of Columbia Basin Tribes and First Nations on Reintroduction and Fish Passage into the United States' and Canadian Upper Columbia Basin.

Current studies led by the Upper Columbia United Tribes in the United States include salmon behaviour and survival studies, coupled with design and testing of interim passage facilities.

While both countries are proceeding with their respective studies, transboundary coordination and cooperation to share information, data, study approaches and results are essential for success. Both countries would commit to respecting and addressing the needs of reintroduction within the modernized Treaty regime as described below, taking into account the One River approach.

Reintroduction of salmon into the blocked areas of the Columbia Basin will require careful consideration of many factors, including available habitat, operational considerations (such as flow volume and timing), and passage/transport through dams and reservoirs upstream of, and including, Chief Joseph and Grand Coulee dams.

Canada and the United States intend to work with the JEB to ensure collaboration on reintroduction studies and efforts, to include data sharing and potential joint studies.

Upon completion of reintroduction studies, the JEB also is expected to provide recommendations on long-term reintroduction programs. At least every five years following the entry into force of a Modernized Treaty, the JEB should review the results of reintroduction studies and activities completed to date and make recommendations regarding reintroduction actions that would support further progress on reintroduction.

Time Periods

Treaty operating years start on August 1 and end on July 31 of the following calendar year (e.g., the 2025 Operating Year (OY2025) starts August 2024 and runs to July 2025).

The Modernized Treaty will remain in force, subject to termination. Termination of the Modernized Treaty may be by agreement of the Parties (the Governments of Canada and the U.S.) at any time, or can be unilaterally initiated by either Party with 10 years' written notice to the other Party. However, as indicated earlier in this document, some provisions, such as pre-

planned FRM and power coordination/power benefit sharing expire in Operating Year 2044. The Parties may agree, in writing, to amend or extend the Modernized Treaty. Negotiations to amend the Modernized Treaty may commence at any time mutually agreed by the Parties.

Glossary

Called Upon: A process described in the Treaty pertaining to Flood Risk Management (FRM) by which the U.S. Entity may request additional flood storage space in Canada to meet FRM needs during an anticipated major flood event, if the flood risk cannot be adequately managed by the effective use of FRM storage in the U.S.

Coordinated Refill: A procedure for the refill period in the spring that involves Canadian and U.S. reservoirs refilling at proportional rates to control the flow at The Dalles for flood risk management.

Entity: Responsible bodies designated by each country to formulate and carry out the operating arrangements necessary for the implementation of the Columbia River Treaty. In Canada, BC Hydro is the entity for the implementation of CRT operations, and the Government of B.C. is the entity for the disposal of the Canadian Entitlement. The U.S. Army Corps of Engineers (USACE) and Bonneville Power Administration (BPA) are U.S. federal agencies that are jointly the entity for the implementation of the CRT.

Entry Into Force: The date the Modernized Columbia River Treaty becomes legally effective.

Flood Control Operating Plan: An updated operating plan submitted by the U.S. Entity that includes the Arrow Storage Reservation Diagram.

Interim Period: The period of time between reaching agreement-in-principle (announced on July 11, 2024) and the date the Modernized Columbia River Treaty enters into force.

Modified Flows: The historical streamflows that would have been observed if current irrigation depletions existed in the past, and if the effects of river regulation were removed (except at the upper Snake, Deschutes, and Yakima basins where current upstream reservoir regulation practices are included).

Million Acre Feet (MAF): A unit of measurement for large volumes of water in a reservoir. 1 MAF represents the volume of water covering an area of 1 acre to a depth of 1 foot, times a million.

Proportional Refill: A procedure for the refill period involves Canadian and U.S. reservoirs refilling at proportional rates to control the flow at The Dalles for flood risk management.

Storage Reservation Diagram (SRD): A diagram that defines the flood control storage space required in a reservoir for flood risk management on the Columbia River. Storage space required is a function of time of year and the seasonal runoff volume.

Upper Rule Curves: The maximum reservoir storage content. These curves are determined based on flood control regulations in accordance with the Flood Control Operating Plan and are associated with the annual pre-planned Flood Risk Management regime.

20th Percentile: A statistical measure to indicate the value below which 20% of data points in a dataset fall. In other words, it's a cutoff point where 20% of the values are less than or equal to this point, and 80% of the values are greater than this point.