The Past, Present and Future of the Columbia River Treaty: A Case for Modernization

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1- Case Description

1-1 Geolocation: (47.663479, -119.113113)

1-2 Indicate the three uses of water most important to this case study:

Hydropower Generation
Fisheries – Wild
Other ecological services – Flood Control

1-3 Case Study Summary:

The Columbia River Treaty is a bilateral agreement between the United States and Canada, implemented in 1964. The treaty focuses on hydroelectricity and flood control; under the terms of the agreement, Canada was required to provide 15.5 million acre-feet of reservoir storage. This was achieved through the construction of three dams in British Columbia. The treaty also authorized the construction of the Libby Dam on the Kootenai River in Montana.

The Treaty was negotiated during an era of dam construction that began with the Grand Coulee Dam in the 1930s. This era had a profound impact on the ecology of the Columbia River basin, transforming one of the world's richest salmon rivers into an "organic machine" that forced migrating fish through a system of ladders, dams, and reservoirs. Within three decades of ratification, thirteen species of fish were listed as threatened or endangered under the Endangered Species Act. In addition to being ecologically devastating, this had significant consequences for the Native American and First Nations tribes that live in the basin. These tribes, whose ceded lands cover 25 percent of the Columbia Basin, were excluded from the original negotiation process.

The treaty has no expiration date. It will continue indefinitely unless one side requests termination, which can happen any time after 2024. However, 2024 also marks the date in which the flood control agreement changes to a less defined approach. Both sides have expressed a commitment to continuing the treaty, which is widely regarded as a successful model of transboundary water cooperation.

Many stakeholders regard the 2024 deadline as a critical opportunity to modernize the terms of the treaty. Despite its successes, the treaty's narrow scope is unable to respond to changing environmental, economic, and cultural conditions. The modernization of the Columbia River Treaty presents an urgent and unique opportunity to reexamine the region's numerous and often competing interests.

1-4 Keywords:

hydropower, fisheries, flood control, bilateral agreement



2.0 Issues and Stakeholders

Issue: The core part of the 1964 Treaty – which addresses Canada's responsibility to provide storage for flood control – will expire in 2024 unless measures are taken to renew or modify it.

Natural Societal and Political Domain Variables: Governance Stakeholder Types: Non-legislative governmental agency

The Columbia River Treaty, signed in 1964, has no expiration date. It will continue indefinitely unless one country requests termination, which is allowed any time after 2024 (U.S. Department of State, n.d.). 2024 also brings changes to flood control obligations. After 2024, Canada's obligation to provide annual flood control ends and will be replaced with "called-upon" flood control. Under this system, the U.S. would ask Canada to store water on an as-needed basis, paying operating costs and economic losses that result from forgoing alternative uses (Northwest Power and Conservation Council, n.d.). These provisions, as well as changing needs for water usage, make the future of the Columbia River Treaty uncertain.

Stakeholders

- U.S. Entity
 - o U.S. State Department
 - o Bonneville Power Administration
 - U.S. Army Corps of Engineers Northwest Division
- Canadian Entity
 - o Canadian Department of Foreign Affairs, Trade, and Development
 - British Columbia Hydro and Power Authority

Issue: Since the 1960s, stakeholders outside of the main negotiating parties have argued that the Treaty neglects ecosystem needs. In particular, the four dams built as a result of the Treaty have altered the river's ecology and contributed to the decline of salmon fisheries.

Natural Societal and Political Domain Variables: Ecosystems, water quality, values and norms

Stakeholder Types: Environmental interest, Non-legislative governmental agency, Federated state/territorial/provincial government, Sovereign state/national/federal government

The original Treaty did not include any provisions for ecosystem benefits. During the original negotiations, the plans were met with protest from conservationists, Native American tribes, and Canadian First Nations. These stakeholders wanted to protect traditional salmon runs in the Columbia River Basin, which had already been severely threatened by the construction of the Grand Coulee Dam in the 1930s. The Grand Coulee Dam, which was built without fish passage infrastructure, eliminated salmon runs in the upper Columbia River (Northwest Power and Conservation Council, n.d.). When compared to historical averages, today's salmon runs in the Columbia River are significantly reduced (NOAA, 2008).

Stakeholders

- U.S. Entity
- Canadian Entity



- First Nations and Native American Tribal Organizations
 - o Canadian Columbia River Inter-Tribal Fisheries Commission
 - Including the Ktunaxa, Secwepemc and Okanagan Nations
 - Columbia Basin Tribes Coalition
 - Including the Yakima Nation, the Nez Perce Tribe, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes of the Umatilla Nation
- Conservation organizations
 - Including but not limited to: Save Our Wild Salmon, Pacific Rivers, Sierra Club, American Rivers, Center for Environmental Law and Policy, Earthjustice

Issue: The terms of the Treaty have resulted in U.S. consumers overpaying for energy, which some Northwest stakeholders object to.

Natural Societal and Political Domain Variables: Water quantity, assets

Stakeholder Types: Industry/Corporate Interest, Community or organized citizens, Local/township/county/city government

The terms of the Canadian Entitlement meant that all power generated downstream would be split evenly among the United States and Canada. However, the energy market has changed considerably since 1964. The original economic assumptions were based on forecasts of declining downstream power benefit, but these proved to be incorrect (Karier, 2020). The power sharing agreement has led to conditions that disadvantage U.S. electricity consumers. As a result, some stakeholders in the Northwest have argued that termination of the treaty is preferable to continuation.

Stakeholders

- Bonneville Power Administration
- Northwest Power and Conservation Council
- Public Power Council
- Public Utility Districts in Pacific Northwest States
- State and Federal Legislators in Pacific Northwest States

Issue: Although they have a vested interest in the outcomes of the renegotiation process, the leaders of states in the Columbia River Basin – Washington, Oregon, Idaho, and Montana – have not been formally included in the process.

Natural Societal and Political Domain Variables: Water quantity, water quality, governance

Stakeholder Types: Federated state/territorial/provincial government

The region's policy leaders are concerned with the best way to improve salmon populations, grow their economies, and build a clean energy future in the Pacific Northwest. The Columbia River Basin is an integral part of this vision. Throughout the last decade of discussions, Pacific Northwest Senators and Members of Congress have urged progress on negotiations for modernizing the Columbia River Treaty. Legislators perceived that the State Department was dragging its feet on beginning negotiations, writing in 2016 that "Treaty modernization and negotiations with Canada directly affect



the economy, environment, and flood control needs of communities we represent. The U.S. Department of State [must] conclude the review process, approve the Circular 175 immediately, and press Canada to appoint a lead negotiator and engage in negotiations" (Cantwell 2016).

Meanwhile, Northwest Governors have committed to a new collaboration on salmon recovery. In October 2020, Govenors Jay Inslee, Kate Brown, Brad Little and Steve Bullock – the leaders, respectively, of Washington, Oregon, Idaho and Montana – released a joint letter that pledged to "identify the actions and investments needed to recover harvestable salmon and steelhead populations, conserve other fish and wildlife, honor and protect tribal needs and way of life, and strengthen the electricity and agricultural services that communities rely on" (Brown et a. 2010).

Stakeholders

- State of Washington
- State of Oregon
- State of Idaho
- State of Montana
- Senators and Members of Congress in those states



3- Details

3-1 Case Status

Ongoing

3-2 Presence or absence of enabling conditions

- 1. Parties agree to explore mutual interests and invent creative options for mutual gains
- 2. Active recognition of interdependencies among involved parties
- 3. Parties agree to create a mechanism to monitor implementation of the agreement and adapt the agreement to address new problems/issues as they emerge

4- Key Questions

- 1. How can consultation and cooperation among stakeholders and development partners be better facilitated/managed/fostered?
- 2. What kinds of water treaties or agreements between countries can provide sufficient structure and stability to ensure enforceability but also be flexible and adaptable given future uncertainties?
- 3. How do issues of equity and development impact the identification of stakeholders in cases involving hydropower or other revenue generating water infrastructure?

5- Connections (link your case to the relevant riparians/water features/projects/agreements)

(Skip) 6- Analysis, Synthesis, and Insights (ASI)



7- The Case History of the Columbia River Treaty

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Geography and Hydrology

The Columbia River basin, at over 250,000 square miles, is larger than France. The basin includes more than half of Washington and Oregon, almost all of Idaho, and parts of Montana, Nevada, Utah, and Wyoming.

Approximately 15 percent of the Basin is in the Canadian province of British Columbia (Hyde 2010). The Columbia River is the largest river in the Pacific Northwest and the fourth largest river in North America. It has ten times the flow of the Colorado River and two and one-half times the flow of the Nile River (McKinney 2012).

The United States and Canada have a history of bilateral cooperation

The border between the United States and Canada is the longest international



Figure 1: The Columbia River Basin includes territory in British Columbia, Washington, Oregon, Montana, Idaho, Nevada, Utah, and Wyoming.

border between two countries. Since the beginning of the twentieth century, the two countries have recognized their common interests and pursued opportunities for mutual gains (Hirt and Sowards 2012). Water rights have long since been part of the diplomatic relationship. This was formalized by the Boundary Waters Treaty, signed in 1909 "to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier" (International Joint Commission 1909).

The Boundary Waters Treaty established the International Joint Commission (IJC) to help the two countries carry out its provisions. At the time, disputes over water were already creating tension along the border. The Treaty provided a framework to deal with these disputes. The IJC held its first meeting in 1912 and has worked to resolve more than 100 matters raised by the two federal governments. Over the last century, the IJC has evolved into a body that promotes cooperative development as well as adjudicate disputes (Osborn 2012).

The Columbia River Treaty was negotiated during an era of hydropower expansion

During the mid-twentieth century, more than one dozen dams were constructed in the Columbia River Basin. These dams were mainly built to generate hydroelectric power, but they also benefited flood control, navigation, and irrigation projects. These projects transformed the landscapes and economies of the Pacific Northwest. The Columbia River is one of the most hydroelectrically developed rivers in the world. There are eleven dams on the main stem in the United States and three in Canada, in addition to more



than four hundred other dams for irrigation and hydropower on tributaries (McKinney 2012). The flagship component of the system is the Grand Coulee Dam, which was completed in 1942 and remains the largest hydropower producer in the United States, The Grand Coulee Dam provides 11 percent of the power requirements of the Pacific Northwest (National Park Service).

In 1944, the United States and Canada requested that the IJC determine "whether a greater use than is now being made of the waters of the Columbia River System would be feasible and advantageous." Both countries saw in the Columbia River Basin an opportunity for comprehensive planning that would enhance hydropower output and flood control for the benefit of both nations (Osborn 2012, Hirt and Sowards 2012).

The IJC did not begin their research in earnest until 1948, when a major flood event accelerated the timeline for flood control provisions. The Columbia River, abnormally high due to deep snowfall, rapid melting, and large rainstorms, breached a dike in Vanport, Oregon. The town, an industrial suburb outside of Portland, was completely submerged. 18,000 residents were displaced, 51 people were killed, and the estimated property damage was over \$100 million (Sowards, 2019).

Treaty negotiations took eleven years and emphasized power and flood control

The IJC began detailed studies after the Vanport Flood, completing their detailed report in 1959. The report concluded that "the primary benefits in the downstream country from cooperative use of storage of waters within the Columbia River System are improvements in hydro-electric power production and prevention of flood damage." Although the report notes that there may be other benefits to coordinated control of the river, "their value would be so small in comparison to the power and flood control values that formulation of principles for their determination and apportionment would not be warranted" (IJC 1959).

Formal negotiations began in February 1960, with nine sessions that led to the signing of the CRT by President Eisenhower and Prime Minister Diefenbaker on January 17, 1961. The preamble begins by "recognizing that their peoples have, for many generations, lived together and cooperated with one another in many aspects of their national enterprises for the greater wealth and happiness of their respective nations," grounding the treaty in the historical partnership between the two countries. It also notes that "the greatest benefit to each country can be secured by cooperative measures for hydroelectric power generation and flood control" (United States and Canada 1961). The preamble reinforces the treaty's limited and utilitarian purpose: building dams to generate power and improve flood control.

Terms of the Columbia River Treaty

The United States ratified the Columbia River Treaty in March 1961, but ratification was delayed in Canada until 1964 due to additional negotiations between the provincial and federal governments (Hyde 2010).

The terms of the Treaty specified that Canada would "provide in the Columbia River basin in Canada 15,500,000 acre-feet of storage usable for improving the flow of the Columbia River." To achieve this, the Treaty mandated the construction and operation of three dams in British Columbia for the purpose of providing flood control and generating hydroelectric power. It also authorized construction of the Libby Dam in Montana. Construction of each of the four dams was completed within ten years of ratification.



In exchange, the U.S. was required to pay Canada three payments totaling \$64.4 million, which corresponded to one-half the estimated cost of future flood damages that would be prevented by the construction of the dams. The U.S. was also required to give Canada one-half of the additional usable hydropower that was generated because of the improved stream flow. This downstream benefit is referred to as the "Canadian Entitlement." Under the terms of the treaty, Canada can opt to sell the entitlement back to buvers in the United States. In fact. to pay for the construction of the dams, British Columbia sold the Canadian Entitlement to a consortium of utilities based in the United States for 30 years beginning in 1964. At the end of

that period, power began flowing to Canada from the United States.

Initial impact of the treaty

By many, the Columbia River Treaty has been regarded as a success: in 2011, British Columbia began their renegotiation efforts by claiming "the Columbia River Treaty is known throughout the world as one of the most successful models of a transboundary water treaty. Other countries see the agreement as a benchmark on cooperation to create and share benefits." This sentiment has been echoed by other stakeholders throughout the renegotiation process, as well as by scholars who look to the treaty as a model for transboundary water agreements (Baron and Ketchum 2012, Wilson 2016).

However, the narrow focus on dam-building led to numerous social, political, ecological, and economic tradeoffs. During the initial negotiations, indigenous peoples from the U.S. and Canada were excluded from participating. Ecosystem functions, including the preservation of salmon habitat, were not considered. Additionally, more than 2,000 people and hundreds of farms were displaced during the construction of the four dams. While the Treaty authorized an equal sharing of the additional hydropower generation that results from additional water storage and coordinated water releases, the impacts of the dams were not equally shared by the two countries.

To some extent, these shortcomings reflect the political, legal, and cultural realities of the era. In the decade after the Treaty was ratified, the United States passed the Wilderness Act (1964), the Wild and Scenic Rivers Act (1968), the National Environmental Policy Act (1969), the Clean Air Act (1970), Clean Water Act (1972), the Endangered Species Act (1973), and the Renewable Resources Planning Act (1974).



These laws reflected changing environmental and social values in the United States (Hirt and Sowards 2012). Additionally, a series of legal instruments strengthened the rights of indigenous peoples in both the United States and Canada. The Boldt Decision, handed down in 1974 by Judge George Hugo Boldt in *U.S. v. Washington*, allowed Pacific Northwest tribes to co-manage all fishing resources (Cohen and Norman 2018). These laws reflected evolving attitudes towards environmental protection and equity that had not been formalized when the Columbia River Treaty was negotiated.

The need for a modernized treaty

The Columbia River Treaty has no expiration date. It will continue indefinitely unless one country requests termination, which is allowed any time after 2024 (U.S. Department of State, n.d.). As of this writing, neither entity has instigated termination procedures. 2024 also brings changes to flood control obligations. After 2024, Canada's obligation to provide annual flood control ends and will be replaced with "called-upon" flood control. Under this system, the U.S. would ask Canada to store water on an as-needed basis, paying operating costs and economic losses that result from forgoing alternative uses (Northwest Power and Conservation Council, n.d.). These provisions, as well as changing needs for water usage, make the future of the Columbia River Treaty uncertain.

In broad terms, there are three potential futures for the Columbia River Treaty – terminate, maintain, or revise. While there have been some calls for termination, the prevailing discourse among formal participants in the negotiation process as well as other stakeholders has centered around the need and opportunity for modernization. What exactly is meant by "modernization" depends on who you ask. The narrow scope of the original treaty, as well as the emphasis on achieving mutual gains, meant that the goals of the treaty could be achieved. However, changing environmental, political, and social conditions and values have prompted a variety of stakeholders to identify shortcomings and push for changes.

Treaty negotiation process

The negotiations for modernizing the Columbia River Treaty are very much ongoing. The United States and Canada each designated Entities that are responsible for carrying out the research and negotiations. The United States Entity consists of the State Department, the Bonneville Power Administration, and the Northwestern Division Engineer of the U.S. Army Corps of Engineers. The Canadian Entity consists of the Province of British Columbia, British Columbia Hydro and Power Authority (BC Hydro), and the Canadian Department of Foreign Affairs, Trade, and Development.

Research efforts began in earnest in 2010, when both governments conducted a series of studies to provide information about post-2024 conditions and priorities. The initial scope of these studies was deliberately narrow and only addressed hydropower and flood control. Among other observations, these studies found that if the treaty continues after 2024 with its current provisions:

 Canada will benefit from the continued Canadian entitlement and increased flexibility to optimize power generation.



- The Canadian entitlement will decrease over time from 536 average megawatts in 2010 to 470 average megawatts in 2025 and about 290 average megawatts by 2040.
- With or without the treaty, fish operations reduced U.S. hydropower system annual generation by approximately 1,600 average megawatts.

If the Treaty is terminated, the studies found that:

- Canada will gain flexibility to operate solely for Canadian power and non-power interests, despite losing the entitlement.
- Overall average annual hydroelectric production in Canada and the United States will not change much; however, month-to-month generation differs significantly from coordinated operation.
- The United States would have to utilize more stored water before calling on Canadian storage, meaning that in the called-upon years some U.S. reservoirs would fail to meet refill requirements.

The U.S. and Canadian Entities further established the perspective of each side through additional studies, then formulated draft and then final recommendations to submit to their respective national governments. The U.S. Entity released a Regional Recommendation in December 2013 that set forth nine principles for a modernized Columbia River Treaty. Shortly thereafter, the Canadian Entity released a set of guidelines in March 2014 that echoed some of the principles of the United States but also introduced new dimensions to the discussion.

After the release of the recommendations, there was a multi-year delay before additional progress was made by the negotiating teams. Urged by northwest Senators and Members of Congress, formal negotiations opened on May 30, 2018. In June 2020, the tenth round of treaty negotiations occurred via web conference. At the conclusion of the most recent conversations, the two sides released almost identical press statements. The State Department reported that "During this round, Canada responded to a framework proposal previously tabled by the United States and presented a Canadian-developed proposal," (U.S. State Department, 2020). Echoing that, the British Columbia press release stated, "During the most recent round of discussions, Canada responded to a framework proposed by the United States during the previous round of negotiations in Washington, D.C., and tabled a Canadian proposal outlining a framework for a modernized Columbia River Treaty," (British Columbia, 2020).

Because the negotiations are ongoing, the details of the proposed framework have not been made public. According to the British Columbia press release, "The tabling of proposals is one part of a complex negotiation process. The exchange of options between countries will take time. Once the process is sufficiently advanced and options become clear, the Province of B.C. will engage Canadian Columbia Basin Indigenous Nations, local governments, citizens and stakeholders on decisions regarding a modernized treaty" (British Columbia, 2020).

The lack of information is frustrating to the many stakeholders who regard modernizing the Treaty as essential. In 2018, a coalition of thirty-one nonprofit organizations sent a



letter to the U.S. Entity advocating for, among other things, the expansion of the U.S. negotiating team to include a broader range of stakeholders. The lack of progress and limited transparency is also frustrating to state, local, and regional governments who have vested interests in the outcomes of the negotiations.

The need for a modernized treaty

Four key issues have emerged during formal negotiations and ongoing conversations about modernization. Some of these are shared by a variety of stakeholders, while others are the priority of particular interest groups.

Changing environmental conditions

Despite the initial emphasis on flood control and hydroelectric power, both the United States and Canadian Entities have stated in formal negotiation documents that the health of the Columbia River Basin ecosystem should be a shared benefit and cost of the United States and Canada. Negotiators anticipate that climate change will fundamentally alter the ecology of the basin. The recommendations from the U.S. and Canadian Entities both addressed this reality, with the U.S. Entity noting that "the strategy for adapting the Treaty to future changes in climate should be resilient, adaptable, flexible, and timely as conditions warrant" and the Canadian Entity noting that "there is an increasing awareness of climate change and a desire for planning and adaptation to be incorporated in future Treaty management decisions."

While the long-term impacts of climate change on the Columbia River Basin are unknowable, scientists have forecast that a warming climate will disrupt existing patterns of precipitation and runoff. This will lead to more significant flood events as well as more frequent water shortages and drought incidents (Osborn 2012). Power production and flood control will be impacted as a result. Both Entities have recognized that a modernized treaty should be sufficiently flexible as to accommodate the consequences of climate change.

Need to consider ecosystem functions

The U.S. and Canadian Entities' recommendations also addressed the need for the Treaty to be adaptable to meeting ecosystem-based function requirements. This responds to concerns by environmental advocates, who have argued since the original negotiations that the Treaty neglects ecosystem needs. In particular, the dams built because of the Treaty have altered the river's ecology and contributed to the decline of salmon fisheries. In its 1995 Biological Opinion on the Impacts of the Federal Columbia River Power System on Salmon, the National Marine Fisheries Service set flow objectives at Columbia River Basin dams. Between 1985 and 2008, the spring target was missed approximately 27% of the time (National Marine Fisheries Service 2008).

However, there is a lack of clarity around what should be included in the spectrum of ecosystem functions. The U.S. Entity stated in their recommendations that "a modernized Treaty should provide streamflows from Canada with appropriate timing, quantity, and water quality to promote productive populations of anadromous and resident fish and provide reservoir conditions to promote productive populations of native fish and wildlife," but the Canadian Entity only proposed that "the Province will explore ecosystem based improvements recognizing that there are a number of available



mechanisms inside and outside the Treaty" (United States 2013 and British Columbia 2014). Whether or not the Treaty is the best mechanism for wildlife restoration and conservation appears to be an area of disagreement between the two Entities.

Exclusion of indigenous peoples

The neglect of ecosystem functions and the loss of salmon habitat has been particularly devastating to Canadian First Nations and United States Native American tribes. These tribes were not consulted when the Treaty was developed, yet they were directly affected. The Boldt Decision and other legal instruments recognized the historical fishing rights of these tribes, but the loss of salmon habitat as a result of the Columbia River dams has infringed upon those rights.

The Columbia Basin Tribes Coalition was formed in 2009 and includes 15 tribes whose reserved lands and ceded territories cover the majority of the Columbia River Basin. This includes the Yakima Nation, the Nez Perce Tribe, the Confederated Tribes of the Warm Springs Reservation of

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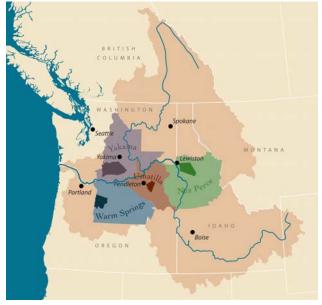


Figure 3: The ceded territories and reserved lands of the Yakama Nation, Nez Perce Tribe, Umatilla Nation, and Confederated Tribes of the Warm Springs Reservation make up most of the Basin. (Source: Columbia Basin Tribes Coalition)

Oregon, and the Confederated Tribes of the Umatilla Nation. The Coalition has developed three recommendations for a modernized Treaty, which are:

- 1. Maintain coordinated flood risk management and a reliable, economically sustainable hydropower system;
- 2. Rebalance the downstream benefits formula, and what the Canadian Entitlement should be going forward; and
- 3. Incorporate ecosystem-based function as a third primary purpose.

The tribes have also emphasized their rights to participate in the negotiations and have maintained that "any modifications to the CRT must ensure full engagement and consent from tribes and First Nations and be in alignment with articulated Indigenous governance principles" (Columbia Basin Tribes Coalition DATE).

Imbalanced energy markets

Finally, the existing power sharing agreement has led to conditions that disadvantage U.S. electricity consumers. The terms of the Canadian Entitlement meant that all power generated downstream would be split evenly among the United States and Canada. However, the energy market has changed considerably since 1964. The original economic assumptions were based on forecasts of declining downstream power benefit, but these proved to be incorrect. Based on the present value formula developed in the



1960s, the economic value of the Canadian Entitlement is far greater than expected and exceeds the value of coordinated power operations (Karier 2020).

The U.S. Entity has proposed rebalancing the power benefits between the two countries to better reflect the actual value of coordinated operations. However, some Northwest politicians believe that the Treaty is beyond repair, and introduced a resolution calling for termination (Nelson Daily Staff 2020). At the same time, Canada is unlikely to relinquish a favorable power sharing agreement. In discussions, the Canadian Entity has maintained the Canadian Entitlement "does not account for the full range of benefits in the United States or the impacts in British Columbia" (2014).

Discussion

At its core, the Columbia River Treaty is a relatively simple document. This is arguably a strength: by focusing on a narrow range of outcomes, the United States and Canada were able to leverage a mutual gains approach and achieve highly effective flood control and hydroelectric power systems. The Treaty built on fifty years of effective transboundary water management that began with the Boundary Waters Treaty and has continued to serve as an example of bilateral cooperation.

However, the original negotiators did not expect the Treaty's provisions to continue in perpetuity, which is why they built in an expiration date for the flood control provisions. The mandated evolution of the regime presents an opportunity to rebalance the costs and benefits and address the region's numerous and often conflicting interests. The region has undergone significant changes since 1964 and a modernized Treaty presents an opportunity to address climate change, ecosystem functions, indigenous rights, clean energy, and other issues.

Of course, developing a modernized treaty that addresses all of these issues is easier said than done. The multi-jurisdictional nature of the Columbia River Basin presents a challenge for negotiators hoping to reconcile varied and often conflicting perspectives into a coherent, workable treaty. With so many stakeholders invested in the outcome, is an overhauled Columbia River Treaty achievable? Is a modernized Treaty the best vehicle for reconciling diverse and competing goals?

The process of modernizing the Columbia River Treaty brings a high degree of complexity, conflicting objectives, multiple levels of governance, and uncertainty about the environmental future of the Basin. As such, any major change to the Treaty is difficult or even risky. However, failing to modernize the Treaty would be a worse outcome. For over fifty years, policymakers in the United States and Canada have recognized that they have more to gain from cooperative management than from independent development of the river. Looking to the future, policymakers must find a way to negotiate with and provide benefits to a broader range of stakeholders. With or without a modernized Treaty, the Columbia River will continue to shape the ecology, economy, and history of the Pacific Northwest.



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