Flood Control and the Columbia River Treaty In 2024, the past is history

FACTSHEET

he Columbia River Treaty between Canada and the United States provided for the joint development and operation of basin water resources to reduce the floods and increase hydropower generation. It was implemented in 1964, with either country having the option to terminate the power provisions after September 16, 2024 with a 10-year written notice. The flood control provisions of the Treaty automatically change in 2024. The end of Canada's obligation to provide primary flood control to the U.S. after 2024 significantly alters the cost/benefit dynamic of the agreement for the United States. Going forward, the U.S. must renegotiate flood control protection or live with a sub-optimal system designed in the Treaty. Meanwhile, without a notice terminating the power agreement, Canada continues to accrue significant benefits not foreseen under the Treaty.

Flood Control Changes in 2024

Flood control was fundamental to the 1964 Treaty. In return for Canada building dam storage capacity, the United States paid \$64.4 million for the use of 8.45-millionacre feet of storage for the first 60 years of the Treaty (or the net present value of half the estimated flood damages prevented through 2024). This amount helped amortize the cost of the Canadian dams, which were completed in 1973. In return, Canada provides primary flood control storage for the United States through 2024. After this date, the Treaty will revert to "called-upon" status. This means that the U.S. will pay for any operating costs or losses for Canada associated when the U.S. calls upon Canada for flood control operations.

There is a dispute between the two countries as to the conditions necessary for the U.S. to exercise the flood control provisions. The details of what precedent actions the U.S. needs to put in place to get Canadian flood control and the cost to the U.S. of Canada providing flood control are a significant unknown post-2024. Maintaining the status quo does not protect U.S. flood control interests.

Power Provisions Can Change, Too

Treaty negotiators agreed that Canada would receive half of the estimated downstream power benefits created by the construction of its storage facilities. This Canadian Entitlement (CE) is paid to Canada in valuable hydropower energy and capacity, based on the calculated difference in hydroelectric power capable of being generated in the U.S. with and without the existence of Canadian storage. The CE was valued based on a "with and without treaty dams" calculation in order to create value to help the Canadians build the dams. The CE was also calculated based on assumptions about the future that over-valued the role Canadian storage currently plays in the U.S. electric system (including the addition of U.S. storage, the growth of energy efficiency and renewables, and fish and wildlife protections that reduce hydropower generation).

Post-2024, electric ratepayers are not receiving value commensurate with cost because 1) the dams exist and have been paid for and the U.S. should only be paying for the value of the operation of the dams; and 2) the methodology for calculating benefits needs to reflect the electric power value resulting from altered flows. The combined



effect is to reduce the current entitlement payment by an estimated 70-90%. This means the U.S. is overpaying Canada for the value of coordinated operations by an estimated \$150 million a year.

Fortunately, both governments recognized that relative benefits were hard to predict over six decades, and the Treaty includes the option for either country to end the Treaty power provisions once the dams are paid for in 2024 — if either party gives 10-years notice. Unfortunately, the U.S. did not give notice of termination as soon as allowed (in 2014). Now, the 2024 change to flood control operations is just around the corner, while the power provisions linger. This puts U.S. parties at a significant disadvantage — both financially and from a negotiating perspective — unless something changes.

Paying for U.S. Flood Control

The U.S. needs to develop a new flood control program for the Columbia River. This is necessary under the Treaty whether or not the power provisions are terminated. Major changes are coming to the way this country will pay for flood control or even operate U.S. storage projects in lieu of existing Canadian storage protocols. A modernized Columbia River Treaty should maintain flood risk management similar to current levels. But decisions are overdue as to whether the strategy should rely on Canada to provide flood control storage or develop mitigation within the U.S., such as levee enhancements.

Moreover, the U.S. Army Corps of Engineers (Corps) has not provided written notice as to whether it needs an authorization to make a payment to Canada for post-2024 flood control, nor has it made a request for an appropriation. A comprehensive strategy for flood control post-2024 is both opaque and long overdue.

This puts U.S. parties at a significant disadvantage — both financially and from a negotiating perspective — unless something changes. The lack of a flood control strategy may be contributing to the U.S. government's unwillingness to issue the 10-year notice of termination of the power provisions of the Treaty. If so, then Pacific Northwest ratepayers will be paying for flood control post-2024.

The payment for flood control must come from U.S. taxpayers to maintain equity. U.S. taxpayers (including those in the Pacific Northwest) pay for flood control across the country. Asking Pacific Northwest electric consumers to shoulder flood control costs while they pay through their taxes for flood control in other parts of the country is inherently inequitable. To make things worse, protecting flood control by not renegotiating the hydropower payment is a case of substantially overpaying for a benefit. The U.S. payment of \$64.4 million for 60 years of flood control is estimated to be worth around \$600-\$800 million (with some uncertainties related to climate value). Meanwhile, the U.S. will have paid billions to Canada through the power provisions of the CE over the same period. Clearly, it makes no sense to use CE payments as a tool to address flood control costs because the value of Canadian flood control to the U.S. is much less than the CE amount. In addition, Canada either may be unwilling to provide flood control storage or expects to be paid for calledupon operations even if the CE continues. The worst possible situation for the U.S. would be for citizens to pay the CE and an additional (unknown) amount for flood control.

The Corps needs to define the strategy for not relying on Canadian storage for flood control and either offer to pay Canada or develop a domestic alternative. Funding for flood risk management should be consistent with national flood risk policies of federal funding through appropriations.

Actions

- The U.S. State Department should issue the 10-year notice of termination of the power provisions of the Columbia River Treaty to initiate productive discussions with Canada.
- Congress should authorize and appropriate necessary funding to the Corps of Engineers to identify a flood control strategy that replaces Canadian storage under the Columbia River Treaty. There may need to be an additional amount to account for the risk of more severe weather events due to climate change. Funds should be made available to be used for development of domestic flood risk management actions or as payment to Canada to provide storage in Canadian reservoirs, whichever costs less.