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The Columbia River Treaty: Fifty Years After the Handshake

The Columbia River Treaty requires coordinated water flows between Canada and the U.S. to improve power generation and provide flood control. In September 2014 either country can announce their desire to terminate participation in the Treaty. Already there appears to be a significant chasm between the entities with respect to how they will allocate the costs and benefits associated with future coordinated operations.

Amy Sopinka and Lawrence Pitt

I. Introduction

The Columbia River is the fifteenth-longest river in North America, winding its nearly 2,000 km length through both Canada and the U.S. Approximately 15 percent of the river's 669,300 km² basin is located in Canada, although due to the elevation and geography, the Canadian portion of the river contributes approximately 35 percent of the annual average flow and up to 50 percent of total annual peak flows. In all, the Columbia River discharges

244 billion cubic meters or 198 million acre feet (Maf) annually, which makes it the third-largest in North America in terms of river mouth flow rate, after the Mississippi and St. Lawrence rivers (Dai and Kevin, 2002). However, its unregulated flow rates are highly variable; flow at the Canadian border can range from 14 to 555 thousand cubic feet per second (kcfs). U.S. measurements are taken at The Dalles, Ore., and can vary from 36 to 1,240 kcfs (BPA, 2011). A map of the Columbia Basin is shown in **Figure 1**.

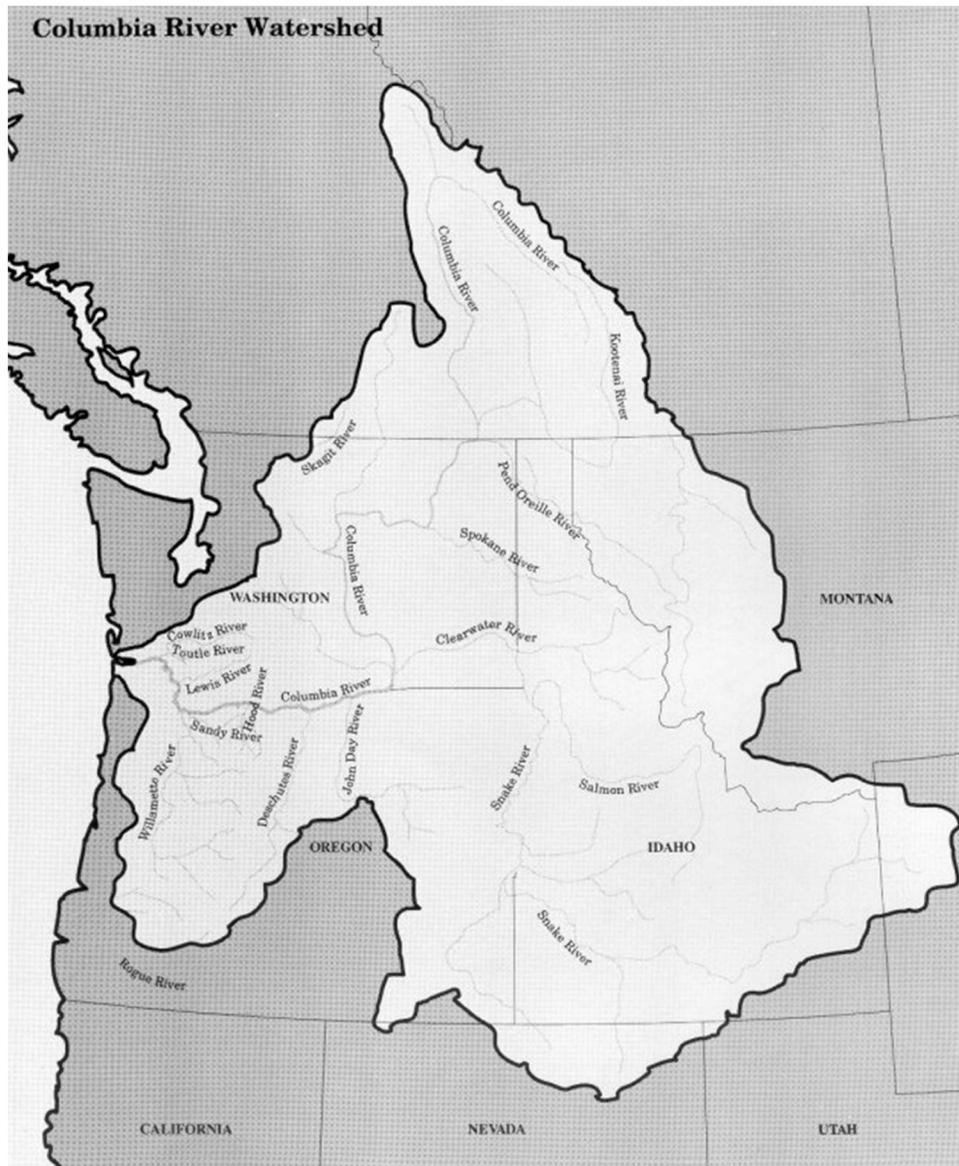


Figure 1: The Columbia River Basin (NW Hydro Flood Control, 2013)

In 1909, the Canadian and U.S. governments agreed to the Boundary Waters Treaty, which provided mechanisms for resolving any transboundary water issues and which subsequently led to the creation of the International Joint Commission (IJC) with a mandate to deal with any conflicting rights or issues that might arise from the use of international waterways.

The IJC was pressed into action in the Pacific Northwest during

the final building stages of the Grand Coulee Dam. The construction of that U.S. facility began in 1933 and was finished in 1941. Just prior to completion, the U.S. government applied to the International Joint Commission for a permit to construct the dam, and in its application conceded that the reservoir might increase water levels at the border, but said it was taking further action in order to prevent that from occurring. The IJC granted the

permit, which was a formality, given that the facility was nearly finished, but maintained the right to revisit the permit if border water levels were not maintained (Northwest Power and Conservation Council, 2011).

The massive Grand Coulee power plant was designed to be 170 m high and 1,272 m long with an initial installed capacity in 1941 of 1,155 MW. However, due to uncontrolled stream flows on the Columbia, operators were unable

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