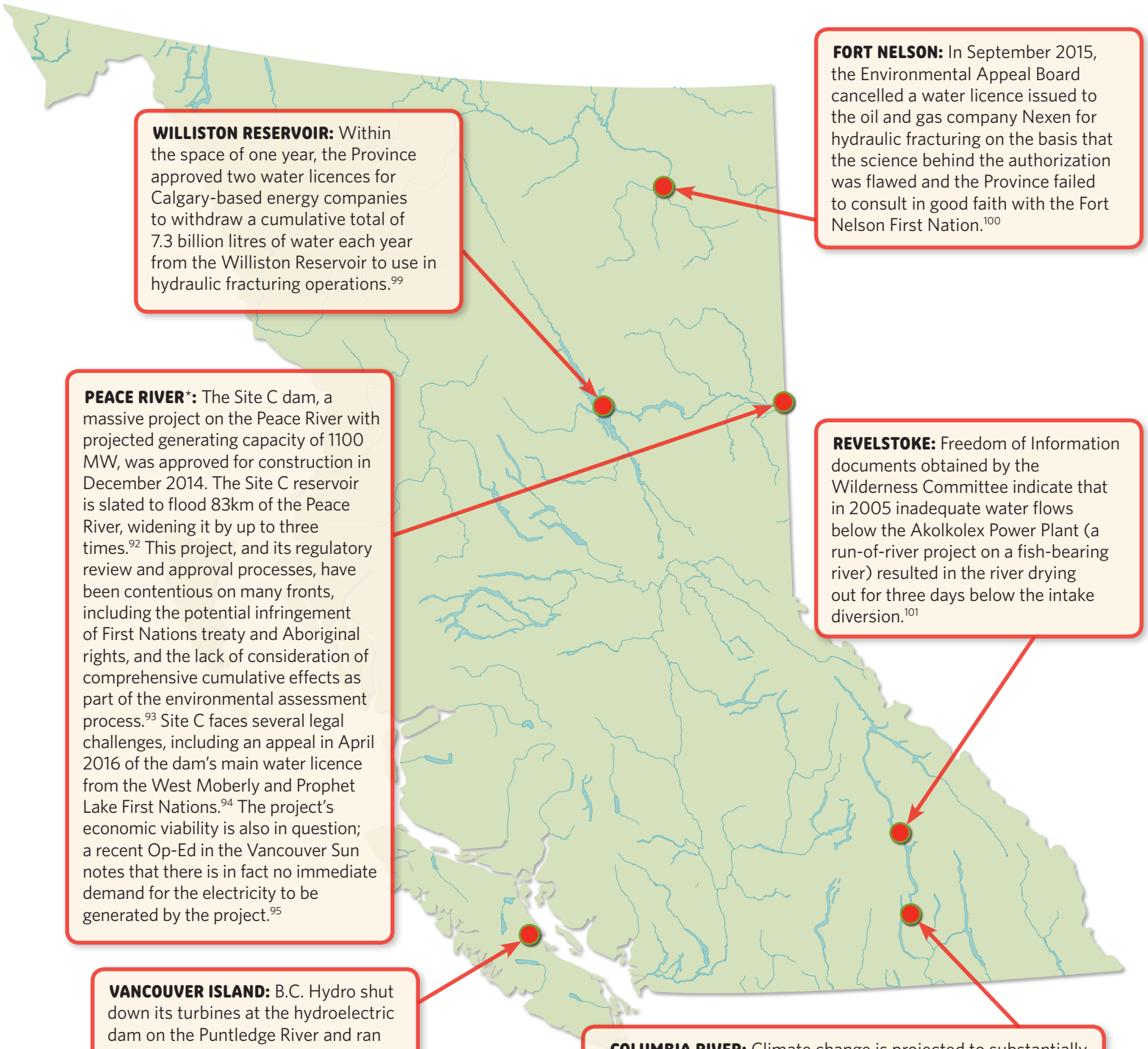
RECONCILING THE WATER-ENERGY NEXUS

EXAMPLES OF WHERE IT IS HAPPENING



FORT NELSON: In September 2015, the Environmental Appeal Board cancelled a water licence issued to the oil and gas company Nexen for hydraulic fracturing on the basis that the science behind the authorization was flawed and the Province failed to consult in good faith with the Fort Nelson First Nation.[100]

WILLISTON RESERVOIR: Within the space of one year, the Province approved two water licences for Calgary-based energy companies to withdraw a cumulative total of 7.3 billion litres of water each year from the Williston Reservoir to use in hydraulic fracturing operations.[99]

PEACE RIVER*: The Site C dam, a massive project on the Peace River with projected generating capacity of 1100 MW, was approved for construction in December 2014. The Site C reservoir is slated to flood 83km of the Peace River, widening it by up to three times.[92] This project, and its regulatory review and approval processes, have been contentious on many fronts, including the potential infringement of First Nations treaty and Aboriginal rights, and the lack of consideration of comprehensive cumulative effects as part of the environmental assessment process.[93] Site C faces several legal challenges, including an appeal in April 2016 of the dam's main water licence from the West Moberly and Prophet Lake First Nations.[94] The project's economic viability is also in question; a recent Op-Ed in the Vancouver Sun notes that there is in fact no immediate demand for the electricity to be generated by the project.[95]

REVELSTOKE: Freedom of Information documents obtained by the Wilderness Committee indicate that in 2005 inadequate water flows below the Akolkolex Power Plant (a run-of-river project on a fish-bearing river) resulted in the river drying out for three days below the intake diversion.[101]

VANCOUVER ISLAND: B.C. Hydro shut down its turbines at the hydroelectric dam on the Puntledge River and ran the John Hart generating station on the Campbell River at 20 to 25 per cent capacity to save water for fish.[96]

COLUMBIA RIVER: Climate change is projected to substantially change the hydrology of the Columbia River region, with melting glaciers, earlier spring melt and lower flows in summer and fall, and overall less predictability.[97] The Columbia River Treaty, a US-Canada agreement governing the development and operation of dams on the Columbia River, is being revised; experts have recommended that ecosystem health and climate change impacts be priorities in any modern treaty, to bring enough flexibility to adapt to changing hydrological conditions.[98]

* This river is also on the Outdoor Recreation Council of British Columbia's 2016 endangered rivers list.

This map is taken from the report: Simms, R. & Brandes, O.M. (2016, September). *Top 5 Water Challenges that will Define British Columbia's Future*. Victoria, Canada: POLIS Project on Ecological Governance, Centre for Global Studies, University of Victoria. Available at http://poliswaterproject.org/topfivechallenges. See full report for citations for each of the issues noted on the map.