



UNDERSTANDING THE STATE OF BRITISH COLUMBIA'S WATERSHEDS

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 in part because "[The licence] is fundamentally flawed in concept and operation. It authorizes a flow-weighted withdrawal scheme that is not supported by scientific precedent, appropriate modelling, or adequate field data."⁶² This is not an isolated example: in 2014 one of North America's leading groundwater experts warned that no Canadian jurisdiction has established sufficient monitoring to protect groundwater in areas of intense shale gas extraction.⁶³

LANGLEY: The Langley Water Management Plan includes a long list of gaps in groundwater data and understanding, including: well data, water use, land use contamination effects, surface and groundwater interactions, environmental in-stream flow needs for groundwater fed streams, and the effectiveness of many management strategies towards the sustainable use of groundwater.⁶⁵

SALT SPRING ISLAND: In 2014 the Board of Trustees of the North Salt Spring Waterworks District placed an expanded moratorium on connections on St. Mary's Lake (including on unserviced lots) because the lake was deemed fully allocated. Yet, in April 2016, the Board of Trustees relaxed the moratorium despite the fact that there is still no conclusive information demonstrating that raising the weir on the lake will provide enough water for the additional connections.⁶⁶

SHUSWAP LAKE: Algal blooms appeared in Shuswap Lake in June 2008, 2010, and 2015. Studies show that there are nutrient spikes in the Shuswap River and the interconnected Mara Lake, and agricultural runoff is the main suspect, but the exact nutrient source remains unknown.⁶⁷

NELSON: In 2004 the Environmental Appeal Board accepted the fact that the government had relied on creek flow records dating from the 1920s to 1930s in making a decision to grant a conditional water licence for domestic purposes on a creek near Nelson. This decision validated using 100-year-old data as a basis for a modern water allocation decision.⁶⁴

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.