

As part of her Master of Science program at the University of Calgary, Sandra completed a detailed international literature review and analysis, of rainwater harvesting techniques, specifically considering best practices, to integrate rainwater into the urban water cycle. She delivered her findings to Calgary City Council, and the CWRA (Canadian Water Resources Association), provincially and nationally. She also spoke at IWA (International Water Association) World Water Congress, Brisbane Australia, with a talk titled *Implications and Opportunities for Rainwater Harvesting, Optimizing the Urban Water Cycle* (2016). One of Sandra's goals is to expand the applications and feasibility of 'whole water', by better utilizing rainwater in integrated water cycle systems.

AloPluvia Integrated Water Resource Management Ltd. was founded by her to focus on integrating and conserving water for catchments, gardens, fields and transforming previously unusable water into water fit-for-purpose water supplies. AloPluvia IWRM Ltd. provides project management, consulting, design, scientific and technical advice and expertise on drinking water and fit for purpose water applications.

Sandra found a need, and is currently gathering support to open a 21st century drinking water lab in British Columbia, that looks at specific elements of the drinking water biome, rather than traditional drinking water presence/absence testing. Areas of special interest are cyanotoxins including BMAA (β -N-methylamino-L-alanine), Giardia, Legionella pneumophila and cryptosporidium in drinking water supplies. Please contact her through www.AloPluvia for more information.

Current volunteer positions include Vice-President of ARCSA Foundation (American Rainwater Catchment Systems Association), and Chair of the Conservation and Efficiency Working Group of the Salt Spring Island Watershed Protection Alliance. The most recent document produced by this group covers conservation and technology suitable for residential, commercial and agricultural water applications on Salt Spring Island. Titled *A Succinct Description of Technologies, Resources and Techniques for Water Conservation and Efficiency* (2018)

She has an MSc in Sustainable Energy Development (water), undertook the ARCSA rainwater harvesting installation, design and inspection training pilot in Washington DC. Currently taking the Thompson Rivers University Water Treatment Program to obtain the EOCP (Environmental Operators Certification Program) designation. Memberships include ARCSA, the AWWA (American Waterworks Association), BCWWA (BC Water and Waste Association), and CWQA (Canadian Water Quality Association).