

Recent/Emerging Alberta Water Regulations: Non-Saline/Saline Water Use

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Sustainable water use is paramount to current and future Albertans. The Alberta Advantage depends on it. The Alberta government is specifically targeting the question of water sustainability in their Water for Life Strategy which was introduced in 2003. However, the Water for Life Strategy process is in its infancy, and it will take some time before a complete understanding of the state of Alberta's surface water and groundwater resources is recognized.

To support the Water for Life Strategy, various new Alberta Environment (AENV) and Energy Resources Conservation Board (ERCB) water guidelines or directives (herein called regulations) have been introduced over the last several years pertaining to non-saline and saline water use. New non-saline and saline water use regulations are also in prep in recognition of the significant issue that water has become to Albertans. Some existing regulations are concise, and are straightforward to interpret. Other regulations are complex, subject to considerable interpretation and rely on non-technically-derived limits and constraints. This leads to an application and approval/license process that is iterative, somewhat open-ended and inefficient.

After a decade of unparalleled growth in Alberta, the Albertan economy will experience a period of contraction owing to global factors, such as changing commodity prices and available investment capital. During this period, it is incumbent on Albertans to revisit these water regulations to assess whether they are achieving their intended objectives, or whether changes are warranted to improve the efficiency and effectiveness of the management of our water resources.

This presentation will provide an overview of key AENV and ERCB existing and planned non-saline and saline water regulations. Thereafter, relevant and practical case studies, from oil sands projects to drinking water supplies will be presented to highlight where the regulations are working and where opportunity for clarity exists.

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Mr. Wills is a founder of, and a Principal Hydrogeologist with Waterline Resources Inc., a Calgary-based firm providing consulting hydrogeology services to industry, government and the private sectors. Mr. Wills has a graduate degree in hydrogeology from the University of Waterloo, and over 20 years of related experience focusing mainly on groundwater exploration, development and management. He has a broad national and international experience-base and is involved in a wide variety of water resource projects ranging from small residential subdivisions to billion dollar oil sands developments. In addition to providing technical expertise, Mr. Wills is increasingly being retained to provide expert witness testimony, and to provide senior expertise in interpreting new or updated water guidelines and directives pursuant to conflict resolution on water resource projects. Mr. Wills has chaired and presented at numerous technical and lay conferences and presentations over the last decade. He is a former regulator, and a past-President of the Canadian Chapter of the International Association of Hydrogeologists.