

Assessing Groundwater Resources in Nova Scotia

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Approximately half of Nova Scotians rely on groundwater for their water supply. Groundwater is a valuable resource that is linked to human health, ecosystem integrity and the Province's sustainable prosperity. In order to manage and protect Nova Scotia's groundwater resources, we need to know such things as the amount of groundwater we have and its quality.

In April 2007, the Province passed the *Environmental Goals and Sustainable Prosperity Act*. In this Act, the government placed into law specific environmental targets to achieve the goals outlined in the Opportunities for Sustainable Prosperity Strategy, which brings together economic and social development, and environmental sustainability. One of the key targets set out in the Act is the development of a comprehensive water resource management strategy by 2010 which will help the government make decisions about Nova Scotia's groundwater resources. The development of an effective water resource management strategy requires scientifically based assessment and mapping of the province's aquifers.

Historically, government had a key role in assessing and mapping groundwater resources in the province, and published a series of regional groundwater assessment reports in the 1960s and early 1970s under the Nova Scotia Department of Mines and the Nova Scotia Department of the Environment. These regional assessments covered only a portion of the province, and with the exception of the recently completed Annapolis-Cornwallis Valley Aquifer Study by the Geological Society of Canada, the province's aquifers have not been subject to regional-scale hydrogeological investigation in several decades.

To provide the necessary scientific framework for managing and protecting the province's groundwater resources, the Nova Scotia Department of Natural Resources, in partnership with the Nova Scotia Department of Environment and Labour, plans to conduct regional assessments of the province's priority aquifers using modern groundwater assessment tools and techniques. These regional assessments will include groundwater budgets, quantifying groundwater flow conditions in terms of recharge, vulnerability to contamination, extraction and sustainability.