

**Monitoring activities of the water resources management division
(Poster)**

John C. Kingston

*Water Resources Management Division, Department of Environment and Lands,
Government of Newfoundland and Labrador, P.O. Box 8700, St. John's, Newfoundland A1B 4J6, Canada*

The Newfoundland Department of Environment and Lands has a mandate to monitor and manage the water resources of Newfoundland and Labrador. Much of this mandate is the responsibility of the Water Resources Management Division, which began operating in 1975 with a staff of two and currently has a staff of 22 in six sections: Surface Water, Hydrologic Modelling, Water Investigations, Water Quality, Groundwater, and Water Rights.

The Surface Water Section is responsible for monitoring protected water supplies; 50% of the province's population obtain their water from 220 protected basins. This section also operates federal-provincial and provincial hydrometric networks, providing data to the Hydrologic Modelling Section and various users across the province. The Modelling and Investigation Sections monitor hydrologic, climatic, and ice processes in several major watersheds. These computerized monitoring systems generate very useful databases and

also provide near-real-time monitoring of stage and flow via data collection platforms and satellites; such data is used in flood forecasting, by the hydroelectric power industry, and even by the tourism industry and canoe clubs. The Water Quality Section operates a federal-provincial Water Quality Monitoring Agreement and analyzes provincial network data collected during the past 15 years. The Groundwater Section monitors eight observation wells for groundwater quality, temperature, and piezometric levels; several landfill sites for groundwater contamination; and the effects of road salt on groundwater quality.

Much of the Division's work involves collaboration with federal agencies, and both collaborative and provincial reports are produced. Major recent publications include the **Water Resources Atlas of Newfoundland** and the **Main Report of the Urban Hydrology Study of the Waterford River Basin**.