Ontario’s Drinking Water Supply System: A Framework for a Preventive Management Strategy

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Abstract

Leading jurisdictions around the world are increasingly adopting a more integrated, preventive approach to managing drinking water quality and protecting human health. Preventive management approaches emphasize the application of risk-based strategies throughout the entire drinking water supply system to collectively prevent or reduce risk. The protection of drinking water sources is an integral component of a comprehensive, preventive strategy to managing drinking water quality. This report examines the principles of an integrated, preventive approach to managing drinking water quality and protecting human health and discusses their application to the province of Ontario. A watershed-based source protection framework for Ontario is proposed and key considerations for its effective implementation are provided.