



## **KNOWLEDGE BRIEF**

### **SOURCE WATER PROTECTION POLICY IMPLEMENTATION GAPS IN NEWFOUNDLAND AND LABRADOR**

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#### **Introduction**

“The water policy of the Government of NL is based on the Multi-Barrier Strategic Action Plan (MBSAP) involving the Department of Environment and Conservation, Government Services, Health Services, and the Department of Municipal Affairs (MAF), with the Department of Environment and Conservation leading policy implementation” (Dore, 2015. p 138). However, Christensen (2011) has stated that “the biggest risks to drinking water comes from gaps or deficiencies in the frontlines of drinking water protection — the laws, programs, policies and personnel directly responsible for delivering safe and clean drinking water” p. 2. This knowledge brief looks at general factors accounting for source water protection implementation gaps and identifies specific examples in Newfoundland and Labrador.

Factors accounting for the implementation-gap according to Grunow (2011) are insufficient financial resources and control capacity, inadequate instruments of coordination, and a lack of relevant knowledge and training among staff members. The capacity to implement policies depends on a multitude of factors, one, as mentioned, being financial, but also institutional, technical/human, and social factors (Rawlyk & Patrick, 2013). According to de Loë (2005), the financial resources available to communities are an important consideration in Source Water Protection (SWP) implementation. The size of a municipality’s budget can be one factor that affects the level of spending on SWP. This will also influence the ability to invest in expensive technical programs such as monitoring, and the undertaking of technical studies needed for SWP (de Loë, Di Giantomasso, & Kreutzwiser, 2002; de Loë & Kreutzwiser, 2007). Shamir and Howard (2012) explain that, “...the greatest obstacle to rational management of water stems from failures of governance and lack of coordination among political jurisdictions” (Shamir & Howard, 2012, p. 39). This is supported by Timmer, de Loe, and Kreutzwiser (2007) who have suggested that provincial agencies and local organizations need enough resources such as funding, training,

technical supports, public consultation and authority from institutional arrangements for effective implementation of SWP plans.

Policies or legislations governing public drinking water systems in the province under the MSAP includes; the Water Resources Act, the Municipal Affairs Act, and the Municipalities Act. (Government of Newfoundland and Labrador, 2015). Implementing legislations within the MBSAP framework introduced in 2001, has led to some enhancements in source water protection, water treatment, operation and maintenance of water distribution systems, water quality monitoring and reporting, and operator training. This has ultimately resulted in enhanced quality and safety of drinking water systems in the province. (Government of Newfoundland and Labrador, 2016). Notwithstanding these successes, available research suggest the existence implementation challenges in Newfoundland as a result of lack of human, technical and financial capacity at the local level (Minnes & Vodden, 2014). Findings from a provincial drinking water study conducted by Minnes and Vodden (2014) suggest that rural communities in NL lack the human, financial, technical and institutional capacity to address the drinking water challenges such as retaining certified water and managing drinking water infrastructure. The study also suggested lack of adherence to source water protection efforts due to lack of human resources and limited support from provincial resources to rural communities which results in implementation gaps.

Another study by Hanrahan, Dosu, & Minnes (2016) suggest non-adherence to the enforcement of policies related to the placement of cabins and the use of snowmobile and all-terrain vehicles around Protected Public Water Supply Areas (PPWSAs). An interviewee in their study, according to Hanrahan et al (2016) stated that “in practice, the Protected Public Water Supply Area legislation under the Water Resources Act is currently not being implemented locally and it is not always enforced at the provincial level”. Christensen (2011) and Baker (2007) have both suggested enforcement irregularities regarding the requirement for water operators with certification in every public drinking water system as part of their permit to operate, as well as failures to practice directives from the provincial government’s on asset management (Minnes & Vodden, 2014). Failures in policy implementation in the province is further entrenched as a result of decentralized approaches to water policies which requires rural communities with all the challenges they face to to manage their own drinking water systems (Hanrahan et al, 2016).

## References

Dore, M. H. (2015). *Water policy in Canada: problems and possible solutions*. Springer.

Christensen R, 2011. Waterproof 3, Canada's Drinking Water Report Card. Published by ecojustice.

Government of Newfoundland and Labrador. (2015). Drinking Water Safety in Newfoundland and Labrador-Annual Report 2013. St. John's, NL. Retrieved from [http://www.env.gov.nl.ca/env/waterres/reports/drinking\\_water/annual\\_report\\_2014.pdf](http://www.env.gov.nl.ca/env/waterres/reports/drinking_water/annual_report_2014.pdf)

Grunow, D. (2011). Structures and logic of EP implementation and administration in China. *Journal of Current Chinese Affairs*, 40(3), 37-35.

Hanrahan, Dosu, & Minnes. (2016). *Government and Community Responses to Drinking Water Challenges and Crises in Rural Newfoundland and Labrador: Final Project Report*.

Ivey, J. L., de Loe, R. C., and Kreutzwiser, R. D. 2006. Planning for source water protection in Ontario. *Applied Geography* 26(2006) pp.192-209

OECD. (2011). Water Governance in OECD Countries: A Multi-level Approach. Retrieved February 9, 2011, from <http://www.oecd.org/gov/regionaldevelopment/48885867.pdf>

Rawlyk, F. X., & Patrick, R. J. (2013). Capacity Needs for Source Water Protection Plan Implementation: Lessons from the South Saskatchewan River. *Canadian Journal of Urban Research*, 22(1), 20-45.

Shamir, U. & Howard, C. (2012). Water Management in 2050. In W.M. Grayman, D.P. Loucks, & L. Saito (Eds.), *Toward a Sustainable Water Future: Vision for 2050* (pp. 37-45). Reston, Virginia: American Society of Civil Engineers.