**Abstract**

Local water systems around the world are increasingly threatened by inadequate management leading to strong interest in governance as a key focus for achieving long term water sustainability. This is particularly true within Caribbean countries where potable water is limited and implementation of effective water management continues to challenge governments. Climate change impacts and extreme weather events have only exacerbated these challenges, especially in the Caribbean. Impending water shortages are particularly threatening to vulnerable groups such as the poor. Because water is essential to civilization, water governance is a key sustainability issue. In this respect, leading climate change adaptation research in water governance has identified the importance of aligning governance structures with local knowledge and key stakeholder input, and locally established water sustainability goals.

In Canada, recent case study research was conducted in two rural ‘water scarce’ regions in Canada (Similkameen & Kettle). This research utilized a novel research method involving social analytics to map and analyze the socio-ecological relationships and structures associated with water governance networks. The goal was to identify the effectiveness of local watershed planning and management processes in involving local actors and stakeholders in collaborative watershed management. Barriers to effective water governance were identified and recommendations made to improve the water governance networks. This research gives water resource managers the insight to intervene into evolving governance processes, to ensure proper alignment with locally determined water sustainability goals. It also enabled those involved in water governance design and implementation to make informed and grounded decisions leading to effective, adaptive, and sustainable water governance.

Applying this approach to urban and rural watersheds within the Caribbean would allow barriers to sustainable water governance to be identified and enable improvements in water governance and management, increase transparency, enhance collaboration, and improve equity and resilience within the watersheds. This paper discusses the Canadian experience, and applies this experience to the context of Belize, where major improvements have been made to water supply infrastructure under the Millennium Development Goals, and water managers are now looking for effective and sustainable programming for the local water board systems. The lessons learned from this comparative analysis may inform future water governance in Belize and the Caribbean.