

Integrating Indigenous and Western knowledge systems for improved water management and research in the North

Lindsay Day, Heather Castleden, Ashlee Cunsolo Willox, Debbie Martin, Sherilee Harper

Significant water-related concerns and challenges are faced by Indigenous communities across Canada, including poor quality drinking water, issues of accessibility, inadequate infrastructure, improperly functioning waste and storm-water systems, and degraded ecological health of shared water systems. In the North, many of these issues are compounded by climatic and environmental conditions, including climate change.

Increasingly it is recognized that in order to develop locally-appropriate, culturally-relevant strategies in dealing with these issues, a collaborative, integrative approach is needed that recognizes, values and engages local Indigenous perspectives, knowledge, and methodologies together with Western scientific advances and technology. Encouragingly, a number of projects exist or have been completed that have sought to include integrative methods in their approach to water research and management. What we have not had to date, however, is any systematic evaluation of these approaches to discover what has worked, what hasn't, and why.

This project, part of a larger Canadian Water Network initiative, seeks to investigate the successes and challenges encountered in the adoption of integrative approaches in recent water-related projects by performing a systematic realist literature review and conducting in-depth structured interviews with researchers, and their community-based research partners, who self-identified as having included or attempted to integrate Indigenous and Western knowledge in their work. Participants were asked about their perspectives on Indigenous and Western knowledge, their relationship to water, the nature of the project in question (purpose, design, outcomes), the extent of community involvement and engagement in the project, and how this was (or was not) achieved.

