

Multi-Stakeholder Collaboration Ends 14-Year-Old Boil-Water Advisory

Residents of Dzit'lain'li (Middle River) IR9, of the Tl'azt'en First Nations in British Columbia, have a lot to celebrate as 2018 draws to a close. New homes and docks along the Middle River are being discussed, as is a new store and school – positive changes designed to attract former residents back to the community.

The key to this renaissance is that, for the first time in nearly two decades, 12 families are living with clean drinking water thanks to a new drinking water system developed as part of an in-depth, community-focused collaboration process pioneered by RES'EAU-WaterNET.

The RES'EAU Community Circle is an award-winning and unique open innovation and precision problem-solving model for drinking water in small, rural and Indigenous communities. It proposes the customization of solutions, with decisions, practices, technologies and services being tailored to the individual community.

It also works to support policies that help rural communities reach their environmental and public health goals by taking the research program out of the lab and into the real world, incorporating communities, operators and all stakeholders' expertise and insight at the earliest stages of the problem-solving process. Students and researchers work closely with communities to understand the limitations and constraints they face. Together, they identify research priorities and design and execute research to produce knowledge and integrated game-changing solutions that are sustainable. These findings are then validated by industry so that they can be readily diffused and adopted.

Solutions are piloted in collaboration with both public and private sector partners and, according to guidelines set out by regulatory agencies, either at public sector facilities and/or

subsequently in actual communities. Successful solutions are then be scaled up through partnerships with national and international strategic programs, or by industry partners.

The Dzit'lain'li project is a long-term collaboration among core collaborators Tl'azt'en First Nations, Dzit'lain'li, ISC, FNHA, FNOWN BC&YT, WSP, BI Pure Water, Université Laval, Polytechnique Montréal and the University of British Columbia. The project began in 2014 with an in-depth evaluation of source water quality and potential treatment solutions. Through 2017, the team worked to understand the operational pathway for the community – what O&M requirements had to be considered, available operator personnel and their training requirements and the perspective of the wider community were all assessed. From 2017 to 2018, design and development of the new system was completed. Ongoing communications and collaborations with the community partners will assess the sustainability of the system.

The focus on community needs and sustainability at the onset of each project is what sets the Community Circles approach apart from business-as-usual paradigms that are preoccupied with selecting products and managing budgets over providing real solutions. Recent setbacks on Ontario reserves that reintroduced boil water advisories are a sign that business-as-usual is all too alive and well in Canada. We seek to change that.

To see what we mean, watch a short video about Community Circles [here](#).

