

CUMULATIVE IMPACTS RESEARCH CONSORTIUM

2017 ANNUAL REPORT



MESSAGE FROM THE LEADERSHIP TEAM

This report provides an overview of the research and community engagement activities delivered by UNBC's Cumulative Impacts Research Consortium (CIRC) in 2017. Over the next year we will continue to build on past successes by reaching out to communities in northern British Columbia to expand our understanding of the cumulative impacts of resource development across northern BC, respond to knowledge and capacity gaps with original research, and build our capacity to act as a regional hub of cumulative impacts information and resources. As we move forward, we will also continue to seek feedback and take leadership from the communities we work with to better understand the ways in which our research and outreach activities can best support local capacity to address the cumulative impacts of resource development. We wish to thank everyone who contributed to this initiative over the past year and look forward to continuing to build a solutions-oriented research and community dialogue for the benefit of Northern British Columbia and beyond.

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ABOUT CIRC

The **Cumulative Impacts Research Consortium (CIRC)** is a research and community outreach initiative based at the University of Northern British Columbia dedicated to enhancing our understanding of the positive and negative cumulative impacts of resource development across northern BC. Our research aims to integrate environmental, community, and health values and perspectives, and account for diverse forms of knowledge and information. Informed by our community outreach and engagement, the CIRC seeks to enhance on the ground capacity to respond to issues related to cumulative impacts.

[https://www.unbc.ca/
cumulative-impacts](https://www.unbc.ca/cumulative-impacts)

Join the CIRC listserv!

[http://lists.unbc.ca/
mailman/listinfo/circ-list](http://lists.unbc.ca/mailman/listinfo/circ-list)

CIRC

CUMULATIVE IMPACTS
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WORKSHOPS AND COMMUNITY EVENTS

CIRC staff have been fortunate enough to travel to various communities in northern BC to convene community workshops around the topic of cumulative impacts. These conversations have been invaluable in helping to inform and shape the CIRC's ongoing research priorities. We have immense gratitude to the communities that have hosted us, and for the engaged community members who have shared their experiences around cumulative impacts. Reports and presentations from all of our workshops and events can be found on the CIRC website under the 'Events' Tab. We want to especially recognize four successful workshops that we ran with considerable community support in 2017:

- School District 91 (Nechako Region) - May 2017
- Chetwynd, Hudson's Hope, Fort St. John, Dawson Creek, Tumbler Ridge - June 2017
- Vanderhoof - October 2017
- Fort Nelson - October 2017
- 2018 CIRC Forum - Prince George - January 2018

We look forward to continuing these conversations over the next year, and building and strengthening relationships with communities across northern BC.

Thanks to our funders



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SSHRC  CRSH

Social Sciences and Humanities Research Council of Canada
Conseil de recherches en sciences humaines du Canada



RESEARCH

We are currently working on a suite of research projects that have emerged in response to concerns and issues voiced by communities in northern BC. Many of the following projects are happening in partnership with various agencies with interest in cumulative impacts in northern BC. More information about these projects, including relevant updates and project descriptions, can be found on the CIRC website:

1. Examining the 'state of the art' of cumulative effects assessment in BC through interjurisdictional comparative case studies
2. Health Impacts of Resource Extraction and Development
3. Development of socioeconomic and health indicators related to resource development
4. Climate change communication in Canada's Provincial North
5. Whose brownfields count? Effective brownfield remediation strategies for rural and remote communities
6. The Environment, Community, Health Observatory (ECHO) Network
7. Developing new tools to assist communities in assessing, monitoring and planning for cumulative impacts

The last listed project (#7, above) was a particularly active file for our team in 2017 leading to the production of several new tools and processes for engaging communities and supporting novel, integrated monitoring processes to better understand the cumulative environmental, community and health impacts of resource development. Three specific tools are profiled on the next several pages of this report, and several publications are currently in development. Check out our website for relevant updates.

INTRODUCING NEW COMMUNITY-BASED TOOLS AND PROCESSES FOR UNDERSTANDING THE CUMULATIVE IMPACTS OF RESOURCE DEVELOPMENT

Integrated Values Mapping

Youth perspectives are often under-represented or missing entirely from conversations about the future of resource governance. Recognizing that decisions of today will leave a lasting impact on future generations, we endeavoured to pilot a process to engage youth on the kinds of values that are important to protect indefinitely. In May 2017, CIRC staff led an arts-based workshop with grade 8 students from School District 91. The overall goal of this workshop was to learn about the kinds of health, community and environmental values that are important to youth living in SD91, and to locate those values on a regional map to discuss how those values interact across time and space. The image below is an example of the outcome of this process.



An example integrated values map produced by students of School District 91. The three layers of the map are combined to illustrate how local values interact across their geographic region.

INTRODUCING NEW COMMUNITY-BASED TOOLS AND PROCESSES FOR UNDERSTANDING THE CUMULATIVE IMPACTS OF RESOURCE DEVELOPMENT

Cumulative Impacts Living Library

This year we launched the Cumulative Impacts Living Library in an effort to 'take notice' of the many projects and perspectives on cumulative impacts across the province, Canada and the world. The platform is a community-driven, online database of projects and resources related to the cumulative impacts of resource development across northern BC. We invite you to explore the site, add your own unique resources, and to connect to other allied organizations. For more information, please visit:

<http://cumulativeimpactslivinglibrary.ca/>

CIRC LIVING LIBRARY

The Cumulative Impacts Living Library is a searchable database of projects and organizations broadly related to the cumulative impacts of resource development in Canada.

To search the library or add your own project, please visit:

<http://cumulativeimpactslivinglibrary.ca/>



INTRODUCING NEW COMMUNITY-BASED TOOLS AND PROCESSES FOR UNDERSTANDING THE CUMULATIVE IMPACTS OF RESOURCE DEVELOPMENT

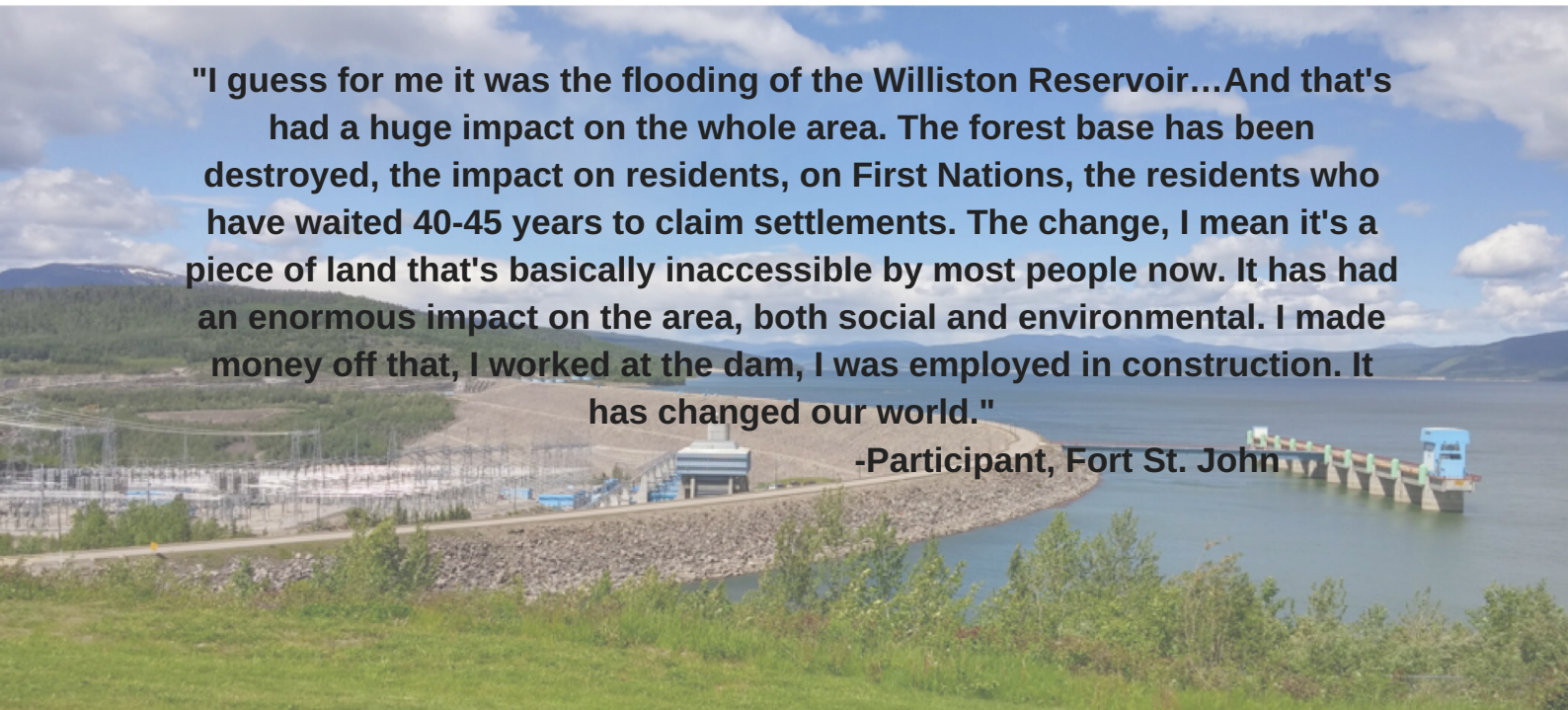
Data-driven Storytelling

Throughout 2017, CIRC staff facilitated a series of community workshops using a "data-driven storytelling" research and facilitation tool. CIRC staff compiled regional data into a 30-year retrospective on cumulative environmental, community and health impacts of resource development. In response to these "integrated regional profiles", workshop participants were asked to respond to the following question:

How do we make better land-use decisions that account for long-term impacts to environmental, community and health values?

Our method:

1. Seeks to explore areas of convergence and divergence between narratives, and other kinds of information around community, environmental, and health values.
2. Attempts to 'make sense' of cumulative impacts across different areas of northern BC, and across past experiences, ongoing realities and visions for the future.
3. Provides a space for participants to share issues they feel go 'unnoticed' in conventional land use decision-making processes, holding space for both researchers and community members to hear and hold multiple perspectives of a region's lived reality at the same time, in dialogue with one another.



"I guess for me it was the flooding of the Williston Reservoir...And that's had a huge impact on the whole area. The forest base has been destroyed, the impact on residents, on First Nations, the residents who have waited 40-45 years to claim settlements. The change, I mean it's a piece of land that's basically inaccessible by most people now. It has had an enormous impact on the area, both social and environmental. I made money off that, I worked at the dam, I was employed in construction. It has changed our world."

-Participant, Fort St. John

Sample Publications

Buse CG, Oestereicher JS, Ellis N, Patrick R, Brisbois B, Jenkins AP, McKellar K, Kingsley JY, Gislason M, Galway LP, Macfarlane R, Walker J, Frumkin H, Parkes M. (2018). A public health guide to field developments linking ecosystems, environments and health in the Anthropocene. *Journal of Epidemiology and Community Health*, forthcoming. Doi: <http://dx.doi.org/10.1136/jech-2017-210082>

Gislason M, Buse C, Dolan S, Parkes M, Tosh J, Woolard B. (2017). The Complex Impacts of Intensive Resource Extraction on Women, Children and Aboriginal Peoples: Towards Contextually-Informed Approaches to Climate Change and Health. In M.G. Cohen (ed.) *Climate change, gender and labour in rich countries*. New York, NY: Routledge, pp. 215-230.

[Listed as Authorless] (2017). Aspirational statement from the One Health Ecohealth 2016 Congress in Melbourne, Victoria: Towards a healthier future through converging communities of inquiry and practice. *Ecohealth*, 14(2), 197-199.

Buse CG, Cornisk K, Parkes MW, Harder H, Fumerton R, Rasali D, Li C, Oke B, Loewen D, Aalhus M. (2017). Towards more robust and locally meaningful indicators for monitoring the social determinants of health related to resource development across Northern BC. Report prepared for Northern Health. Prince George, BC: University of Northern British Columbia.

Reschny J, Brisbois B, Parkes MW, Harder H (Lead Authors) Allison S, Buse C, Daniels T, Dolan S, Fumerton R, Fyfe T, Kutzner D, McLean E, Oke B, Nowak N, Schmeisser A (Contributing Authors). (forthcoming). Towards a better understanding of health in relation to mining and oil & gas extraction: A scoping review. Prepared for Northern Health Authority, Prince George, BC.

Public Presentations

CIRC staff have delivered presentations outlining our ongoing research and engagement activities wherever the opportunity exists. This has been a useful mechanism to increase awareness around CIRC's history, mission, research and resources. A few examples of these venues and audiences include:

- Association of BC Forest Professionals–Prince George BC, February 2017
- Peace River Regional District Board Meeting–Dawson Creek BC, June 2017
- UNBC Critical Geography Conference–Prince George BC, September 2017
- RAIL Commons Conference–Olds AB, October 2017
- European Public Health Association Annual Conference–Stockholm, Sweden, November 2017

ACKNOWLEDGEMENTS

The CIRC was initially established in 2015 with funding from the Pacific Institute for Climate Solutions and the UNBC Office of Research. Over the last two years, CIRC have more than tripled our initial funding contributions through a combination of external sources and in-kind contributions. This allowed our team to expand by hiring two additional employees, a Communications Lead and an Operations Lead, and multiple student Research Assistants. Importantly, it has allowed the CIRC to respond to knowledge gaps highlighted by communities with original research.

The work we have accomplished over the last year would not have been possible without our talented and committed research assistants: Jennifer Baddeley, Scott Brown, Katie Cornish, Bunu Sharma, Joe Gauthreau and Ryan O'Toole.

We would like to take the opportunity to acknowledge the ongoing work of the CIRC Steering Committee: Michelle Connolly, Art Fredeen, Greg Halseth, Marleen Morris, Margot Parkes, Al Wiensczyk and Rachael Wells. We would also like to thank both current and past members of the CIRC Advisory Committee for their ongoing commitment and engagement: Andy Ackerman, Charl Badenhorst, Joan Chess, Nicole Cross, John Disney, Raina Fumerton, Sandra Harris, Richard Kabzems (past), Lana Lowe, Alan Madrigga, Jennifer Pighin (past), Wayne Salewski, Rob Spitzer and Viva Wolf.