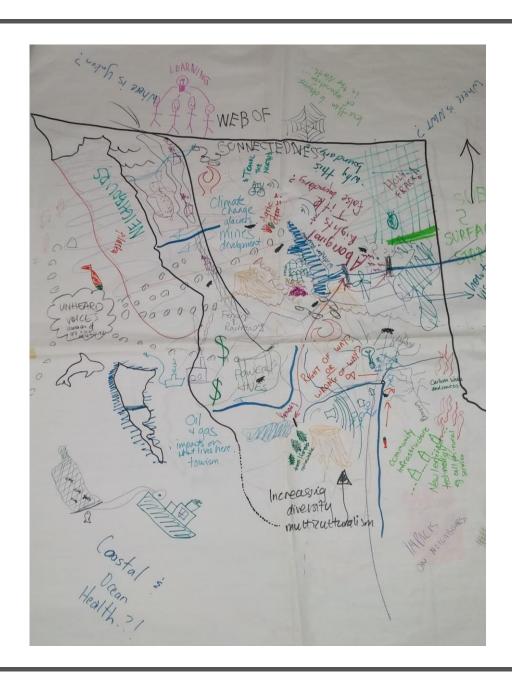
Report from the Launch of the

Cumulative Impacts Research Consortium

October 2-3, 2015







About CIRC

The Cumulative Impacts Research Consortium (CIRC) is a platform for research and community engagement on the cumulative impacts of resource development across northern BC. CIRC is collaboratively led by the Health Research Institute (HRI), the Community Development Institute (CDI), and the Natural Resources and Environmental Studies Institute (NRESi), with funding support from the Pacific Institute for Climate Solutions and the BC Oil and Gas Commission (administered through UNBC's Office of Research).

CIRC's mission is to better integrate understandings of the environmental, community, and health impacts associated with resource development. We understand 'cumulative impacts' on the land, communities, people and animals to be the result of interactions between multiple past, present and future land uses. As a platform for research and dialogue, CIRC is committed to fostering a community of practice concerned about the pace and scale of resource development across BC, and to foster that community through community engagement with First Nations, local and provincial governments, industry and civil society organizations. Our goal is to generate solutions-oriented research that improves our ability to monitor, analyze and understand the cumulative impacts of resource development. As a 'consortium' of actors, we also strive to document and support existing and future projects addressing these and related issues; to share information and facilitate connections between different organizations and stakeholders.

About the CIRC Launch Event

CIRC held its launch event on October 2-3, 2015 at UNBC's Prince George campus. This event was an opportunity to introduce CIRC's mission and mandate to the public, to provide a platform to share promising ideas from across the province, and solicit broad input on CIRC's research priorities. The event was attended by First Nations, elected local politicians, provincial ministerial representatives, industry representatives, a variety of not-for-profit organizations, the Prince George Chamber of Commerce and researchers. The event was broken into six unique sessions. This report describes each of those sessions and shares key insights that emerged from presentations and discussions.

NRESi Colloquium: Celebrating Cumulative Impacts Research and Practice Across Northern BC

Description. The Natural Resources and Environmental Studies Institute (NRESi) colloquium is a weekly forum to discuss research and practice from UNBC's research and practice community (including community partners and alumni). This session utilized the NRESi colloquium as an opportunity to leverage the expertise of NRESi's membership to identify pressing issues related to the cumulative impacts of resource development, to make CIRC staff aware of on-going or future projects related to our mandate, and to invite participants to get involved with CIRC's activities moving forward. This session used a rich-picture methodology that asked participants to identify and locate key features and issues associated with resource development on giant maps of northern BC. Participants were encouraged to creatively display these issues and share ideas or projects that were related.

Key Insights. Eight rich picture maps were produced by participants, an example of which can be found on the cover of this report. Each map was unique and spoke to a variety of forms of resource development including renewables (notably the Dawson Creek wind farm, Site C, and the Kenney Dam), oil and gas





exploration in the Peace and Northern Rockies, agriculture, pipeline development and overseas shipping, road/pipeline/transmission line right of ways, forestry, mining (notably Mt. Polly), outdoor tourism/recreation and fisheries. Other issues that surfaced were the impacts of climate change on the existing land base, concerns over the expansion of the mountain pine beetle, air and water contamination, ocean acidification, First Nations land rights and title, increasing transient populations in work camps, the lack of local control over land-use decision-making, and the limited spatial and temporal scale of many environmental assessments for industrial projects. A number of animal species were also represented on these maps, but most notably salmon, grizzlies, caribou, wolves, and whales. Most maps stressed the financial opportunities that these developments brought for local communities, but also questioned: who was consulted in the process of their development, whether development was being adequately planned to account for the boom and bust cycle of resource-dependent towns and regions, and where the real financial benefits of those developments were realized (e.g. the lower mainland, international corporate interests). There was also significant attention given to fostering connections between these issues, reflecting an understanding by participants that many of these developments are occurring on the same land base, and that their relative impacts are poorly understood.

Keynote Panel: Interjurisdictional Issues in Addressing the Cumulative Impacts of Resource Development

Description. This panel (moderated by Chris Buse, CIRC Project Lead) invited northern leaders with experience working across geographic and political boundaries on resource development issues to share their insights and experiences. Panelists were asked to identify what 'cumulative impacts' meant to them and their organizations, to present one or two projects they see as particularly promising in addressing cumulative impacts, to identify challenges and opportunities of working across jurisdictions and in multistakeholder processes, and to share lessons that speak to how we can affect positive change for resource-dependent communities across northern BC. Panelists included:

- Stephanie Killam, Former Mayor of Mackenzie and Chair of the Muskwa-Kechika Advisory Board
- ❖ Ross Wilson, Director of Stewardship for Metlakatla First Nation
- Brian Frenkel, Director of Avison Management Services and President of the North Central Local Government Association
- ❖ Terry Robert, Senior Regional Manager for the Upper Fraser with the Fraser Basin Council

Videos of the keynote panel and Q and A are available here.

Key Insights. Panelists identified that the idea of 'cumulative impacts' continues to evolve, but that they are related to changes in the landscape from social and economic pressures, and that the assessment of cumulative impacts should inform decision-making processes to maximize social well-being. Some speakers highlighted cumulative impacts as a "tragedy of the commons" with few coordinated and integrated response efforts. With regards to specific projects, panelists identified community forest projects, stewardship initiatives including the protection of the Muskwa-Kechika, the work of UNBC's three research institutes, and increasing political and public interest in this topic as particularly promising. Panelists agreed that in recent years there have been more people from communities, industry, First Nations and government becoming involved in addressing cumulative impacts of resource development. Challenges for addressing cumulative impacts included meaningful communication and participation from impacted stakeholders and procuring funding to support innovative projects. Panelists also noted there needs to be participatory input and involvement from individuals in local communities and that these





processes need to reach beyond those already engaged in these and similar issues. Panelists recognized that people are becoming more aware of cumulative impacts and are trying to create change, but that appropriate mechanisms need to be in place to manifest community visions into practical action. A common theme raised by panelists was the notion that every community has a 'champion(s)' and these individuals need more support. Other ways to affect change identified by the panelists is to educate the public (especially northern youth), put visions into actions and to ensure there is the interest for change from all levels of government. The Q & A session following the panel discussion raised other important points about the limitations of existing data and data sources (few adequate 'baseline' studies, limited data sharing, and associated issues surrounding access and ownership over data), acknowledging that health and community impacts are often missing from cumulative impacts assessment, and questioning how best to ensure diverse (and sometimes competing) community values are maintained and promoted in cumulative impacts assessment processes.

Session 1. Identifying Assets and Needs

Description. This icebreaker activity encouraged participants to learn more about the interests and backgrounds of other workshop participants. The exercise gathered participants in roundtable discussions. They were first asked to think of a significant innovation or an interesting project broadly related to the idea of cumulative impacts that they knew about or were involved with, and were invited to share a few key points about that work with their table members. We then shuffled participants to a new table with new people and encouraged them to reflect on the innovations they had just heard about and to think about what they would like to see done next, who would take the lead, and how they could get involved. Participants therefore either identified existing knowledge and practice gaps, and then shared their top two ideas with the broader group that they thought were particularly important.

Key Insights. Projects that were shared ranged from small scale, community-based initiatives to larger regional and provincial based initiatives and projects with broad participation from First Nations, community groups, local volunteers, local and provincial governments and industry. Participants highlighted several research and practice gaps that can be grouped according to four themes:

- 1. Need for open, accessible data that is capable of being rapidly shared and disseminated to local and regional stakeholders
- 2. Need for higher degree of meaningful and transparent community participation (not just 'consultation') so that existing and future projects can be enhanced with the appropriate social license
- 3. Need for consensus decision-making processes and a governance structure that involves key political, technical and community stakeholders
- 4. Need for change by identifying suitable entry points to discuss and act on cumulative impacts before and as they emerge, and to create effective frameworks to address impacts in ways that engage the public and foster innovation

Session 2. Presentations of Governmental Action on the Environmental, Community and Health Impacts of Resource Development





Description. This session allowed panelists to share work on behalf of government agencies that are trying to tackle the cumulative impacts of resource development through the lenses of environment, community development, and human health. Each presentation was followed by a brief Q and A period. Presentations included:

- "Socio-economic Effects Management Plans (SEEMPs) for Community Level Infrastructure and Services" (click for download)
 - > Presented by Jennifer Psyllakis (FLNRO) on behalf of the Ministry of Community, Sport and Cultural Development
- ❖ "Health and Resource Development" (click for download)
 - > Presented by Dr. Sandra Allison (Chief Medical Officer of Health) and Barbara Oke (Resource Development Officer) Northern Health
- ♦ "Overview of BC's Cumulative Effects Framework" (click for download)
 - ➤ Presented by Jennifer Psyllakis, PhD, Manager Ministry of Forests, Lands and Natural Resource Operations

Key Insights. The first presentation provided information on protocols for Socio-Economic Effects Management Plans (SEEMPs). A SEEMP is a process to identify and manage socio-economic effects related to project developments in the environmental assessment process with a focus on service and infrastructure from LNG project construction and operation. SEEMPs seek to fill existing regulatory and planning process gaps which may not be adequate to address the suite of infrastructure and service impacts from LNG projects. SEEMPs include three phases: the development and submission of the effect assessment 90 days prior to construction; the approval process; and SEEMP implementation (rooted in ideas of adaptive management, ongoing engagement, and reporting. Many issues were raised by event participants about the SEEMP process including the timing of the development and approval process, the resource pressures this process places on local and regional governments, the fact that SEEMPs are monitoring infrastructure and services and not the broader socioeconomic context (e.g. housing prices, workforce and labour issues), the lack of regulatory oversight on the implementation of SEEMPs, and the amount of time to develop appropriate monitoring processes, particularly given that the impacts of a given project on a community begin with the intent to develop it and not just in construction and operation.

Dr. Sandra Allison provided context for why resource development is an issue of public health concern, and Barbara Oke shared a variety of projects and publications that Northern Health (NH) has engaged in on this front. This work includes providing guidance in the environmental assessment process on health impacts, stakeholder engagement on project development, and enforcement or compliance with provincial health regulations. For example, NH has created support tools for industry to address health related issues such as a Health and Medical Services Plan Best Management Guide for Industrial Camps. Some of the challenges NH faces in addressing cumulative effects include an increase in workloads and the complex pathways between industrial projects and possible or realized health impacts. Issues brought up by the audience included the acknowledgement of provincial budget cuts reducing the number of staff who can handle these issues, concerns over environmental degradation and out-migration from regions where it is occurring, the need for meaningful First Nation consultation, and a desire to have more proactive risk mitigation activities to address health concerns before they arise in northern communities.

Jennifer Psyllakis also presented on British Columbia's Cumulative Effects Framework (BC CEF); a relatively new provincial policy framework for understanding the cumulative effects of resource development across the province. The BC CEF policy framework was designed to be adaptable across





industries and projects, to understand valued ecosystem components in a given system, and to promote risk mitigation activities capable of reducing effects or impacts associated with industrial projects. Given this is a new provincial framework it is understood that the benefits of the process will increase overtime. Audience members pointed out that this new framework indicates a paradigm shift in government to being allowed to address cumulative effects whereas in the past the issue was largely ignored. Issues missing from the framework the audience thought were important included health, community social and economic development, and a focus on regional scale rather than the relatively small geographical footprint of a given project.

Session 3. Aboriginal and First Nation Perspectives on the Cumulative Impacts of Resource Development

Description. This panel (moderated by Rheanna Robinson, UNBC's Senior Advisor to the President on Aboriginal Relations) allowed the audience to explore First Nation perspectives on cumulative impacts of resource development across traditional lands and territories throughout northern British Columbia. Panelists were asked to consider: what the term 'cumulative impacts' means to them; how their Nation manages the sometimes competing interests of environmental stewardship, social and economic development, and cultural preservation; and to share their insights in responding to the cumulative impacts of resource development as experienced by their communities. This session ended with a Q and A period with the audience. Panelists included:

- ❖ Karyn Sharp, Carrier Sekani Tribal Council
- * Renel Mitchell, Tl'azt'en First Nation
- ❖ Sherry Dominic, Blueberry River First Nation

Key Insights. Panelists agreed that the degradation of local environments is a reflection of their loss of control over their traditional territories, and that planning processes do not adequately account for the cumulative nature of multiple developments sharing the same geographic area. Panelists indicated that the degradation of the land on their traditional territories also results in their inability to practice their treaty rights. Panelists indicated that one the greatest challenges their communities face is limited capacity to respond to environmental assessment applications due to time and human resource constraints. An additional challenge identified a limited focus of environmental assessment protocols on individual assessments rather than large landscapes that account for the larger northern landscape. Prioritizing interests and values on the land was another identified challenge, particularly when natural resource-based projects develop rapidly. When asked how nations are balancing multiple values on their land base, a common theme was the inseparability of local economic development and cultural preservation from their relationship with the land. Some of the promising practices shared by the panelist include traditional use studies completed for each season and collaboration agreements among Nations (e.g. environmental stewardship initiatives). Some First Nations have begun to identify acceptable levels of risk for their communities (in relation to value identification from environmental assessments associated with industrial projects), but indicated that this is not necessarily a practice realized within current government processes. Panelists also stressed the importance for First Nations to work collaboratively across nations to ensure lands are protected for future generations. During the Q & A session with the audience, many participants highlighted the need for industry to engage in more meaningful consultations with First Nations groups. Questions asked by the audience addressed the challenges associated with collaborative relations across different First Nations, how local governments could work more effectively with First Nations communities, and the need to First Nations understandings of other aspects of cumulative effects besides the environment (e.g. social, cultural, and health values). Panelists also stressed the importance of





addressing cumulative impacts at the local level and that First Nations have a desire to be a part of research processes to improve the uptake of research results on traditional lands and territories.

Session 4. Towards the Future

Description. This session was designed to solicit input into CIRC's future research and engagement initiatives, but also to identify ways participants could contribute to CIRC and associated activities in the future. Participants were grouped in roundtables and given large sheets of paper and sticky notes and asked to first brainstorm a variety of issues that were important to them, and which are broadly related to the idea of cumulative impacts from resource development. After the brainstorming phase, participants were asked to group their identified issues by theme and prioritize them according to what their group felt were more or less pressing issues. Next, we asked participants to generate as many ideas as they could that would help address those issues (i.e. tangible actions tied to specific organizations or people). These processes were then physically connected to the issues identified in the first phase of this exercise, and the top three pressing issues were shared with the broader group.

Key Insights. Five key themes emerged when asking participants what the most pressing issues were related to the topic of cumulative impacts of resource development. A brief description of those issues and associated actions is included below:

Theme 1: Lack of centralized knowledge on cumulative impacts assessment and resulting action

• Associated Actions:

- Develop a centralized knowledge hub of organizations, research and projects that also inventories existing tools and approaches to address cumulative impacts explicitly and implicitly
- Identify new conceptual models for understanding cumulative impacts in ways that integrate diverse sources of data (e.g. environmental, social, cultural, economic, health data)

Theme 2: Lack of public awareness about cumulative impacts

• Associated Actions:

- Convene participatory meetings in local communities to bring diverse groups together to share their concerns and learn from one another
- o Develop educational workshops on cumulative impacts data analysis and interpretation
- O Share promising stories emerging from communities around the province and get greater attention to northern issues from decision-makers in the lower mainland

<u>Theme 3: Need for improved communication, collaboration and coordination between existing projects and stakeholder groups</u>

Associated Actions:

- Facilitate difficult community conversations between stakeholders with adversarial histories
- Act as a cultural broker between academic/scientific, public, government, industry and First Nations stakeholders
- o Contribute to reconciliation processes between all levels of government and First Nations





- o Inform the job vs. environment dichotomy through original research and policy advocacy
- o Be a platform to structure collaborations between stakeholder groups
- o Facilitate connections between provincial ministries to foster greater collaboration

Theme 4: Lack of a unified vision for sustainable community, economic and social development

Associated Actions:

- Community engagement (see examples above)
- Community visioning exercises to develop common understandings of the issues and possible solutions to manifest a shared vision for the future based on communitygenerated needs

Theme 5: Improve Cumulative Effects/Impacts Science

Associated Actions:

- Integrate health and community development concerns into environmental assessments and cumulative effects assessments
- o Address shortcomings of fragmented EA processes that only focus on project footprints
- Develop a process to incorporate diverse value sets into an assessment architecture that can inform planning processes
- o Address the cumulative impacts on the north as a product of centralized decision-making structures and the 'invisibility' of northern issues in the south of the province
- Contribute to an understanding of what 'baseline' data looks like for the process (and according to whom?) and apply actuarial analysis to cumulative impacts to better account for possible impacts, thresholds and mitigation activities
- More academic activism on these issues

Next Steps for CIRC

CIRC is committed to fulfilling its mandate to conduct original research and engage communities in dialogue on the cumulative impacts of resource development. Over the course of the next year, we will endeavor to address many of the themes that emerged from Session 4 above, but in the near term we will be focusing our attention on the following actions:

- Developing a 'living library' of resources, tools, projects, organizations and people that engage
 with various facets of resource development. This centralized knowledge hub will serve to
 improve public awareness of cumulative impacts work across the province, enhance coordination
 and collaboration between projects, share promising stories, and improve public awareness on
 related topics.
- 2. Continue to host training workshops and community events to promote dialogue on the topic of cumulative impacts. It is notable that we are currently in the process of planning the delivery of three such events, and we encourage you to contact circ@unbc.ca for more information:
 - a. WWF/CIRC/Bulkley Valley Research Centre Cumulative Effects Monitoring and Management Training Workshop Prince Rupert, December 10-11, 2015
 - b. Bulkley Valley Research Centre/FLNRO/CIRC Monitoring and Cumulative Effects Conference Smithers, Early 2016





- c. CIRC Community Engagement Event Fort St John, Spring 2015
- 3. Conducting original research to integrate environmental, community and health concerns into cumulative effects/impacts assessment and monitoring.

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