Objectives: Exploring the linkages between resource development and well-being is key to sustainability in the north. The concept of well-being is increasingly used in environmental assessment processes; many kinds of government data are also being re-packaged as “well-being” data with the aim of helping to communicate and stimulate discussion on the relationships between economy and community. But there is more to learn from community-based research. The research presentation presents two different kinds of well-being studies with the aim of demonstrating how the concept and the indicators used for monitoring are very different across cultures and geographies.

Results: Research on well-being in various parts of northern Canada has focused on different communities and their particular values, beliefs and experiences — of ultimate concern - how does their quality of life change in relation to resource development and its effects. Case Study 1 Research in Whitehorse and Yellowknife involved understanding well-being from the perspective of new Canadians (i.e., temporary workers, immigrants); well-being in this study is very much tied into to place and the process of place-making that occurs when people arrive and attempt to make the north their home. The qualitative study, developed by Cynthia Amati (Phd Candidate, University of Alberta) examines the different factors, including the boom-bust of economic opportunities in mining, that affect place-identity. Case Study 2 – Community-based research on the effects of mining has become increasingly valued across the north by governments, academics and communities themselves. A project in Lutsel K’e, Northwest Territories, initiated in the mid 1990s is one good example of how communities can define and carry out their own socio-economic monitoring and use indicators to monitor well-being. Given that social scientists, including those concerned with resource development effects in the north, have been relatively limited in their capacity to create and maintain longitudinal data, the work is methodologically unique. The research results are significant in that the indicators and data outcomes are markedly different that those offered by government, as is the narrative or “story” it tells about the impacts of diamond mining in the NWT. The opportunities and challenges of maintaining this, and related data, by the First Nation is discussed by Jeanette Lockhart.

Policy Implications: Policy makers can learn a great deal from well-being research. The concept has different meanings in different socio-cultural contexts - different groups (Aboriginal, new Canadians) are likely to define well-being in different ways. The measures they use to understand changes in well-being are also likely to differ. There is also a methodological lesson from the research; conventional top-down approaches to socio-economic monitoring have tended towards Foucault-esque surveillance. Community-based monitoring of well-being offers opportunities for bottom-up thinking about how communities are affected and need/use knowledge from monitoring in different ways.

Future Research: Research on community well-being from the bottom up is needed in other regions and communities to better understand the experience of development in different contexts and to help build knowledge that can inform local, regional, territorial and government policy and decision-making.
Reordered Reclamation: Northern Mine Reclamation Policy and Practice
Anne Dance, Visiting Researcher, University of Ottawa (Contact: Annedance.history@bell.net)

**Objectives:** As a ReSDA and later SSHRC Postdoctoral Fellow at Memorial University (2014-16), I conducted research related to environmental legacies, resource development, and remediation in the Arctic. The project used historical sources and contemporary policy documents to understand the evolution of northern mine remediation policy and the current challenges facing communities living near operating and abandoned mines.

**Research Findings:** This project assessed the many programs, policies, and laws affecting contemporary remediation and found that there is no overarching vision informing planning. Abandoned mines are purportedly the territories’ responsibility, but the reality is far more complex given existing legal regimes. Definitions of remediation and reclamation have changed, and remediation efforts now draw on traditional knowledge and encourage local involvement (although not necessarily consent). Finally, the oft-repeated rhetoric describing an older era of irresponsible, polluting, and unreclaimed mining versus a new era of responsibility and stewardship persists despite the fact that this does not always reflect northern experiences.

**Dissemination and Outreach:** To accompany an article I wrote for the *Northern Review*, I designed a hyperlinked briefing poster on the topic. The goal was to make the many existing policies that touch on reclamation more accessible in the face of inter-jurisdictional complications. See: [http://www.anne-dance.com/northern-reclamation.html](http://www.anne-dance.com/northern-reclamation.html). I also led a contribution to the Write 2 Know campaign requesting more information from governments about abandoned mines programs.

**Potential Policy Implications:** Managing abandoned mines and other contaminated sites is a massive challenge for northern governments and communities, and frequently ties into environmental justice concerns and the ongoing impacts of settler colonialism. Yet government remediation programs and policies are rarely prioritized unless they meet specific policy goals (i.e. paying down the deficit or providing jobs and training). The north needs stable, long-term funding to address mine remediation as a component of wider cumulative impacts of development. In particular, much more must be done to help communities address the temporal dimensions of reclamation (e.g. maintenance and monitoring “in perpetuity”). Even smaller-scale reclamation works demand long-term thinking far beyond the next electoral cycle or budget.

**Future Research:** My research found that remediation is defined differently depending on the audience and the speaker; too often, “successful” remediation does not align with northern communities’ expectations. More must be done to understand how communities define and understand remediation and ensure these ideas are incorporated into reclamation planning and policy at every level.
Asbestos Hill: Inuit Experiences with Nunavik’s First Mine
Jeanette Carney, Memorial University

Objectives:
1. To contribute to the knowledge of mining impacts in Nunavik and to provide a historical context to current mining issues in the region
2. To produce digital records of the communities’ oral histories to remain with the people of Salluit and Kangiqsujuaq
3. To record community perceptions and feelings towards mining to potentially help shape future mining projects through a better historical understandings of past mining issues.

Research Findings:
- **Work experience**: Interviewed former Inuit Asbestos Hill mine workers remembered their time at the mine as a positive experience despite cultural and linguistic differences. The fly-in fly-out schedule was difficult, with employees working 11-hour days for three to six months with two-week vacations. Interviewees recalled their first experience in a multi-cultural workplace as an exciting and worthwhile adventure with many opportunities for skills training (carpentry, mechanics) and entertainment (movies, a bar).
- **Cultural impacts**: the mine interrupted traditional hunting, fishing, and trapping activities, and Inuit workers were subjected to prejudice and at times racist interactions.
- **Social/health impacts**: the mine’s introduction of drugs and alcohol led to persistent subsistence abuse problems that are still present. There is concern that former Inuit miners’ health has been affected by working closely with asbestos and asbestos fibres.
- **Environmental impacts**: the remediation of the mine site has yet to be completed.

Potential policy implications: First and foremost, this research, with the numerous and continuous requests for reclamation from the Kativik Environmental Advisory Committee (KEAC), should lead to the total remediation of the Asbestos Hill mine site. This research could potentially impact the recording and maintenance of archival data at the national and Québec archives. It is important that archives have copies of governmental and company records available, thus allowing for a greater level of transparency.

Future Research: A study should be conducted on the current and future health effects of asbestos exposure to the health of former Inuit Asbestos Hill mine workers’ (and the community members’). Research should be undertaken on the environmental status of the Asbestos Hill mine site, Deception Bay area, and the area between these two locations. This study should also assess the health of marine and terrestrial wildlife, with respect to their contact with Asbestos Hill. Social science research on the Asbestos Hill mine should focus on the FI/FO aspect of the mine, examining the non-Inuit, long-distance commuters’ experience at the mine. Finally, it is important that northern Indigenous communities be recognized for their involvement in the mining industry and to community/economic development. It is important to note that Inuit of Salluit and Kangiqsujuaq were the instigators of the first impact and benefit agreement (IBA) between an Indigenous people and a mining company in Canada (Raglan IBA).
Measuring Wellbeing to understand resource impacts
Kent Spiers, University of Calgary

Objectives: The main objective of my research project was to examine models of measuring community wellbeing in Alaska and Yukon; determine if they were developed with the input of residents and if these models reflect local living conditions? One of the primary challenges was simply locating models of measuring community wellbeing, after an extensive search I was able to locate three in Alaska and three in Yukon. In order to answer my research questions: I carried out a literature review, researched historical and background information on each model, piloted a content analysis of keywords and conducted expert interviews with people familiar with the models.

Research Findings: My study illustrated that community wellbeing varies according to local conditions and interests. Existing models of community wellbeing do not adequately reflect the diversity of conditions in the North. The analysis of the models found that in both Alaska and Yukon, the existing models did not adequately incorporate local input. This same issue emerged in the expert interviews, where testimony stated that little to no consultation was carried out at the community level. Despite differences in the political, historical and social structures of each region, there appears to be little difference in the incorporation of local input between models developed in Alaska and Yukon. It is clear that there was a lack of local input with the construction of models of measuring community wellbeing. It is surprising that there was a lack of local input because research suggests that the inclusion of community members in the construction of these models can lead to stronger social cohesion and control of resource management (Varghese et al. 2006). The one project that demonstrated the most inclusion of local input was the Eagle Gold Mine Project, however, it was not clear that steps were ever taken to mitigate concerns that residents raised about the potential resource development project. Furthermore, the expert interviews revealed that local input was extremely limited or non-existent in the construction of models, which led to frustration related to how communities continue to be portrayed and how residents often feel like their voices are not heard or opinions do not matter.

Potential Policy Implications: In terms of policy, this study supports the body of research around the importance of consulting with community members in order to have an agreed upon model for measuring community wellbeing. There is continuing pressure for governments and organizations to measure performance, which is done by establishing indicators that can show changes after particular laws or programs are established. By creating a framework that strongly encourages or mandates communities engage in the exercise of creating a model of measuring community wellbeing with the input of local residents we could see more communities being able to mitigate particular social issue as well as encouraging sustainable economic enterprises.

Further research is needed to understand the complexities of creating models of measuring community wellbeing. In my current research at the University of Calgary, I am looking at Community Based Monitoring across North America. This past summer I travelled to communities in order to see if there was support for my interests. One of those communities was Fogo Island, which is off the coast of Newfoundland. As we know, many communities in Newfoundland suffered greatly at the collapse of the cod fisheries, Fogo was no exception. The Shorefast foundation was created several years ago in order to bring life back into the community by supporting new economic enterprises such as ecotourism and sustainable fishing. In my talks with community members I was struck by their engagement with the foundation and how they portrayed a sense that it belongs to everyone, not one person or a board of directors. When I asked why they felt that way they told me that when the foundation was being put together, everyone in the community came together and had a say in its construction. It can be said that Fogo is now thriving with tourism being a huge driver, as is seen with the multimillion dollar Fogo Inn and sustainable fish being sold at higher prices than other Newfoundland cod. I am interested in further researching the “Fogo phenomenon” to see if similar ventures could be carried out in northern communities. I believe that the Shorefast foundation demonstrates a potential model of how resource revenues can stay within a region at little to no cost to communities.
Scoping Research – Indicators as a building tool for understanding community wellbeing
Todd Godfrey, University of Alberta

**Objectives:** This research project is using economic methods to examine how indicators can be used as a tool for understanding community wellbeing in Northern Canada. Northern groups like the Inuvialuit Regional Corporation have been working to collect data to be used for socio-economic analysis. This project will be the first to use these data for economic research, filling one of the Inuvialuit Regional Corporation’s major needs.

The objectives of my research project are to,
- Build an economic framework to analyze and monitor the wellbeing of individuals in Northern communities of Canada;
- Analyze and estimate how socio-economic indicators and key determinants affect wellbeing;
- Analyze and estimate how resource development projects affect the wellbeing of individuals in Northern Canada.

**Results:** We are still in the developmental stage of the framework and economic models; therefore there are no results to show at this time. However, this project will have important policy implications when successfully completed. Results will show what socio-economic indicators are having the largest and most significant effect on wellbeing. They will also show how resource development in the north is affecting wellbeing, and through which specific socio-economic channels. This will enable policies to be implemented that focus specifically on the socio-economic areas that will significantly improve wellbeing in the North. They will also give more insight to implement policies related to resource development in the North. At a more regional level, this project will provide the Inuvialuit Regional Corporation with a practical tool to monitor and improve wellbeing of individuals in Inuvialuit communities.

**Future Research:** Going forward, this project can be used as the building block for more economic research in Northern Canada. This project can be expanded upon, and with the continual collection of additional data, new projects dealing with other important areas of economic research in Northern Canada can be done.