

# Raising the Bar for Socio-economic Impact Assessment









Environmental Assessment Practitioners' Workshop

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#### ACRONYMS USED IN THIS REPORT

- CD Compact Disk (as in the SEIA Workshop CD)
- CIMP Cumulative Impacts Monitoring Program
- EA Environmental Assessment
- EIA Environmental Impact Assessment
- FASD Fetal Alcohol Spectrum Disorder
- GPI Genuine Progress Indicators
- GNWT Government of the Northwest Territories
- IBA Impact Benefit Agreement
- INAC Indian and Northern Affairs Canada
- MVEIRB Mackenzie Valley Environmental Impact Review Board
- MVRMA Mackenzie Valley Resource Management Act
- NGOs Non-governmental Organizations
- NWT Northwest Territories
- SEA Socio-economic Agreements
- SEIA Socio-economic Impact Assessment

## 1.0 Introduction

The Mackenzie Valley Environmental Impact Review Board (MVEIRB or the Review Board) hosted its third Environmental Assessment (EA) Practitioners' Workshop in Yellowknife on March 15 and 16, 2006. Funding for the Workshop was generously provided by Indian and Northern Affairs Canada. Co-facilitation and logistical support was provided by SENES Consultants Ltd.

The focus of the two-day workshop was socio-economic impact assessment (SEIA). The Workshop provided a venue for the various parties who participate in some way in SEIAs to acquire a better understanding and insight into what the process entails. Further, the Workshop provided an opportunity for participants to talk openly about the process and to identify things that are and aren't working well in current SEIA. This forum for discussion was also a valuable source of information and priority setting for the Review Board as it developed *Socio-Economic Impact Assessment (SEIA) Guidelines*.

The Review Board is committed to doing good SEIA for projects that have potential significant social, economic and/or cultural impacts. Over the past year the Review Board has been working to improve EIA practice to include these concerns. Work to date includes:

- Developing Socio-economic Impact Assessment Guidelines;
- Meeting with a variety of stakeholders in focus groups to determine how to better integrate SEIA into the EIA process in the Mackenzie Valley;
- Visiting 14 communities to talk to over 550 people about social, economic and cultural impacts and SEIA process issues;
- Developing a library of SEIA materials; and,
- Devoting the entire 2006 Environmental Assessment Practitioners' Workshop to "Raising the Bar for Socio-Economic Impact Assessment".

The SEIA Guidelines will be geared toward developers and assessors/regulators to conduct more effective social and economic analyses, as well as preparing communities and government to more effectively follow and participate in social and economic aspects of EA. The Guidelines will address;

- Principles of good SEIA;
- Data collected, sources and methods used in SEIA;
- How the "Six Steps of SEIA" are conducted;
- Expectations for government and community involvement in assessment;

• Tips, worksheets, tool, question lists to make SEIA consistent, clear and effective.

A draft of the *SEIA Guidelines* was released for public comment on May 8, 2006, and is included on the SEIA Workshop CD included with this report, or can be downloaded from the Review Board website – www. mveirb.nt.ca. Interested individuals and organizations are encouraged to review the CD and the *SEIA Guidelines* to learn more about SEIA and to provide their insight to the Review Board.

# 2.0 Background on Socio-economic Impact Assessment in the Mackenzie Valley

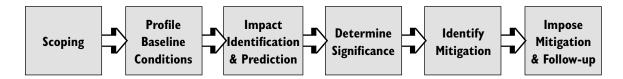
The Review Board is a co-management board set up to handle EA in the Mackenzie Valley. Half of the board members are nominated by First Nations, while the federal and territorial governments nominate the other half. Established in 1998, the Board is governed by the *Mackenzie Valley Resources Management Act* (MVRMA).

The Review Board's mandate includes the responsibility to, through the conduct of environmental impact assessment (EIA):

- Enable Mackenzie Valley residents to participate in the management of its resources for the benefit of Mackenzie Valley residents and all Canadians;
- Ensure the concerns of aboriginal people and the general public are taken into account; and
- Protect the bio-physical environment and the social, cultural and economic well being of Mackenzie Valley residents and communities.

Socio-economic Impact Assessment, in the Mackenzie Valley context, is systematic analysis used during the EIA process to identify and evaluate the potential social, economic and cultural impacts of a proposed development on individuals, families, and communities. Where those impacts may be significant and adverse, SEIA also attempts to reduce, remove or prevent them from occurring, or find compensation for their occurrence.

At its core, SEIA, like all EIA, is a process with a series of steps for *identifying, assessing and mitigating impacts*. The steps are identical in name and concept to the process required in biophysical EIA but require different data collection methods, information sources, expertise, and analytical tools. There are six main steps to SEIA. These are identified in the figure below:



The Review Board uses an inclusive definition for SEIA recognizing the links between social, economic, and cultural impacts, and the fact they are also intrinsically related to the biophysical environment, especially among Aboriginal populations, for whom the land has been the economic provider for millennia, and a huge part of the social and cultural fabric. The table on the next page indicates just some elements of the socioeconomic environment that have been the subject of impact assessment since the passage of the MVRMA.

#### Social, Cultural, and Economic Impacts that Mackenzie Valley Environmental Impact Assessments has Considered

Socio-economic Theme	Valued Components <sup>1</sup>	
Quality of Life and Population Health	Individual and population health Community cohesion and maintenance of values Family cohesion Cultural maintenance	
Wildlife Harvesting, Land Access and Usage	Hunting, trapping and gathering — traditional economy Recreational and traditional economy — access to land Valuation of alternative land uses (i.e. tourism vs. hunting vs. industrial)	
Heritage Resources and Culture	The aesthetic, cultural, archaeological and/or spiritual value of places  Maintenance of traditional language, education, laws and traditions	
Employment and Business	Local vs. outside business competitiveness Employment opportunities for local people Career development opportunities for local people Boom and bust cycles and economic diversification	
Population and Demographics	In- and out-migration effects Community social and cultural makeup	
Infrastructure and Services	Pressures on health and social services Housing pressures — affordability, availability, appropriateness Traffic and road safety — pressures on physical infrastructure	
Income and Lifestyle Changes	Overall money in community Uses of money in the community — disposable income Local and regional cost of living Distribution of money among community members — equity	

<sup>1</sup> Valued Components are aspects of the environment which have particular importance, based on economic, social, cultural, community, ecological, legal or political concern, in a given geographical area.

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## 3.0 Workshop Objectives

The Review Board hosts an annual Environmental Assessment Practitioners' Workshop to educate practitioners and to inform Review Board practice of conducting environmental assessments. The 2006 EA Practitioners' Workshop was focused on SEIA based largely on the growing interest in and importance of the inclusion of a SEIA in all environment assessments, alongside the continuing lack of both knowledge and agreement among many parties as to how "good SEIA" works.<sup>2</sup>

A SEIA is about analysing how development impacts on people, communities and culture. The Guiding Principles of Part 5 of the MVRMA require regard to "... the protection of the social, cultural and economic well-being of residents and communities in the Mackenzie Valley" during EIA (Section 115(b)). This requires the input of not only experts EIA practitioners but also the very people who will be affected by development and assessments. We were very pleased that the 112 Workshop participants included people from government, consultants, industry, academics, leaders and aboriginal and non-aboriginal people affected by development in the Mackenzie Valley (see Appendix B for list of participants).

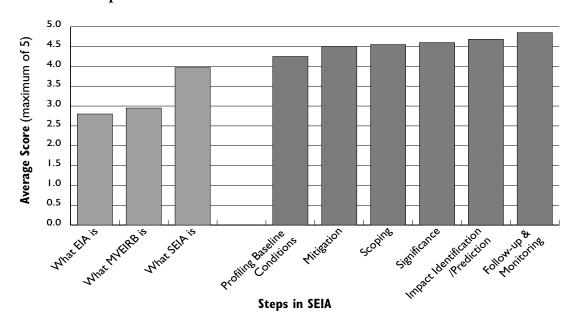
This diverse range of attendees meant consideration of varying levels of understanding and experience with the SEIA process. A questionnaire was distributed a month prior to the Workshop to help determine the agenda by identifying participants' SEIA impact and process concerns. The figure shown on next page provides a summary of the responses received from participants to the question "What areas should the EA Practitioners' Workshop focus on?"

Given the high level of interest among participants in learning more about all six of the steps of SEIA, the Workshop objectives were refined to the following:

- 1. Defining Socio-economic Impact Assessment;
- 2. How to conduct good practice for each of the "Six Steps of SEIA";
- 3. Where there are gaps in the current practice of SEIA in the Mackenzie Valley; and
- 4. How we can all work together to fill some of those gaps.

<sup>2</sup> The Review Board has published a summary document outlining the impact and process issues related to us about SEIA by a variety of Mackenzie Valley communities in 2005. "Community Visits 2005: Raising the Bar for SEIA" is available on the SEIA Workshop CD or at the Review Board website at http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/Socio-Economic\_Impact\_Assessment\_Community\_Tour\_Report-2005.pdf

#### What Participants Wanted to Focus On



The overall goal of the Workshop was to "Raise the Bar for Socio-Economic Impact Assessment". The Workshop created a forum for sharing concerns, multi-stakeholder discussions and probably most important, identifying potential solutions and associated action items for the future. Following one principle of good SEIA, which is that interaction and dialogue by a wide variety of stakeholders is essential to good decision-making, participants were heavily involved in several exercises and "Table Talk" discussions. These are highlighted throughout the text. Parts A and B of the Workshop focused on education and sharing of current practices and initiatives related to SEIA both in the north and elsewhere. Part C emphasised finding solutions to the challenges faced when doing SEIA and the assignment of action items.



The following sections provide summaries of the presentations, exercises, and discussions during the two-day Workshop. The complete agenda is provided in Appendix A. Additional Appendices focus on some of the presentations and findings of the Workshop. All presentations and other materials generated for or by the Workshop are available on the SEIA Workshop CD included with this Report (if you don't have the hard copy, this CD is available upon request from the Review Board or can be accessed at www.mveirb.nt.ca). The SEIA Workshop CD also has profiles and SEIA mandate information about many of the participants to the Workshop, as well as a copy of the May 2006 Draft SEIA Guidelines and additional SEIA information.

# 4.0 Part A: Introduction to Socio-economic Impact Assessment

#### Overview

In order to set common ground with participants' understanding and knowledge of SEIA, and how SEIA fits into the Review Board's EIA process, Mary Tapsell and Alistair MacDonald of the Review Board provided introductory presentations<sup>3</sup>. Mary's focused on the Workshop's objectives to "discover each other, to learn from each other, to gain better understanding of important topics and to identify issues and potential solutions." Alistair emphasized what SEIA is – "Recognition that development occurs not just in a physical site, but in a specific social situation; SEIA is EIA that recognizes people matter." He also discussed three reasons why SEIA needs more focus in EIA:

- 1. It is the law in the Mackenzie Valley to include social, economic and cultural considerations in EIA;
- 2. These considerations come up all the time in EIA, and are especially important to focus on as northern communities make decisions about balancing the traditional and the wage economy, and attendant changes to society and culture; and
- 3. Despite these facts, the socio-economic side of EIA still lags behind the level of effort and expertise put into the biophysical.

Alistair also introduced the *SEIA Guidelines* development process and the "Six Steps of SEIA" discussed later in this report.

A panel of five individuals from different stakeholder groups was then used to give a broad brush overview of how SEIA is currently incorporated in the Mackenzie Valley and to identify strong points and remaining challenges to good SEIA. All participants were then offered the opportunity to replicate this "talk show" at their tables by answering similar questions.

<sup>3</sup> All presentations from the Workshop are on the SEIA Workshop CD, and are also available online at http://www.mveirb.nt.ca/reference\_lib/other.php.



#### "Sticky Notes" Exercise:

#### A Process of Continuous Engagement

This Workshop was designed for maximum engagement of all participants – many of whom don't always have their expertise (whether their knowledge be local, traditional or scientific) – tapped during SEIA. To that end, participants were all provided with different colored Sticky Notes to represent social, economic and cultural impacts (yellow), process issues (pink), and potential solutions (blue), and invited to write their thoughts down whenever they occurred and place them in buckets on their tables. The added incentive of candy in the buckets was provided!

Some 160 sticky notes were collected over the course of the two-day Workshop. Reflecting the general tenor of the discussion - that we have a long way to go in establishing SEIA as an effective part of EIA – there were many more process concerns than impact issues or solutions offered. The comments from Sticky Notes are included in the relevant sections of Part B (process concerns), Section 7 on Lessons Learned (potential solutions), and Appendix E (impact concerns).

#### **SEIA Talk Show**

#### **Purpose of Panel:**

To give a brief snapshot of the perspectives and experiences of individuals from different walks of life on:

- 1. Changes over time in the social, economic and cultural impacts (positive and negative) that merit inclusion in SEIA in the Mackenzie Valley;
- 2. Roles and responsibilities of different types of organizations in SEIA;
- 3. Current challenges to doing good SEIA in each of the "Six Steps" in the Mackenzie Valley; and
- 4. Ways to improve the incorporation of effective and efficient SEIA into the EIA process.

#### Panel members:

Bernie Hughes, Acting Director, Policy, Indian and Northern Affairs Canada<sup>4</sup> Sheryl Grieve, Lands & Environment Coordinator, North Slave Metis Alliance Lois Little, Consultant, Lutra Associates, Yellowknife Michael Benson, Socio-economic Specialist, National Energy Board Bruce Vincent, Socio-economic Lead – Mackenzie Gas Project, Imperial Oil

<sup>4</sup> A complete list of the roles and responsibilities of their respective organizations (and others) are included in the SEIA Workshop CD under "Participating Organizations Info".

#### Highlights:5

#### What are the types of impacts we are and should be thinking about in SEIA?

Three of the five panellists have lived in the north for many years and stated we have come a long way since 25-30 years ago when there was no formal structure for SEIA. The Berger Inquiry was used as a reference point in time, with the extent of growth in SEIA outstanding in the interim. One respondent commented that one of the greatest overall impacts is a positive: change in the attitude of government, developers, and communities toward the importance of SEIA – the fact that we do assessments at all is huge change from prior developments like the Giant and Con mines.

The scale and pace of development was identified as having great impact on communities. In many cases, the pace of development has outstripped the pace of communities' capacity to take advantage of possible benefits. It was also recognized that impacts vary from community to community and the communities most likely to face the greatest impacts often have the lowest capacity – either do deal with the likely changes, or have their concerns aired during EIA.

It was noted that economic issues tend to overshadow social issues in current SEIA. One panellist said that we tend to forget that cultural impact assessment is also important in the north. Economics are "easy" to determine and report, thus the focus has been on jobs and training rather than more difficult to quantify social aspects like family violence and substance abuse. The relationship between economic growth and social problems is also often not dealt with adequately. It was pointed out that research has shown that while employment and economic growth bring many positive changes to society, it can also create negative effects like family violence and family disruption. More work needs to be done looking at how changes brought on by economic change can be beneficial or detrimental in enhancing quality of life, and how.

Participants also considered the merits of separating the social from the economic impact assessments. These subfields use very different information gathering techniques, assumptions and methods of analysis. Some people feel the fields should be called social and economic impact assessment to recognize these differences. (NOTE: The Review Board at present uses the "catch all" term of socio-economic to recognize the complex inter-linkages of economic factors overlapping with cultural and social factors.)

#### What are the common themes of struggles and challenges for the "Six Steps of SEIA"?

A variety of issues related to early community engagement and scoping of issues were identified:

- Additional time commitments required from already busy communities;
- Maintaining a distinction between EIA and the negotiations of contractual agreements between

<sup>5</sup> For the whole dialogue from the Talk Show, and a list of all Questions & Answers from the plenary, see Workshop Q & A Notes on the SEIA Workshop CD

corporations and communities;

- Obtaining an appropriate level of public involvement can be a struggle and it is common to have concerns about consultation (e.g., timing of when consultation needs to occur);
- Scoping raises difference of opinion about socio-economic impacts especially which ones are related to the development rather than simply as part of the background environment; and
- While SEIA should consider both beneficial and adverse impacts, we often forget to scope in the
  positive, and thus SEIA rarely is used to design *enhancement* measures rather than just *mitigation* (or
  harm reduction) measures.

The two community-based panelists identified common challenges related to the lack of community capacity and regulator responsibility. One stated that "even if we do great baseline work, in the end everybody says it is somebody else's responsibility to implement change, and it doesn't end up happening." Too often, baseline information is collected after the impacts have already begun, raising the issue of timelines and the adequacy of resources to obtain relevant information. Traditional/local knowledge is often left out of the SEIA because it is generally not readily available in a published, easily accessible form, the type of inputs that developers want.

Impact prediction has not been adequate to this point. It was felt that we must look closer than we have in the past at the root causes of impacts in order to better understand who will be affected, how impacts can be mitigated, and how impacts differ between projects.

Mitigation is also a big issue because if we are not managing impacts, then SEIA is reduced to an exercise of good intentions with little actual benefit. Panellists noted that we need to focus more on ensuring that mitigation and follow-up actually occurs. This turned out to be one of the common themes throughout the entire Workshop.

The panellists felt that Review Board should emphasize the following in future SEIA;

- Recognition that cumulative impact assessment is of utmost importance;
- The use of culturally appropriate methods of assessing impacts, including the incorporation of the
  values (Valued Components) of each community facing potential impacts into the types of indicators
  used in the assessment; and
- Ensuring appropriate public involvement in the SEIA process.

#### Table Talk One: "Table Talk Show"

Just like the Panel itself, each table at the Workshop had a specifically chosen mixture of people from many walks of life. After listening to the Talk Show, participants were invited to replicate the dialogue by discussing the same issues.

#### **Summary of the Results:**

1. Who are the main actors presently involved, and what groups need to be more involved, in socio-economic impact assessment in the Mackenzie Valley?

Actors Currently Involved	Actors That Need To Be More Involved	
First Nations	Youth	
Self-Government	Women's Groups (e.g., Status of Women Council, NWT Native Women's Association)	
Regulatory Agencies The Review Board	Elders Frontline Service Providers (e.g., social workers)	
Land and Water Boards	Academics	
Industry Cultural and Educational Institutions	Social Groups Metis groups	
Non-governmental Organizations	NWT Literacy Council	
Communities  Consultants	Territorial advisory groups like the Social Agenda Working Group The Protected Areas Strategy	
Lawyers	Territorial Government (eg., departments of Health and Social Services, Justice & Education) Regional Health and Social Services Authorities	

Suggestions for how to get these groups involved in SEIA included:

- Using plain language in all documents;
- Further community training to participate in the SEIA process;
- The Review Board going into schools and presenting how the EIA process works and how to get involved;
- Building SEIA and EIA into the secondary and post-secondary curricula;
- One on one meetings or focus groups with the more "vulnerable" groups;
- With funding from the National Energy Board and Indian and Northern Affairs Canada, make social science advisors and independent advisors available to talk about associated risks of development with communities;

- Financially support women's groups and NGOs to be more involved;
- Contract groups doing community development work to help build capacity for the SEIA process, especially in the outlying communities; and
- Encourage front-line service delivery agencies to contribute to baseline studies and other steps in the SEIA process.

# 2. What are the types of (positive and negative) social, economic and/or cultural impacts that you have seen happen related to resource development – or are concerned about for the future – in the Mackenzie Valley, and are these impacts dealt with effectively in current EIA?

Table discussions varied from assessing cumulative effects to the inadequacy of current research using short timeframes. Change from a traditional to wage-based economy is still relatively new and has impacts related to everything from cost of living increases to modification to culture. It was felt that there is a general deficiency in some communities to be able to respond and adapt to development demands and there is no support or recognition of community weaknesses or efforts to promote community-specific strengths when development is proposed.

Participants wrote about the negative health and social impacts of resource development on communities. They reported increases in the health and wellness of individuals and families via drug and alcohol abuse, sexually transmitted infections, family violence, family break downs, societal role confusion, a lack of support for mental health concerns, and increase in health and social services without increase in staff or funding. These negative impacts are particularly felt by single parents, mostly women. It was felt by some that in delivery of socio-economic programs by the GNWT, the resources are not there for childcare funding and development specific training is provided too late to take full advantage of employment opportunities.

Labour issues were also discussed as a negative because with new development workers leaving home for jobs outside the community is causing a shortage of labour within the community. On the flip side, increased competition from outside skilled workforce decreases opportunities for locals, which in turn will decrease community capacity. The short-term migratory workforce also poses problems for community structures, cohesion and services via in-migration effects. Real and perceived personal and community security has declined with population increases and rising drug and alcohol abuse.

In terms of whether these issues are being dealt with appropriately during EIA, some people expressed opposition to professionals being parachuted in to participate in or complete studies for the assessment who have little understanding of the context, concerns and actual "issues" of that community. Local input and ownership of these studies was proposed to ensure that the appropriate and accurate information is

captured. It was also acknowledged that SEIA occurs in the midst of ongoing social change and it is difficult to recreate missing historical data to create suite of indicators.

Overall, participants stated that socio-economic impacts have not been dealt with effectively. However positives were noted. One positive was that more attention is being placed on baseline studies. Funding has been available for traditional knowledge information and stories and the creation of local boards and agencies (regional Health and Social Services Boards, Resource Development Impact Groups, Interagency Committees, etc.) to be responsible for their areas is also positive. Additional money in the community brings security and income to those without previous opportunity. New partnerships are being built between schools and universities, government and industry are providing resources for activities by communities. An example is the "Asset-Based Community Development" initiative in Behchoko.

Discussions occurred about whether we should have annual "State of the Environment" reports for socio-economic impacts. It was suggested that socio-economic effects often have larger spatial boundaries than the biophysical and that a responsible authority be established to set limits and boundaries that are acceptable. This in turn raised more questions about how to draw boundaries on such information. In sum, as with much of the Workshop, there was additional light shed on problems than solutions when answering this question.

## 3. Which of the "Six Steps" are done well or not done well in the Mackenzie Valley and what are the challenges for good practice in each?

Scoping: Overall, participants said scoping, baseline and learning about community concerns is done well in the Mackenzie Valley. However questions and comments revealed that these steps need to be defined more clearly.

Baseline: Two schools of thought emerged on the subject of baseline conditions assessment. Some groups thought that current surveys of community well-being and other indicators are adequate, while also raising questions about where that data should be collected and stored, and how and who should analyse it. It was suggested that the GNWT Bureau of Statistics would be a good base but there also is a need for more social indicators that are responsive to community values and concerns. Conversely, other groups emphasized deeper concerns over the current compilation of this data. They felt the indicators currently used do not adequately reflect community Valued Components in many cases.

Impact Prediction: Inclusion of women's concerns and perspectives has not been drawn effectively into the process. Also, very little research goes into looking at the project alternatives required under the MVRMA (including the "go/no-go" comparison – the costs and benefit scenarios of having the development vs. not having it). Rarely are consideration of multi-generational effects and sustainable development built into the assessment parameters.

Significance: There were concerns expressed about how the Review Board weighs different evidence in its determination of impact significance, particularly when balancing "subjective" community submissions versus "objective" analysis of measurable indicators by the developer or government.

Mitigation and Follow-up/Monitoring: The lack of mitigation measures and ongoing monitoring agencies to ensure impacts are being addressed was an ongoing concern expressed throughout the Workshop. Currently, there is a socio-economic void as far as regulation is concerned. As one participant put it: "It's great for Review Board to develop guidelines but there is nobody to enforce anything, it all depends on goodwill." There are presently no regulations or authoritative body willing or enabled to ensure compliance or effect changes to development if it seen to be detrimental to the socio-economic environment.

Overall challenges for good practice include the need for widespread consultation with communities including traditional knowledge funding, greater inclusion of the most marginalized groups and more research for key indicators of overall impact – what you might call the "canary in the coal mine" indicators.

### **Summary**

### Introduction to Socio-economic Impact Assessment

There is no question that SEIA is here to stay in the Mackenzie Valley, and that it *can* add value to the overarching EIA process. What people are concerned with now is defining good practice for this burgeoning field. Current efforts, whether they be individual assessments done by Developers, or the way SEIA fits into the EIA process, are inadequate to fulfill the MVRMA's Part 5 Guiding Principles.

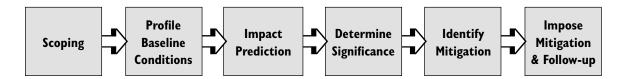
Participants in the panel and Table Talks thought we could improve SEIA practice by:

- Recognizing that cumulative impact assessment is of utmost importance;
- Using culturally appropriate methods of assessing impacts;
- Incorporating and documenting community values;
- Ensuring appropriate public involvement via participatory approaches and initiative to increase community capacity;
- Incorporating more assessment of development impacts on the Mackenzie Valley's unique cultural groups and long-established communities;
- Using plain language in all documents;
- Including women's voices and perspectives and take measures to ensure gender equality; and.
- Developing mechanisms to ensure that the imposition of mitigation and follow-up actually occurs.

## O Part B: Doing Good SEIA: Step-by-step

#### **Overview**

Now that common ground had been reached in understanding what SEIA is, how it fits into Mackenzie Valley EIA and overall challenges to good practice, we turned our attention to the six steps involved in doing SEIA. The six steps were presented in the following format:



The first exercise was one of scoping. Table Talk 2 took us through the process that groups might go through to determine what the Valued Components are that they want to protect, and what type of impacts they are concerned about relative to those Valued Components.

Two presenters focused attention on how each of the six steps can be undertaken through health and gender impact assessment "lenses". Carolyn Dunn of Health Canada (see Appendix C) spoke about Population Health, a concept that recognizes a broad range of social, economic and cultural factors contribute to health. SEIA provides the tools to include these factors alongside biophysical ones when assessing the impacts of industrial development on populations. Barbara Saunders then focused our attention to the fact that women's voices have been marginalized in traditional EIA. Her presentation on Gender Analysis (Appendix D) walked us through how SEIA can more properly address these imbalances in the future.

Following these topical presentations we began to examine each step of the assessment process. The afternoon of Day One took us through Scoping and Baseline Condition Profiling, and then Impact Prediction. At the same time, our presenters brought forward some of the issues faced by their two separate expert sub-fields in SEIA: social impact assessment (Lois Little) and economic impact assessment (Roy Ellis). Through their presentations we learned of concerns in each area and did additional Table Talks to discuss how to determine appropriate indicators for baseline profiling (Table Talk 3) and one specific way to identify and predict impacts (Table Talk 4 on Mental Mapping).

Day Two started with David Lawrence presenting on "Step 4: Determining Significance". After a very informative exercise (Table Talk 5) that required each Table to attempt to determine significance like the Review Board, we delved into the real world SEIA example of the community of Lutsel K'e. Three presenters (Brenda Parlee, Gloria Enzoe and Florence Catholique) walked us through the unique "community-based monitoring" program Lutsel K'e instated to assess impacts of (particularly mining) development on their society, culture, economy and biophysical environment.

Following up on the theme of the difficulty of creating successful mitigation outcomes, Naomi Krogman gave our final presentation of "Steps 5 & 6: Mitigation, Monitoring & Follow-up".

## **Doing Good SEIA, Steps 1 & 2:**Scoping and Profiling Baseline Conditions

#### Table Talk 2: Another Person's Shoes

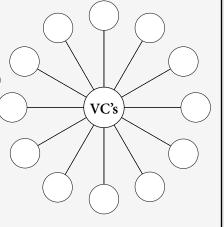
Table Talk 2 was an opportunity for participants to wear "Another Person's Shoes". At the beginning of the Workshop, each participant was assigned to one of 15 named tables, ranging from regions like the Dehcho, down to communities like Yellowknife, and even to sub-populations like Youth or Elders. Table Talk 2 first asked participants to determine what elements of the socio-economic environment might be most valued to their assigned group (Valued Components), and then to estimate the type of impacts they would be concerned about from new development on those Valued Components. A synopsis is provided here; full results from all tables are available on the SEIA Workshop CD under "Table Talk 2". The purpose of this exercise was to make people from many walks of life try and think outside their own experiences and to emphasize two key concepts of SEIA: focusing on community-relevant Valued Components in assessment, and assessing only those elements of the socio-economic environment likely to be impacted by the development in question.

The figure below indicates the instructions given for Table Talk 2.

#### **Table Talk 2: Valued Components**

**Table Name:** 

- Identify the Valued Components that your table might hold dear. i.e., Youth table might focus more on education and job training, while elders might focus more on time on the land – although NOT NECESSARILY SO!
- A VALUED COMPONENT (VC) is an aspect of the lived environment that a community prioritizes the protection of.
- Once you have your list of VC's think of what
  it is about new development that might impact
  upon them. Place a list on the left hand side of
  the page.



#### **Summary of the Results:**

#### **Part 1** Identifying Valued Components

A couple of sample tables are listed below along with their main Valued Component priorities and related impact concerns:

- 1. Youth Age-appropriate recreational and educational activities and social services in community, ability to learn traditional ways while preparing properly to take advantage of the new, strong family ties, access to adequate education and job-ready training. Concerns about loss of traditional knowledge and language, not "falling behind" people from outside because of lack of education and training opportunities at home, difficult decision of whether to leave home to pursue those opportunities, crime and addictive behaviours, lack of role models to learn from.
- 2. **Yellowknife** Communal safety, availability of social and health services and housing, adequate time to plan growth and development, maximizing economic opportunities. Concerns about inadequacy of all of the above in the face of rapid and cumulative change related to increasing pace of industrial developments.

While each group had their own priorities to work under, several trends emerged in the Valued Components identified for the socio-economic environment.

- 1. Maximizing employment and business opportunities: for long term, career development.
- 2. **Economic balance and equity:** Keeping cost of living in line with increased incomes, avoidance of boom and bust, adequate and affordable housing, getting fair opportunity to access benefits and revenues from development.
- 3. Safe and functioning communities: low crime rates, adequate social and physical infrastructure, especially water quality, health and wellness services and road safety, manageable population dynamics (minimizing out-migration while maintaining control over impacts of in-migration).
- 4. **Healthy community relationship to land, water, air and animals:** balance, access to healthy country foods, knowledge of the land, protection of sacred sites, prioritization of major life-giving elements of land caribou, water.
- 5. **Sustainable development:** economic diversification, minimal social and cultural disturbance, protection of environment for future generations, wise and well-timed use of non-renewable resources.
- 6. **Educational opportunities:** traditional and modern, adequate training to take full advantage of development.
- 7. **Increasing community capacity and political empowerment:** for self determination, for meaningful inclusion in decision-making processes on resource management, for self-directed healing, to control destiny through planned and staged development.
- 8. Communal well-being and cohesion: Healthy individuals, families and communities, mental, physical, spiritual health, strong family structures and equal sexual division of labour, traditional and modern healing, gender, income and age group equality, volunteerism and cooperation, respect for others, special protection for those most vulnerable, access to positive recreation activities and community gatherings, solidarity of purpose.
- 9. **Personal Well-being:** happiness, control over own time, self-respect, sense of belonging, risk perception, avoidance of vice (drugs, alcohol), sexual health.
- 10. Cultural maintenance/transmission: language, time on the land, retaining identity, strong intergenerational relations, maintaining traditional economic activities, investment in cultural activities, utilization of traditional knowledge in all walks of life.

The second thing tables were asked to do was to identify what it is about industrial development that might impact on these Valued Components. Given the nature of this exercise, which didn't present a specific development scenario, it is understandable that the presumed impact – e.g., increasing addictive behaviour – often did not have an associated development component that table members associated as the causal factor. It is vital however, whenever doing good SEIA, to identify **how** the development might cause (or

contribute) to the impact that is being predicted. Using the same 10 categories listed above, here is what attendees told us about how development activities might impact on their Valued Components. (Again, the focus in responses was on potential negative impacts, but there are many positive impacts to consider that balance some of these off that also merit consideration in SEIA.)

#### Part 2: Identifying Potential Impacts on Valued Components

#### 1. Maximizing employment and business opportunities:

• Outsourcing of jobs and contracting for various reasons

#### 2. Economic balance and equity:

- Competition for jobs and business opportunities (creates imbalance in ability of communities to keep skilled workers in vital local employment needs)
- Lack of opportunities for women in resource development economy
- Young males have best chances for new jobs; women, youth and the elderly have lower access to benefits – creation of haves and have nots

#### 3. Safe and functioning communities:

- Increased in-migration from job seekers and attendant impacts
- Increased out-migration of skilled labour class from outlying communities to regional centres
- Increased crime and need for more police presence
- Increased access via new or improved transportation (beneficial and adverse)
- Increase pressures on existing (often already inadequate) social infrastructure, contributing to high turnover among social and health service providers
- Increased demand on existing (often already inadequate) physical infrastructure from immigration or industrial uses, concerns about public safety of inadequate roads, water treatment, etc.

#### 4. Healthy community relationship to land, water, air and animals:

- Air and water quality and links to country food quality (largely cumulative, multi-development effects)
- Changing distribution of animals and plants and impacts on relation to land
- Reduced long-term alternative land uses related to large scale industrial land uses
- Increased access of outsiders to harvesting grounds of locals
- Lack of access to land for traditional uses
- Reduced availability or ease of access to country foods may change dietary structures

#### 5. Sustainable development:

 Conservation and wise utilization of resources vs. cutting off of economic options via single-resource dependence

#### 6. Educational opportunities:

- Inadequate baseline education and training for locals to access available jobs, especially in the outlying communities
- Forced to move in to Yellowknife or Edmonton to get training
- People leaving education early to work in high-paying, short term resource jobs
- Prioritization of "modern" education leading to reduction in ability to transmit knowledge between generations

#### 7. Increasing community capacity and political empowerment:

- Pace of change overwhelming current community capacity, especially to do anything but react to development, rather than plan proactively before development is proposed
- Lack of funding and expertise at local level to make informed decisions as part of larger EIA process
- Sense of lack of political voice in resource development decisions "foregone conclusions"?
- Concerns about political corruption associated with big development

#### 8. Communal well-being and cohesion:

- · Increasing sexually transmitted infections
- Dietary changes (junk food)
- Alcohol, drugs, gambling addictions increases due to long-distance commuting?
- Reduced community population stability (more in- and out-migration)
- Development change contributes to cumulative impact of rapid social, economic and cultural change of resource development on traditional communities
- Increased population impacts on housing availability, affordability and adequacy

#### 9. Personal Well-being:

 Lack of experience with money management can lead to poor utilization of increased income, including debt (creating vulnerability to economic downturns) and addictive behaviour (drugs, alcohol, gambling)

#### 10. Cultural maintenance:

Concerns about loss of traditional consensus decision-making

## **Presentation:** Appropriate Indicators for Social Impact Assessment, Lois Little, Principal, Lutra Associates Ltd.

(http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/6-Lois\_Little-Appropriate\_Indicators\_for\_Social\_Impact\_Assessment.pdf)

## "Northerners consistently express concerns about well-being but what indicates well-being today may change tomorrow"

Lois Little talked to us about the fact that social indicators are used everyday by everybody, for example to "indicate" state of mind or to show one's comfort level with a course of action. Indicators are needed because certain concepts or conditions in themselves cannot be measured. Happiness, quality of life, well-being, personal safety, culture, participation, etc. are powerful concepts that have many properties and can be measured in many ways. Used as gauges to show, judge or measure environmental, social, economic and cultural conditions, indicators are a very important element of SEIA.

Scoping processes raise social issues and concerns, and essentially shape the terms of reference for the SEIA. Lois noted one problem with current SEIA scoping exercises is that they tend to cover all of the ills a community might be facing, even when it may be unclear whether issues relate directly to the project or to the broader social environment of which the project is a part, or to an accumulation of events or activities. This remains a problematic area in impact assessment and for the development of appropriate indicators which focus on potential impacts that have some feasible relationship to the new development.

Baseline information is our reference point so we know what our social world is like before a project, and thus can identify probable changes and predict impacts. Social, economic and cultural conditions should be described in quantitative and qualitative ways, bringing in the voices of those most likely to be impacted.

Scoping and baseline information thus set the stage for the whole SEIA process. Flawed, incomplete or inaccurate data can create significant difficulties for the remainder of the SEIA particularly for impact mitigation and follow-up work. In the past 'grey' literature which also included people's stories were not considered as valuable as numbers. People's words and experiences are as important as statistics. In Lois' opinion, both are needed.

To emphasize some of the ideas related to the importance of good baseline conditions assessment and the role appropriate indicators play, participants engaged in Table Talk 3.

## Table Talk 3: From Valued Components to Appropriate Indicators

Table Talk 3 required participants to take the list of their most important Valued Components and what they learned from Lois Little's presentation to tackle the nuts and bolts of SEIA: finding appropriate indicators. Instructions were to:

- 1. Develop a list of no more than 10 indicators you feel can best measure the impacts on your valued components that you identified in Table Talk 2.
- 2. Use your 30 available sticky dots to rate the importance of each indicator. Split the dots equally around the table. Give any indicator as many dots as you like!! The five indicators with the most sticky dots then become your most important indicators.
- 3. For your five most important indicators, please tell us why they are key and how we can get the information to measure them.

The function of this exercise was to get people talking about the value of using measurable indicators when making a determination of whether a development is, indeed, likely to impact on an identified Valued Component. In addition, this exercise was about showing how people determine what indicators are the most valuable and indicative of change.

#### **Summary of the Results:**

Key indicators for Valued Components identified by participants are listed below (*indicators identified by at least one group as being in their Top Five – transcribed verbatim here*):

#### **Key Indicators for Valued Components**

#### **Employment, Education, Economy**

- Unemployment
- Number of people engaged in wage employment
- Level of income
- · Number of people on income support
- Amount of income security received per month by elders

- · Number of years of schooling completed
- Reported racially-motivated incidents in work environment
- Worker absenteeism rate
- Median duration for local hires (amount of time spent in one workplace)
- Percent of population with trades certificates
- Number of high school graduates
- Variety of jobs available to women

#### Social

- Crime rate
- Number of people accessing social services for social problems
- · Housing availability
- Housing acceptability/appropriateness
- Documented cases of drug/alcohol abuse
- Number of people in addiction care
- Number of people volunteering

#### Cultural

- Percentage (by age group) of population using non-English traditional language in the home
- · Time spent on the land
- Number of identified sacred sites in the area
- Access to elders' knowledge

#### **Traditional Economy**

- Return per unit effort on traditional harvesting activities
- Price per unit for harvested goods
- Participation rate of youth in traditional harvesting
- · Number of people engaged in traditional harvesting
- Frequency of hunting and traditional activities
- Sharing of traditional foods
- Percent of eligible workers taking a harvesting leave of absence
- Number of women participating in governance
- Child care spaces available

Important considerations and concerns about the development of indicators expressed by participants, both during this exercise and on "Sticky Notes", included:

- 1. Indicators need to be linked to both Valued Components and community aspirations of affected populations, and to areas of the socio-economic environment likely to be impacted by the development in question.
- 2. The importance of assessing not only in aggregate, but also by demographic clustering (i.e., identifying vulnerable sub-populations), should not be underappreciated.
- 3. Percentages are usually much more valuable than raw numbers of people, especially in smaller communities.
- 4. Both regional and community-specific indicators need to be included in SEIA. In purely regional assessments, well off communities can often serve to mask problems in more vulnerable communities (e.g., unemployment rates in the Sahtu mask the differences between Norman Wells [under three percent] and Colville Lake [well over 20 percent]).
- 5. The extent to which indicators need to be agreed upon by government, proponents and communities is unclear.
- 6. Consideration of using quality of life indicators that are ignored by Gross Domestic Product concepts, such as developing a Genuine Progress Indicator report for the NWT.<sup>7</sup>
- 7. The ability to work with a limited number of indicators while still demonstrating what is occurring in the social, economic and cultural environment finding those indicators that are the "canaries in the coal mine"; the early warning devices that social, economic or cultural change is increasing. To date, the usefulness of traditionally used SEIA indicators in actually predicting the scope and direction of change have not been assessed in the NWT.
- 8. Acknowledgement that indicators are very selective in the data they interpret and that certain areas may be missed entirely; e.g., unemployment indicators are defined by wage labour, but entrepreneurial work or other forms of work may be overlooked.

<sup>7</sup> For more information on how Genuine Progress Indicators differ in their focus on social, cultural and economic balance and sustainability from traditional measures which prioritize economic growth, see the Pembina Institute's website – http://www.fiscallygreen.ca/gpi/index.php.



#### "Sticky Notes" Findings:

#### Participant Concerns about Scoping and Baseline

#### Scoping

- Considering, during scoping exercises, the impacts on communities that would normally be considered "indirectly affected"
- Determining or defining who and what constitutes the "community", with consideration to geographic boundaries, sub-populations and self-identification, given the multitude of local and regional organizations who are stakeholders
- Defining consultation requirements for government, developer and Review Board
- Scoping obligations of developers, with respect to assisting communities with minimal capacity
- Lack of consideration of the triple bottom line (economic, social, environmental) and intergenerational equity within existing EA frameworks
- Temporal scope of assessment needs to be broad enough to capture fact that
  communities are affected at various levels of development; when there is no activity; when
  pipelines are talked about; when mines are being developed; when tourism is not being
  taken advantage of; when there are spikes in industrial activity

#### **Determining the Appropriate Level of SEIA effort**

- Currently, thresholds for when a SEIA is required remain vague, undefined
- Need consideration of threshold for work camp size beyond which potential social, economic or cultural impacts change, including access to community, personal security issues, effects on goods and services
- Concern that assumption small projects will have little to no socio-economic impacts means they will not be properly assessed

#### **Baseline Research**

- Conducting SEIA must address the question of measuring health and social impacts while being respectful of privacy – the fear of judgmental attitudes may hinder aboriginal people to give straightforward answers to delicate questions, even if their confidentiality is assured
- A rapidly transforming social, economic, and cultural baseline has implications for attempting to interpret significance and causal factors
- SEIA process should ensure that there is a consistent method to compile and evaluate baseline information

- Recognition that participating organizations may lack the capacity (time, resources) to compile data
- There may be significant difficulty for consulting companies to obtain often personal information from community members in the short time frame that they stay in a community
- Prior studies on communities or groups of communities in the NWT are limited; a lack of case studies with which to compare research
- Currently, there are analytical weaknesses in the Communities and Diamonds reports of the GNWT
- · Small size of communities effecting statistical analysis of surveys
- Many organizations lack the time, resources and capacity to compile baseline information
- Lack of coordination on issues like skills training makes it hard to collect information
- Lack of relevance of most commonly chosen (typically, the most easily accessible) indicators to specific communities
- Amount of emphasis given to "individual, family and community wellness" issues minimal when compared to the current regional and economic focus of most SEIA

### **Doing Good SEIA, Step 3:**

#### Impact Identification & Prediction

**Presentation:** Economic Impact Assessment in the Mackenzie Valley, Roy Ellis, Principal, Ellis Consulting.

(http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/7-Roy\_Ellis-Economic\_Impact\_Assessment\_in\_the\_Mackenzie\_Valley.pdf)

 ${}^{*}It$  is important that the directly affected communities & the NWT benefit as much as possible from developments occurring in the north."

Roy Ellis presented one perspective on economic impact, with an example focusing on assessing job creation. He walked us through the basic steps of doing an economic impact assessment, noting that the

small economy in the NWT poses unique problems in economic impact analysis. It means that building business capacity is essential, and training and education initiatives have to be "tailored" for the kinds of projects that will be occurring. The test of economic benefit vs. impact identified by Roy was that projects must have an overall positive contribution to the economy.

Impact identification and prediction stem from two main sources of economic impacts; those that flow from the project on the environment (footprint) and secondly, those that flow from economic activity. The environmental impacts on the "footprint" are mitigated through project design and/or compensation therefore have been few, if any, unmitigated impacts flowing from the environmental side. Impacts that flow from economic activity can be seen as "opportunities" – when people are willing to take training to qualify for jobs, and "enabled" to start new businesses or expand existing ones to build capacity. Another opportunity is for "equity" participation in projects.

There are also "indirect" and "induced" impacts which are estimated using an economic impact model. The most "authoritative" model is Statistics Canada's Interregional Input-Output Model and this model is "static" – based on average costs. Predictions for employment and business impacts are made using combination of model results and assumptions regarding labour force availability. These results are provided to the "social" team for feedback on what they have learned from community visits and then comments are incorporated where appropriate. To ensure benefits, it is essential that information on training requirements and business opportunities be given to communities as early as possible. Of particular importance to jurisdictions like the NWT, with small populations, are assessment of the cumulative effects of several developments, and the potential for diminishing local and regional economic benefit as all available labour gets drawn into early developments, meaning that later developments require in-migration labour.

Roy also warned that if intervention is not done early – i.e. building labour force and business capacity then many of the potential opportunities will be lost – training and business development must be done before the project is in operation. Training and business development needs to be tailored to the types of jobs likely to come from the development.

There was a lively discussion following Roy's presentation, with attendees appreciating the rigor of the quantitative tools described, but questioning whether they encompass the full range of economic issues important to the people of the Mackenzie Valley. Mentioned were a lack of tools such as Genuine Progress Indicators for a broader assessment of development contribution to sustainability, costs to the long-term biophysical environment, any costing of losses to alternative economic activities (e.g., traditional harvesting, tourism), and a lack of analysis of community-scale economic dynamics (most analysis is at regional and territorial levels). The juxtaposition of growth in the economy, but not so much in individual career development opportunities for aboriginal people, and the complexities of rapid change in a sparsely populated region was highlighted in the following exchange:

## Q: Diversification and sustainability require managers, not just truck drivers. But we don't see Aboriginal managers being hired. How do you address that?

A: "The Northern labour market is limited. The currently available labour pool is poorly educated and has no experience. All others are basically working. Contrary to popular belief, companies do want to hire in the north. They do not have an interest in bringing southerners up. In the south, they compete with other projects such as the [Fort McMurray] oil sands. A local workforce is generally a more stable workforce, with less fluctuation. We now see more aboriginals being educated; there are more aboriginals in post-secondary institutions than ever before. Over time, these people will become managers."

It was pointed out by participants that the tools put in place to monitor effects, such as Socio-economic Monitoring Agreements, lack teeth at this point in time, with developers and government often having "opt out" clauses and a requirement for new mitigation to be "cost neutral". There are no Limits of Acceptable Change and associated adaptive management requirements written in to current agreements.

#### **Table Talk 4: Mental Mapping Exercise**

Following the presentation on economic impact assessment, participants were asked to complete a mind mapping exercise at their tables. Mental mapping is just one of many forms of participatory impact prediction modeling. The focus of the exercise was to identify the possible positive and negative impacts on communities that could result from a new development, and to generate a discussion about the relationships between development components, direct impacts and indirect impacts. Instructions were as follows:

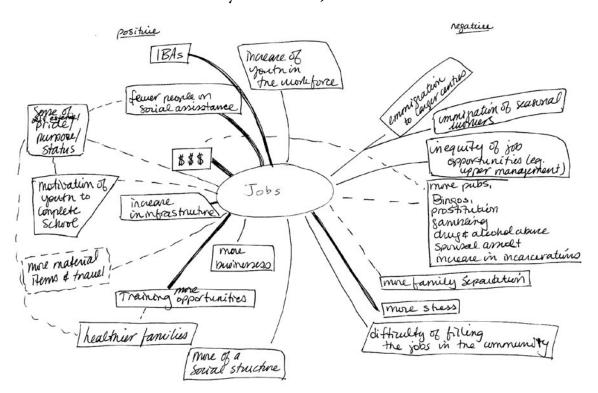
Company X plans to build a new development that will create 500 new jobs. The development will be located 200 km from the nearest community, Fort St. Elsewhere, which depends on a mixture of wage economy and a traditional lifestyle.

Using the development component of "new jobs" as the starting point, map out as many potential impacts related to this component as you can.

- I. Place positive impacts to the left of the centre circle and negative impacts to the right of the circle.
- 2. Use arrows and different line thickness to show the direction and strength of relationships between impacts.

An example of one such mind map is shown in the following figure. Of the 14 mind maps created by different tables, there were many similarities in the views presented. On the positive side of the ledger, increased income, access to training opportunities, greater self-reliance, improved infrastructure, and improved future opportunities for youth were commonly noted. On the negative side, the most common impacts noted were increased social problems (e.g., drug and alcohol use, spousal abuse, gambling), increased stress on the family structure, loss of ties to the land, and out-migration from smaller centres.

## **Example Results:** Mind Map of Possible Positive and Negative Impacts for Communities from Industry Associated Jobs





#### "Sticky Notes" Findings:

#### Participant Concerns about Impact Identification and Prediction

- Traditional people from the communities may not "process" impacts in the same way as scientists
- Many people in small communities see negative social effects from development as "obvious" and not requiring statistical analysis to prove
- Lack of community capacity to evaluate quantitative evidence
- Difficulty of distinguishing impacts that are directly attributable to a project versus other social issues occurring in a community

## Measuring cumulative effects was identified as a major gap in current SEIA. Concerns included:

- The ability of SEIA to deal with long term impacts, or impacts that do not show up immediately during development
- Impacts should be inclusive, e.g., impacts of nearby exploration projects need to be considered in the assessment of a large scale project
- The consideration of the potential social or economic impacts occurring from a project not going ahead should be considered in a cumulative effects model (mentioned twice)
- The current focus by government agencies is on individual projects, not on developing
  programs or measures for cumulative change; SEIA results from study of individual
  projects may not be significant, but a cumulative study of the project may reveal
  significant impacts
- A cumulative effects SEIA may be appropriate in the case where there are a number of widely dispersed projects occurring that draw on the resources of individual or small clusters of communities
- Pressures from regulators and government officials to "push-through" seemingly small projects without giving cumulative effects full consideration

## **Doing Good SEIA, Step 4:** Determining Significance

## **Presentation:** Good Practice Of Socio-economic Impact Significance Determination, David Lawrence, Principal, Lawrence Environmental

(http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/8-David\_Lawrence-Socio-Economic-Impact\_Significance\_Determination.pdf)

"Potentially significant impacts involve public reasoned judgments, in combination with collaborative consultation & with technical support."

The first presenter of Day Two, David Lawrence, spoke about how determining significance in a development project is partially determined by institutional arrangements, partially by EIA experience and theory, and partially by project-specific circumstances. Significance determinations are subjective, value-based judgements about what is important, desirable or acceptable. What represents a significant impact is bound and influenced by EIA legislation, regulations, guidelines and legal precedents, and by government policies, plans, standards and objectives. Under the MVRMA, the Review Board is the organization that makes a final determination of the significance of impacts (and thereafter, required mitigation measures to reduce the significance of the impact) during EIA. Judgements about significance determination apply procedures (e.g., staged evaluation procedures) and/or methods (e.g. threshold application) to determine impact significance. They vary by context (spatial, short/long term, social, cultural conditions relative to background conditions) and perspective which can vary among individuals, groups, and communities.

David introduced us to four approaches to significance determination:

- 1. The Technical Approach adjusts for differences in impact types (e.g., social), reliability of data and varying public and agency perspectives and allows for degrees of significance.
- 2. **The Collaborative Approach** where interested and affected people jointly determine what is important, why & to what degree and is undertaken in interactive forums.
- 3. The Reasoned Argumentation Approach integrates community, technical and traditional knowledge, views significance from multiple perspectives and ensures open, transparent and inclusive process.
- 4. **Composite Significance Determination Approach** is a blend of the above three approaches. Composite approaches may be using elements from all three approaches.

One current problem in significance determination is that while common sense tells us that degrees of significance exist, existing EIA legislation calls for either significance or no significance and does not allow for varying degrees of significance. Social and economic effects are important and are among those impacts most likely to be considered significant. They can include health, displacement (people, cultural, heritage), and cumulative impacts on individuals and communities (especially livelihood, quality of life, value conflicts).

#### **Review Board Significance Determination**

As a follow-up to David's presentation, a quick overview of significance determination as applied by the Review Board was provided by Alan Ehrlich, Senior Environmental Assessment Officer with the Review Board, who stated:

"Significance determination requires more than just rigorous science behind predictions. In determining significance, we attempt to apply values and wisdom into EIA. Science alone can't tell you what is significant or, what matters to people. This is why we do significance determination. The Review Board members discuss the evidence before them and, based on their informed subjective judgment, various world views and their collected wisdom, determine if a predicted impact is significant. Significance is determined using a combination of both brain and heart to come to an informed subjective decision. There are values, as well as science, at the base of these things."

#### **Table Talk 5: You Determine Significance!**

To drive the importance and difficulties of doing good significance determination home, Table Talk 5 asked each group to "become" the Review Board, and determine the significance of each of the following scenarios predicted to occur during the course of a development under Environmental Assessment (the specific development example from Table Talk 4 – the Fort St. Elsewhere Mine – was again used for greater clarity):

#### Predictions:

- High probability of three percent drop in trapping success over five years near the community
- 2. High probability of 20 percent drop in bingo attendance for 10 years, irreversible
- 3. 20 percent chance of increased teenage suicide rate in the region, might be reduced by new social services

In addition to the determination of whether each impact was significant or not, each "Review Board" was asked to also explain:

- I. What drove their decision; and
- 2. What additional information would be assist in making this determination?

The exercise illustrated that decisions are both value driven and reliant on the levels of information provided throughout the EA. The exercise showed how difficult it is for the Review Board to make determinations of significance, especially in the face of inadequate information. It did so by using purposefully vague scenarios. Each one used slightly different measurement parameters, with missing pieces of information. Note for example that the reversibility of the impact is not indicated for Scenario One, but some indication is given for the others. As a result, all groups had to ask for additional information, which the Review Board does during an EA by posing Information Requests of its own, or on behalf of parties. The EA process is only as good as the inputs that fuel it and the questions posed by the parties and the Review Board.

Recognition of the role of values in decision-making was also important for this exercise. SEIA is by nature subjective, as in reality is all EIA. One group noted that their "Review Board" values were defined by their gender – a "Women Only" board. This reality does not diminish the importance of decision-making, or the weight with which decisions should be treated.

#### **Summary of the Results:**

Scenario One: High probability of 3 percent drop in trapping success over five years near the community

Significant	Not Significant	No Decision
Two tables	Seven tables	Six tables

Most groups felt that the small drop was not significant, despite the high probability of the impact occurring.

**Key Elements:** Trapping is not simply an economic activity – it is tied together with the socio-cultural fabric of NWT communities (e.g., trapping is used as a way to pass on knowledge about cultural values and

survival skills on the land). This multifaceted nature of the activity makes it more likely to be significant if the magnitude of change was higher. Another point raised by some groups was that although five years may seem short term to some people, it is a long time in the life of a youth who will not have the opportunity to have knowledge passed on to them by their elders.

# Scenario Two: High probability of 20 percent drop in bingo attendance for 10 years, irreversible

Significant	Not Significant	No Decision
Four tables	Two tables	Eight tables

A couple of groups found the premise ridiculous or at the very least an extremely grey area compared to the other two scenarios. This was the very point of the inclusion of bingo attendance in the exercise. While the majority of groups refused to make an absolute determination of significance without further information, all issued excellent Information Requests, largely focused on finding out what phenomena would cause the declining attendance.

Key Elements: Those that did determine this was a significant impact pointed to the severity of the change and the high probability and irreversible nature for the medium-to-long term. The aspects of community well-being related to this activity, as well as concerns that reduced bingo attendance might be more an indicator of larger impacts rather than an impact itself, were discussed widely. Neither was it abundantly clear whether reduced bingo attendance was a positive or negative occurrence: the losses of revenue for non-profit organizations in the community could be counterbalanced with the possible benefits, or reduced income loss to gaming in communities. The adverse health effects of smoke exposure in bingo halls was also mentioned. There are two sides to every impact coin, the beneficial and the adverse. We need to consider both.

# Scenario Three: 20 percent chance of increased teenage suicide rate in the region, might be reduced by new social services

Significant	Not Significant	No Decision
12 tables	One table	One table

The vast majority of groups identified this as a significant impact even in the absence of additional information. The vital nature of the Valued Component being dealt with was the leading reason, along with the relatively high degree of probability for such a momentous outcome.

Key Elements: Most people agree that protection of youth is *perhaps the* number one priority for Mackenzie Valley communities – therefore, any impacts on them should be treated with the precautionary principle.<sup>8</sup> The most difficult question for each Review Board, of course, was whether a 20 percent chance can actually be considered **likely**. For the Review Board to make a determination of significance, the impact needs to be adverse (obviously, in this case), significant (a mixture of things based on a value judgment), and likely (not obvious, in this case).

Several tables pointed out that the ramifications of even one teenage suicide, beyond the loss itself, can be huge. Community well-being can plummet, leading to cascading impacts. This recognition that impacts beget additional impacts and can create unmanageable, spiralling impacts is very important. In part due to this high level of concern, greater emphasis was given here to finding out the adequacy of proposed mitigation. Probability and severity don't both need to be at a certain pre-determined level for an impact to be deemed significant. Severity of potential impact is usually weighted more than a mere 50 percent-plus chance that an impact will occur. Significance determination is always a mixture of factors, whose weight may shift depending on the severity of a possible outcome. The more severe the outcome, the more the precautionary principle comes into effect and the less relative importance likelihood of occurrence takes on.<sup>9</sup>

#### Participants also identified the following additional key elements of significance determination for SEIA:

- Local people are of the utmost importance, especially their self-defined well-being. Find out if the
  voices of those most likely to be impacted were heard? Understand who made the prediction, and the
  assumptions on which it was based.
- A focus at all times on the question of: "How does the impact affect community well-being?"
- Recognize that information, especially data collection and analysis techniques, and assumptions of predictive models, must be transparent to all parties.
- Consider the nature of the evidence presented and weighting of Review Board based on their value system (e.g., local trappers' oral submission vs a wildlife biologist weighting may be dependent on constitution of Review Board).
- Understanding of the socio-economic context absolutely essential. A 3 percent trapping loss in Yellowknife may be a miniscule drop. For Colville Lake, it may be the "tipping point" to much greater loss.
- Understand the causal factor(s) behind the impact, especially how they link to aspects of the development undergoing EIA.
- Determine the geographic scope and temporal scope (duration) of the impact: What is the reversibility of the impact?

<sup>8</sup> The Precautionary Principle is akin to the concept of "better safe than sorry". It holds that the lack of full certainty that an impact will occur should not postpone the imposition of mitigation for potentially significant impacts on the environment.

<sup>9</sup> For more information on how the Review Board considers difficult questions like this, consult the Review Board "Reference Bulletin:

Operational Interpretation of Key Terminology in Part Five of the Mackenzie Valley Resource Management Act," available at www.mveirb.nt.ca

- Mitigation must target those groups that are feeling the loss, and replace the element (i.e. social
  activities) rather than compensate in some less appropriate fashion. For example, the bingo loss may
  be more important as a social activity for women, rather than men
- Determine if there are particular groups within society that will feel the impacts more. Also, look at individual impact equity vs. community benefits should the rights of the individual be paramount, or the rights of the collective?
- Identify whether the singular impact in question is linked to cumulative changes that may have much more profound effects is important looking for the "canary in the coal mine".
- Understand that if mitigation is built in to the development via commitments, it can be used to assist in significance determination. However, the absence of identifiable mitigation does not mean that significance *should not* be found. Often impacts which are difficult to reverse with currently available means merit more attention and therefore become more significant.



#### "Sticky Notes" Findings:

#### Participant Concerns about Significance Determination

- Weighing the value of the proponent's determination of social, economic and cultural impact significance versus that of MVEIRB
- Consideration as to how positive vs. negative impacts are weighed and balanced against one another; how do you reconcile conflicts within communities, based on differing values, about what is important?
- Acknowledgement that the crafting of a "reasoned judgement" by MVEIRB is complicated by the reality there is a significant disparity between interveners' capacities to present their cases
- Dealing with degrees of significance when legislation focuses on significant thresholds
- Dealing with patterns of interacting (and cumulative) impacts when Valued Components, impact prediction and impact significance interpretation emphasize individual impacts
- Coping with more intangible elements determining significance, such as culturally-rooted perception of impacts from development
- How do you balance positive economic impacts vs. negative social and health impacts arising from development?
- Consideration of whose values carry the day in SEIA and the attention to a
  precautionary approach that allows the most sensitive values to carry the most weight

# SEIA and Communities: The Lutsel K'e Experience

This session offered the audience a real-life example of a community that has attempted to blaze its own SEIA trail. Presenters talked about different kinds of social indicators that may be usefully incorporated into SEIAs at the community level (Brenda Parlee); a case study on community-based indicators and an approach to monitoring from Lutsel K'e in the South Slave region of the NWT (Gloria Enzoe); and opportunities and challenges of incorporating results of community-based monitoring into decision-making (Florence Catholique).

**Presentation:** Alternative Perspectives on SEIA Indicators, Brenda Parlee, Department of Rural Economy, University of Alberta (NOTE: All three presentations are located at the address listed below).

(http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/9-Brenda\_Parlee-Alternative\_Perspectives\_on\_SEIA\_Indicators\_Lutsel\_Ke.pdf)

"Community-based monitoring that involves local people in defining, monitoring & interpreting changes in their community can increase knowledge and capacity to address socio-economic & cultural impacts of greatest concern."

When conducting SEIA, the conventional indicators such as unemployment rates and business development opportunities are often inadequate measures for understanding the impact of development on the health and well-being of northern communities. There are other kinds of social, economic and cultural activities also important to a community's well-being that may be significantly and adversely affected by a proposed development.

Assessing a community's "social capital" is an example of an alternative indicator that can be used in SEIA. Social capital relates to the connections, networks and social interactions amongst a group of people in a common setting.

Brenda gave the example of evaluating the effectiveness of leadership as a social capital indicator. When researching such indicators, both qualitative and quantitative questions need to be asked. She argued that by asking community residents these questions, researchers and the community gain knowledge about

<sup>10</sup> One participant warned that the use of the term "capital" in reference to social resources reflects the increasing commodification of the lived experience, something that has been associated by some people with a decline in community cohesion and the rise of an "every person for themselves" attitude.

# **Presentation:** Community-Based SEIA Monitoring in Lutsel K'e: How It Works and Some Key Results, Gloria Enzoe, Lutsel K'e Community Researcher

"Mine employees spend less time on land, miss out on family activities, experience more family break-ups & arguments over money, & feel there is not enough training & opportunities for promotion."

Community-Based Monitoring in Lutsel K'e – the Ni hat'ni – Watching the Land Program – evolved over the last seven years. It aims to gain a better overall picture of what is happening to the community of Lutsel K'e. The program works based on the assumption that environmental and socio-economic issues go hand in hand.

The program uses five distinct surveys to measure and monitor community-based socio-economic indicators, focused on Community Health, Mine Employee & Spouse, Cultural Vitality, Youth, and Leadership.

Gloria highlighted the results of the surveys information gathering, organization and interpretation, which showed a variety of socio-economic ills facing the community:

- The number of people concerned about environmental impacts of mining continues to rise every year.
- There is low attendance at public meetings due to frustration over lack of outcomes, "too many meetings" and people being scared to speak out.
- There are low numbers of volunteers because people want to get paid for time and/or have other commitments, etc.
- There are high rates of overcrowding and houses in need of repairs.
- There are few serious trappers left due to lower fur prices, higher gas prices, and lack of cheap equipment.
- Caribou is still vitally important. There is a very high percentages of families (up to 95 percent) who eat six or more meals of caribou meat a week.
- Younger generations are losing knowledge of history, legends, and sacred sites.
- The use of Chipewyan language is rapidly decreasing in younger generations.

Gloria explained that one big challenge to the Community-based SEIA Monitoring program is the lack of financial support. Staff levels have decreased from six to one part-time worker. The program needs reliable,

committed staff to adequately carrying on the program. In addition, experts are needed to interpret the results and help to use the information for the benefit of the Lutsel Ke Dene First Nation community.

**Presentation:** Community-Based SEIA Monitoring in Lutsel K'e: Use of Results, Challenges We Have Faced, and Priorities for the Future, Florence Catholique, Lutsel K'e Dene First Nation

"Data collection is of no use unless it is analysed & mulled over as to what it means for the community. Standardized treatment for all communities is not appropriate."

Florence Catholique explained how the community of Lutsel Ke has been able to use results as;

- Promotion of community-based monitoring programs to other First Nations and communities.
   This promotion includes providing advice to other groups on how to develop their own programs.
- Evidence of impacts already observed, when assessing new resource developments.
- Information for leadership and community organizations, to provide direction for actions.
- Information integrated with environmental/land use data to provide a better overall picture of the community
- Information for environmental and socio-economic monitoring agencies established for the diamond mines.
- Baseline information and as a tool for verification for government statistics related to the Gahcho Kue project.

She also said that although the program results have provided a lot of information, the community still needs to determine if a change is actually negative or positive and how to manage it. She also highlighted many challenges with the program that require recognition and action:

- Reluctance by regulatory boards and government agencies to consider the results on an equal level with "scientific" data.
- Lack of *action* taken on results, and lack of leadership promotion of the program.
- Trends are easy to identify and they are able to compare results between years, but they still need serious statistical analysis to really make linkages.
- Originally designed surveys may not meet current community needs and there is a need to
  periodically re-assess information being gathered, while not changing the program so much that the
  comparability between years is lost.

• The program is time consuming, and requires financial and human resource support and capacity to continue implementing the program.

Florence believes the Community-Based Monitoring Program has shown that it is a viable means to measure and monitor social changes. She concluded by stating that boards and governments have responsibility to support such programs at the community, regional, and territorial level and to make links between program data and future assessments and IBA/SEA negotiations. Currently, however, IBAs in particular are not effective in dealing with social impacts.



# "Sticky Notes" Findings: Participant Concerns about the Role of Communities in SEIA

#### **Community Inputs to Process**

- How to deal with resistance from those communities who do not wish to provide proponents with information
- The impacts to decision-making where the SEIA is conducted in circumstances where subjective information is equally valued and every community member is considered an expert (this issue was raised by a variety of participants)
- The differing priorities of a community-driven SEIA versus proponent-driven SEIA, and the appropriateness of using a community-driven SEIA for the purposes of a regulatory process
- Establishing the process by which Traditional Knowledge is incorporated into the SEIA and how to deal with confidentiality issues associated with Traditional Knowledge
- · Establishing a role for land use planners in screening and assessment of developments
- · Addressing the costs of bringing trained translators to meetings and hearings
- Consideration of the difficulties encountered in assessing cultural impacts in the absence of numerical measurements or monitoring criteria
- Considering either the "participatory approach" vs. the "technical (or consultative) approach" when deciding upon the type of SEIA methodology to follow
- How to identify and address the variations that occur in communities about which social,
   economic and cultural indicators and Valued Components are most important
- The need to ensure that the opinions of a few community members are cautiously balanced against a more systematic approach to conducting SEIA
- The ability of communities to set levels of acceptable developments via social, economic and cultural impact thresholds

- Issue of perceptions impact assessment needs to consider people's fears and attitudes
- Use of different cultural appropriate methods for different populations can lead to unpredictable and arbitrary assessment
- Lack of integration of community aspirations in relation to socio-economic, cultural and environmental valued components in the EA process
- Ethical concerns about dissemination of community based socio-economic priorities to outside organizations/companies.
- Lack of a sense that community inputs are meaningful: "my comments not being taken into consideration by the responsible parties or the proponent"
- SEIA not currently being used as a process which allows findings be converted into longterm community learning and plans for addressing cultural, health and economic issues

#### **Capacity**

Many comments were received that focused not only on building community capacity, but also building capacity of other parties, along with creating reasonable expectations of what can and can't be done. One participant stated "We need to recognize that a lack of resources is a chronic problem across aboriginal groups, government, non-government groups!" People also want a better understanding the role of government in improving social conditions, and the limitations of developers to improve social conditions.

- Lack of resources to fully participate in meetings or hearings in person
- Capacity of communities to envision potential impacts (discuss trade-offs or negotiate) when they may have little experience with large, complex industrial development
- Ability of communities to participate in all the various EA, reviews of land use permits and water licences application, workshops and other similar activities
- Recognition needed that at the small community level, EA coordination normally takes
  place at the Land & Environmental committees and social, economic and cultural concerns
  may fall off the table
- Acknowledgment that communities are overworked, busy, lack time to process information and lack plain language materials
- Determining the amount of time required to gather community concerns within timelines allotted by the decision makers to make time-sensitive decisions
- Conducting SEIA in culturally appropriate methods when communities are experiencing consultation fatigue and lack of capacity to provide input

# **Doing Good SEIA: Steps 5 & 6:** Mitigation, Monitoring & Follow-up

**Presentation:** Keeping the Agreements of SEIAs Alive: Mitigation and Followup, Dr. Naomi Krogman, Department of Rural Economy, University of Alberta

(http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/11A-Naomi\_ Krogman-Keeping\_the\_Agreements\_of\_SEIAs\_Alive\_Mitigation\_and\_Follow-Up.pdf)

"In the social sciences there has been very little work in the North on the integration of social impacts as part of cumulative impact assessment. Most of the work has been about long term degradation of the environment."

The sixth step in the SEIA process – "Mitigation, Monitoring & Follow-up" – was cited by participants both as the most important one to study at the Workshop, and as the step with the most current problems. Naomi Krogman noted that mitigation and follow up are the steps most weakly addressed in SEIAs around the world and there are currently few positive examples to build on.

One of the reasons mitigation, monitoring and follow-up are included in EIAs and SEIAs is to address the sustainability of benefits from the project to the community. Generally ecological/environmental sustainability is more clearly visible to mitigate, (i.e., replacing plants where they were uprooted), *community sustainability* is less well defined. Two elements that are key principles to sustainability are Community Capacity and Resiliency. Community capacity is the community's ability to act on their own concerns, and address collective problems. Resiliency is a community's ability to identify signals in their ecological and social environment that suggest changes would be better for the collective, reorganized, and continue the cycle of social learning.

What does successful mitigation, monitoring and follow-up require? Naomi spoke of two main contributing elements: First of all, community capacity to monitor changes they see resulting from development, and enact an organized response to address those trends that are undesirable. Secondly, adherence to the principle of "subsidiarity" – i.e., those closest to the point of impact should have the greatest decision-making responsibility; they are likely to have the knowledge and ability to address these problems.

In the Mackenzie Valley, principles such as subsidiarity are called into question due to minimal capacity. Communities need to have the 'capacity' to know and understand the scope, pace and duration of development to inform a mitigation and follow-up plan. Generally a discussion of thresholds should be

advanced to plan for mitigation, monitoring and follow-up activities. Thresholds can be understood as a "limit of acceptable change" or a "positive or negative trigger in the social or physical environment activating collective concern." Improved methods to link subsidiarity and capacity with mitigation, monitoring and follow-up implementation is necessary.

Monitoring also requires collaboration by all stakeholders to develop and participate in a monitoring plan that:

- Ensures the implementation of conditions attached to a decision and ties monitoring to a solid baseline condition assessment, with set limits (thresholds) of acceptable change in place;
- Continually measures and reports on impacts of a project;
- · Verifies conformity with established conditions and acceptable limits; and
- Sets requirements up, and funds aside, to mitigate whenever it becomes necessary.

Given the temporary nature of Impact Benefit Agreements, Naomi asserted that Indian and Northern Affairs and the GNWT should take a stronger role in addressing the additive and interactive social impacts of resource development.



# "Sticky Notes" Findings: Participant Concerns about Impact Benefit and other Agreements

- Need to establish the role of Impact Benefit Agreements and Access Benefit Agreement in MVEIRB's determination of social, economic or cultural impacts
- Determination of parties who are party to the socio-economic agreements seems arbitrary
- The difficulty faced by MVEIRB in being able to evaluate social impact mitigations if Impact Benefit Agreement or Socio-Economic Agreements are signed after determination of significance
- The challenge of identifying mitigation measures when details of the Impact Benefit Agreements are confidential to signing parties
- The absence of the GNWT, the party ultimately responsible for health and social service, in e IBA negotiations
- Socio-economic agreements (SEAs) lack legislative 'teeth' to enforce proposed social
  and cultural mitigation proposed, which is rarely included anyhow because of this fact. –
  a very negative feedback loop

Enforcing mitigation, monitoring and follow-up will require changes to terms and conditions not only in socio-economic agreements, but permits, licenses and government policies. Ideally, Naomi felt that communities should develop their own capacity, with assistance as needed, to monitor cumulative effects. Additionally, it may be necessary to involve an independent agency to "watch-dog" mitigation efforts to assure they are carried out. Communities may need assistance from such an agency to:

- Obtain basic information from government and industry about the on-going status of the project;
- · Support community based monitoring efforts and comparisons across communities; and
- Take legal action on unfulfilled promises around mitigation, monitoring and follow-up.

To "Raise the Bar" on SEIA in the area of mitigation, monitoring and follow-up requires:

- More and better information to communities about risks and mitigation possibilities;
- A move toward community-controlled impact assessment procedures;
- Increased pressure by all parties to clarify whose mandate it is to monitor social impacts and enforce
  agreements;
- Encourage impact benefit and other agreements to be publicly open to scrutiny; and
- Improved community organization around their collective vision of ways to improve their community, and protect their culture and relationship to their territory.



# "Sticky Notes" Findings: Participant Concerns about Mitigation and Follow-up/Monitoring

- The EIA process is generally weakest in the follow-up and monitoring step; the SEIA
  process is heavy on paper and semantics; light on enforceable real measures to insure
  minimization of negative socio-economic effects and provision of benefit for communities
- Difficulty in imposing SEIA terms and conditions without a regulatory framework to enforce
- The big difference between a capacity to monitor and the ability to compel additional mitigation through adaptive management
- · Lack of community participation in monitoring, especially inclusion of women
- Creating processes to facilitate reporting back to communities about positive or negative changes

- Establishing responsibility between government, communities and proponents for enforcing of monitoring provisions; there is a current absence of "responsible authorities"
- Ensuring that baseline and indicator establishment is robust and replicable in order to ensue that monitoring can identify changes
- The tendency for solutions (mitigation) to social impacts being economic remedies and not necessarily the avoidance of impacts
- · The need for binding mitigation measures that are not part of any permit
- Absence of proper feed-back loops during mitigation/follow-up stage of assessment limits adaptive management

## Summary / Doing Good SEIA: Step By Step

Major themes that emerged during the presentations, question periods and exercises of Part B focused on what is going well and what isn't during the Six Steps of SEIA. They included:

- The proceedings showed a clear division between those people who feel community members have necessary expertise to identify, predict and find appropriate mitigation for socio-economic impacts, and those who feel that faith is misplaced and that reliance on communities' "subjective", qualitative inputs should not be weighted heavier than other, more quantitative inputs.
- People generally felt that scoping and baseline condition assessment was being done adequately in
  many cases. Where this falters is when developers do not provide adequate early and participatory
  engagement of potentially-affected communities in the assessment of the development; and where the
  Valued Components chosen for the SEIA do not echo the goals and priorities of these communities.
- Social and economic impact assessment and prediction tools differ mightily in their indicators, methods of data collection and analysis. Cross-over tools such as Genuine Progress Indicators, and deeper analysis of the linkages between economic change (during both boom and bust times) and social outcomes needs to be a part of good SEIA.
- The concept of Limits of Acceptable Change seemed to echo throughout the proceedings. If communities lack the capacity or cohesion to determine what levels of change they are willing to put up with before significant adverse changes occur, then baseline condition assessment is being done on a blank slate, and impact predictions will be measured against what? Without these limits in place, how can mitigation be determined and adaptive management decision points be reached?

- The fact that community capacity needs to be increased for all of the Six Steps to become more effective. The real life example of the promise and peril of Community-based Monitoring in Lutsel Ke showed this gap.
- There is little faith in the utility of even good SEIA in the current system, given that socio-economic
  measures are difficult to get accepted, and even less likely to be enforced properly given the lack of
  willingness by regulators to enforce conditions that are not within their limited mandates. Mitigation
  on paper without set follow-up and monitoring programs is not acceptable to the people of the
  Mackenzie Valley.

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# 6.0 Part C: "Filling The Gaps" Issues and Actions

## **Determining The Gaps to Fill: Exercise**

After the close of Part B on Day Two, a sheet of paper with the following instructions was distributed to each participant:

After lunch today, we will be separating into 8-10 tables, each of which will focus on "Filling the Gaps" – brainstorming ways we can actually improve the practice of SEIA in the Mackenzie Valley. To help us define the TABLE TOPICS, please answer the question below.

In total, 58 participants answered the following question: Which of the following SEIA issues areas are you most interested in talking about further? (circle a maximum of five please)

SEIA Topic	Ranking	Number of Votes
Follow-up and monitoring – how to?	1 (tie)	22
Measuring well-being and quality of life	1 (tie)	22
Building community capacity	3	20
IBAS and other agreements – how do they fit into SEIA?	4	19
Building sustainable development into SEIA	5	16
Community involvement in SEIA	6	15
Cumulative effects in SEIA	7 (tie)	14
Significance determination in SEIA – how to?	7 (tie)	14
Improving baseline data	9	13
Impact prediction – how to?	10 (tie)	10
Cultural maintenance	10 (tie)	10
Incorporating traditional economy in SEIA	10 (tie)	10
Maintaining benefits in the North	13	9
Health Impact Assessment	14 (tie)	8
Identifying appropriate Valued Components and Indicators	14 (tie)	8
Employment and training	16 (tie)	7
Developing thresholds of acceptable change	16 (tie)	7

Continued...

SEIA Topic	Ranking	Number of Votes
Ensuring impact equity	18 (tie)	6
SEIA in preliminary screenings	18 (tie)	6
Determining the appropriate level of SEIA effort for specific developments	20 (tie)	5
Gender equity in SEIA	20 (tie)	5
Heritage resources assessment	22	4
Doing good economic impact assessment	23	3

This was not a ranking exercise. The nine bolded topics were those which were discussed at the eight tables on the afternoon of Day Two; Building Community Capacity and Community Involvement in SEIA were combined into one group.<sup>11</sup>

On the afternoon of Day Two Workshop participants took part in break-out group discussions on the different topic areas they prioritized. The focus of the discussions was to discuss the issues and challenges to northerners in doing good SEIA related to that topic. At this point in the Workshop, it was emphasized that participants were to seek out some creative suggestions and action items and identify who should be responsible for implementing them so that we can all "Raise the Bar". The findings from two separate 45 minute brainstorming sessions on each topic are summarised in the following sub-sections:

- **6.1** Building Community Capacity
- **6.2** Measuring Community Well-Being
- 6.3 Improving Baseline Data
- **6.4** Cumulative Socio-economic Impact Assessment
- 6.5 Significance Determination and Socio-economic Impact Assessment
- **6.6** Impact Benefit Agreements, Socio-economic Agreements and Socio-economic Impact Assessment
- 6.7 Building Sustainable Development into Socio-economic Impact Assessment
- 6.8 Follow-up and Monitoring

In each of the following tables, the numbered recommendations or action items in the third column are related to the same number in column four, those parties attendees felt would be responsible for imposing the change.

<sup>11</sup> In addition, participants identified key questions that need to be considered to improve each element of SEIA. They are included in Appendix F.

# **6.1** Building Community Capacity

## What is Community Capacity?

At the core, it was recognized that having capacity in a community means the community has the ability to heal from the past, deal with the present and plan for the future. However, how such capacity is obtained depends on many factors. Resources, whether they are social, cultural, economic or political are required for a community to build and maintain its capacity, with which they could participate in important activities such as socio-economic impact assessments.

Key Issue	Insufficient Social Capital
Challenges	Social structures are needed in order to cope with past and current struggles while participating in socio-economic impact assessments.
Ideas / Action Items	Support the development of social capital building activities (e.g. traditional/cultural programming).  Who: Industry
	Maximize funding opportunities available for social programming. <i>Who:</i> Communities
	Conduct 20-30 year planning for continuous development and social programming.  Who: Communities
	Make improvements to education systems, such as a "made in the north" university. Take into consideration the "out migration" of students heading south for their university when deciding if there is enough people to support such an institute.  Who: Government of Northwest Territories

Key Issue	<b>Economic Stability</b>
Challenges	The lack of consistent funding year to year inhibits the continuity and planning for social programming. Social capital typically needed to engage in processes like socio-economic impact assessment is tied up in day-to-day community survival strategies. Impact benefit agreements themselves were not a direct resource for mitigating social impacts, as they were more a tool for self-government.
Ideas / Action Items	Diversify the sources of income for the social programming by looking at partnerships with industry.  Who: Communities
	Incorporate community capacity funding into IBAs. <i>Who:</i> Communities and Industry
	Strengthen political will to fund more social programming. Who: Government bureaucrats
	Smart investments with the money generated from IBAs into things such as the Trust Funds initiated by the DehCho.  Who: Communities and Regional Governments
Key Issue	Political Power
Challenges	Lack of control over speed and pace of development was deemed a threat to all components of a community's capacity to engage in SEIA and environmental impact assessment (EIA) in general. Communities can be vulnerable and unable to participate in the decision making if the change being created is unforeseen and therefore unexpected.
Ideas / Action Items	Enable communities to have part ownership in the companies, extending farther than just financial interests in the companies; it would require meaningful participation in the decision making of the companies. This may address concerns related to culturally appropriate business and working environments which are deterring communities for fully engaging in the development happening around their communities/ Subsequently, communities should begin long term planning could also become more feasible and relevant with adequate power in the decisions both within a company and within SEIA/EIA.  Who: Industry and Communities

# **6.2** Measuring Community Well Being

#### What is Community Well-Being?

Defining the well being of a community should be a community-driven initiative. However, the discussion groups felt they could identify a few important criteria and indicators that could be used to measure "well-being" (included here verbatim):

- · Percentage of time spent on the land
- Use of traditional lands
- Teen pregnancies/community
- Number of community celebrations
- Time spent with elders and youth together
- Percent of people using aboriginal language
- Percents of people with Sexually Transmitted Diseases
- Health concerns re: contamination, increase addictions/substance abuse

- Income disparities (inequalities)
- Increase in family violence due to family erosion
- Measures of social cohesion
- Children at risk due to decrease in child care
- Increase in elder abuse issues
- Loss of subsistence economy
- Suicide [rate]
- Crime rate
- Access to health care and social services

Key Issue	Insufficient Capacity
Challenges	Communities are already over-burdened with responsibilities and responses to competing initiatives. Often EAs look at things at a regional level and while this is important for some aspects – it does not really get to the heart of the community situation- and community level should be the target for issue identification.
Ideas / Action Items	Workshops should be held at the communities to identify indicators that should be monitored track and evaluate community wellness.  Who: Government of Northwest Territories
	Monitoring what is important for measurement must be done in a culturally appropriate way (to match the culturally appropriate indicators that are identified by each community).  Who: Government of Northwest Territories

Key Issue	Meaningful Measurements
Challenges	Just because information is easy to find or report on does not mean it is necessarily a relevant indicator. There was also acknowledgement on the challenge of using qualitative data and that there may be a diversity of perception and interpretation of Quality of Life within communities and over a period of time.
Ideas / Action Items	<ol> <li>There should be a database created in a central location that can track project specific socio-economic indicators.</li> <li>Who: GNWT Municipal and Community Affairs</li> </ol>
	<ol> <li>Track and utilize community-based "well-being" indicators not normally tracked by the Department of Statistics.</li> <li>Who: GNWT Bureau of Statistics and Communities</li> </ol>
	<ol> <li>The Population Health approach may be useful in determining community well-being.</li> <li>Who: Communities, GNWT Health and Social Services, Health Canada</li> </ol>
	<ol> <li>Community wellness indicators should be reviewed periodically – but should be applied consistently across the board to all developments that are affecting a community.</li> <li>Who: Government and Communities</li> </ol>
	5. Create an NWT Centre for Community-Based Monitoring and fund it through the Cumulative Impact Monitoring Program (CIMP). <i>Who: Government and Communities</i>

## **6.3** Baseline Information

#### What is Baseline Information?

Baseline information characterizes the past and current conditions of the potentially affected communities at the time the project is proposed. Socio-economic baseline information can be quantitative, for example, the number of people with cancer. Other SEIA baseline information is qualitative, such as the spiritual importance of a particular lake to the community. The discussion groups identified a few examples of indicators that could be used as baseline information:

- Numbers of fish in rivers and lake
- Areas outside of community that people use
- History of hunting, fishing, trapping in and around the regions
- Historic and present use of human trails
- Number of people using traditional foods regularly
- Number of cases of FASD
- Number of people with cancer, diabetes
- Examination of past and present mobility of people

Note: Researchers can include government officials, industry and consultants, community based researchers and academia

Key Issue	Type of Information Used
Challenges	The identification and analysis of valued components often does not reflect the community values. For example, dollar values on things like fishing, hunting and trapping is not always appropriate.
Ideas / Action Items	Use Traditional Knowledge in the identification and verification of valued components.  Who: Researchers
	Set up community working group to determine what baseline data to collect and how to analyse it. This includes the determination of threshold levels of acceptable change from the perspective of the community. This working group should include traditional knowledge holders, women, youth and elders to be involved equally with regional councils and community inter-agencies.  Who: Researchers and Government
	Set up programs to allow continual baseline information monitoring to allow for trend analysis for future projects.  Who: Government and Communities

Key Issue	Capacity to Participate in and Collect Baseline Information Date	
Challenges	There is little capacity for communities to collect data and apply appropriate mitigation. Communities are also feeling burn-out in consultations.	
Ideas / Action Items	Ensure consultation are diverse and not with the same like-minding people.  Who: Researchers	
	Ensure consultations are done in a comfortable settings for communities members to talk and provide good information. <i>Who:</i> Researchers	
	Draw upon past research, information and experiences. <i>Who: Researchers</i>	
	Offer financial and training support to communities to collect their own baseline information.  Who: Industry and Government	
Key Issue	Cooperation Between Government, Industry and Communities in Collection of Data	
Challenges	There is a lack of communication between researchers, government, industry and communities about the activities on the land, the existing baseline information that has been collected and the future needs for baseline information. There is also a lack of trust between groups in revealing data.	
Ideas / Action Items	Joint ownership over research programs and baseline information collected should be offered to communities.  Who: Government and Industry	
	Improve sharing of information between groups and government about activities.  Who: Government, Communities and Industry	
	Coordinate research activities in the region.  Who: Government, Industry, Communities and Researchers	

## **6.4** Cumulative SEIA

#### What is Cumulative SEIA?

Cumulative Socio-economic Impact Assessment seeks to evaluate the combined effects of past, present and reasonably foreseeable developments on the social, economic and cultural environments. The execution of a cumulative SEIA helps to identify the contribution of individual projects to the overall "load" of impacts that are being experienced by communities. A well-conducted SEIA helps to clarify what impacts are attributable to industrial development (individual and collective) from those which are the product of other phenomena (i.e. impacts of modernity, social policies, settlement).

Key Issue	Appropriate Scale of Assessment
Challenges	Scale of assessment may vary depending on the magnitude of the projects being considered.
Ideas / Action Items	Consideration of trans-boundary or even national scales of SEIA may be necessary given the implication that such projects can have on the social fabric of Canada.  Who: Industry and MVEIRB
Key Issue	Influence of Small Projects
Challenges	The numerous small projects, such as seismic programs or mineral exploration need consideration.
Ideas / Action Items	Development of an information management system that provides up-to-date information about what activities are occurring in the NWT. <i>Who: Government</i>
Key Issue	Appropriate Cumulative Thresholds
Challenges	Require development of indicators and thresholds for cumulative socio-economic impacts.
Ideas / Action Items	Empower communities to help them determine for themselves what social, economic, and cultural conditions they find acceptable or unacceptable.  Who: Communities, Government and Industry

Key Issue	Conducting Cumulative SEIA Assessment
Challenges	MVEIRB and other actors in the process require the correct type of information to accurately assess cumulative effects.
Ideas / Action Items	Existing cumulative impacts programs like CIMP need to be strengthened and better-focused through funding and capacity improvements. <i>Who: Government</i>
	Responsibility for cumulative SEIA needs to be asserted and agencies responsible need to step up to the challenge.  Who: Everybody
	Equip government and aboriginal agencies with stable funding that will allow them to improve their capacity to evaluate potential socio-economic impacts.  Who: Government
Key Issue	Improving Essential Definitions
Challenges	The MVRMA associates cumulative effects with "reasonable foreseeable developments". Highly likely induced developments may be excluded due to a strict interpretation.
Ideas / Action Items	More consideration of what "reasonable foreseeable developments" practically means, with particular regard to induced developments. Who: MVEIRB and Government
Key Issue	Contribution of Individual Projects to the "Cumulative Load"
Challenges	"Background" conditions make attributing impacts to specific developments difficult. Changes occurring in society and associated impacts may not be related to any industrial development.
Ideas / Action Items	Improved research into the socio-economic "baseline" conditions <i>Who: Government</i>
	Developing a better understanding of the various socio-economic influences affecting communities, regions and the NWT. <i>Who: Industry</i>

Key Issue	Monitoring of Cumulative Effects
Challenges	Monitoring of cumulative effects is necessary for parties to know what projects are occurring or likely to occur.
Ideas / Action Items	Establish local, community-based monitors trained in biophysical and socio-economic monitoring to plug into regional information networks. <i>Who: Government and Communities</i> Training given to government inspectors to assess cumulative effects while in the field. <i>Who: Government</i>
Key Issue	Community Planning
Challenges	Communities planning sustainable futures are thwarted by the lack of tools to control development, and their pace, thus resulting in a
	cumulative alienation of the resources to plan the future by.

## **6.5** Significance Determination and SEIA

#### What is Significance?

We intuitively know that something is significant if it is important, something of value. When talking about the significance of impacts, impact assessment – which tends to focus on avoiding adverse (harmful) impacts – considers whether Valued Components of the environment are going to be changed in such a way that their value will be lost or reduced below an acceptable level.

For the purposes of Mackenzie Valley EIA, an impact is significant if the development or a series of developments in combination may, in the opinion of the Review Board, alter an important part of the environment. If the significant impact is also deemed by the Review Board to be likely to occur and adverse in nature, it must then require one of the following:

- The imposition of mitigation measures to reduce, remove or compensate for the impact;
- Further study through an Environmental Impact Review; or
- Recommendation that the development be rejected due to the inability to reduce the impact below the level of significance.

Key Issue	Identifying Impacts
Challenges	Socio-economic impacts are hard to predict accurately, because they are complex, cumulative, lacking in baseline,.
Ideas / Action Items	Lutsel K'e-type community based social monitoring should be encouraged in each other Mackenzie Valley community, to give the MVEIRB the baseline it needs to make good significance determinations for future developments.  Who: Communities and Government

Key Issue	Varying Vulnerabilities Between Communities
Challenges	Different exist vulnerabilities in different communities. An impact that is not significant in one community might be significant in another.
Ideas / Action Items	Significance should be determined on a community-specific basis, reflecting the plans, aspirations and vulnerability of each community. Do not use a broad brush- evaluate impacts on a community-specific basis <i>Who:</i> MVEIRB, Communities
Key Issue	Applying the Precautionary Principle
Challenges	Because socio-economic impacts are complex, cumulative, and challenging to predict, certainty levels of prediction may be lower than for biophysical impacts.
Ideas / Action Items	The absence of absolute certainty of the impact does not mean that action should not be taken to reduce the probability of an impact occurring, or its severity if it does occur. It is important to apply the precautionary approach when determining significance.  Who: MVEIRB
Key Issue	Different Capacities to Present Impact Predictions in Hearings
Challenges	Good community participation in hearings is essential for the MVEIRB to reach meaningful community-specific determinations. At present, government, developer and some NGOs get training in effective presentation techniques.
Ideas / Action Items	The MVEIRB should design and deliver training to parties in "how to participate effectively in hearings" during Environmental Assessments. <i>Who:</i> MVEIRB

# **6.6** Impact Benefit Agreements, Socio-economic Agreements, and SEIA

# What are Impact Benefit Agreements (IBAs) and Socio-Economic Agreements (SEAs)?

There are a number of different types of contractual agreements that have been used for managing socio-economic impacts, depending on the size, location and industrial sector, including but not limited to Impact Benefit Agreements, typically between aboriginal organizations and Developers and Socio-Economic Agreements (SEAs), typically between government and developers (see the Draft SEIA Guidelines, Section 5.7, for more information).

Key Issue	Keeping IBAs Confidential
Challenges	The confidential nature of IBAs means there is little opportunity to learn from previous developments, to discern the success of mitigation, and to determine when adaptive management should be imposed. This lack of information made publicly available also limits accountability to people other than the contractual parties.
Ideas / Action Items	Some people suggested that Boards should be able to see the IBAs and SEAs under confidential cover, before making decisions on whether adequate mitigation is in place to deal with identified significant adverse impacts on the human environment. *However, several people argued that confidentiality is an important element in the fight against inflating people's expectations that the "next deal" will always be a better one.  Who: Industry, Communities and MVEIRB
Key Issue	Impact of IBAs Themselves
Challenges	Along with the time and effort they take to negotiate, they can create divisions between communities – those that haves IBAs and those that do not. Also mentioned by community members was a perception there is no real choice – you have to get your IBA while you can or you will be left out in the cold.
Ideas / Action Items	Have shortened renewal periods for IBAs and SEAs Who: Industry and Communities

Key Issue	Impact of IBAs Themselves Continued
Ideas / Action Items continued	More community-to-community dialogue, with communities that have had good outcomes from IBAs or SEAs teaching others about their experiences.  Who: Industry and Communities
	More community-based SEIA (setting of goals <i>before</i> developments are proposed) would fuel better IBA negotiations.  Who: Communities with support of Government
	Public education of rights under – and limitations of – IBAs is essential part of implementation; minimizes confusion and frustration over expectations and provides continual monitoring at grassroots level.  Who: Government and Industry
Key Issue	Impact Mitigation Potential
Challenges	IBA negotiations can be a very political process and not so much an impact mitigation one, if the emphasis is on cash compensation without any mechanisms for tracking flows of funds. Several people felt that the role of IBAs was not to mitigate social impacts at all, but to provide economic compensation for loss of access to land, developer access to land in general, essentially to "buy support" for the development.  As a result, there was some concern that the IBA negotiation process not
	be seen as a replacement for a proper SEIA, done on a larger scale, by a wider group of analysts than a group of head-to-head negotiators between company and community.
Ideas / Action Items	Focus on negotiating ways to reduce probable negative impacts to the existing human environment first, before focusing on increasing income in the communities.  Who: Communities, Industry and Government
	Municipalities, especially tax-based municipalities that pay for many of the infrastructure of communities and shoulder much of the burden of change and adaptation, should also be a part of their own SEA and/or IBA negotiations.  Who: Industry and Municipality
	Additional revenue sharing agreements required, not just lump sums, for true project buy-in.  Who: Communities and Industry

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#### **Impact Mitigation Potential** Continued

#### Ideas / Action Items continued

Negotiations for IBAs and SEAs should include a serious collaborative SEIA effort as a basis for impact identification, prediction and determination of appropriate mitigation. The EA process often provides a venue that can run parallel to these negotiations, and fuel them with information and third party expert perspectives.

Who: Communities, Industry and MVEIRB's EIA process

Develop a mutual understanding of what the goals of a SEA are. Opportunities for MVEIRB education about the substance of past agreements and the negotiating stance of GNWT and/or INAC are essential to assist the MVEIRB in having high confidence that SEAs will work to reduce impacts identified by the MVEIRB below the level of significance, or that SEAs have some sort of adaptive management rather than being monitoring without mitigation capacity.

Who: GWNT, INAC and MVEIRB

#### **Key Issue**

#### Timing for Completing SEIA vs. IBAs and SEAs

#### Challenges

#### Do you:

- a) Get SEAs and IBAs completed before final determinations of the MVEIRB on an EA are complete? If so, you have benefit of having additional commitments on the Public Record that can help the MVEIRB make an accurate determination of whether proposed mitigation is adequate.
- b) Complete the EIA process, have the MVEIRB identify all significant impacts and recommend mitigation, and build that mitigation into subsequent agreements? Parties would have the benefits of the entire EIA process as a parallel venue to negotiations, and third party determination of likely impacts.

#### **Ideas / Action Items**

Though more participants felt finishing the SEIA first made more sense, given that IBAs and SEIAs are one of the few enforceable mechanisms for implementing MVEIRB findings (even though they are not legally linked). One way around having to finish an IBA or SEA before the MVEIRB can make an educated decision on whether IBAs or SEAs will mitigate identified impacts is to get testimonials from the parties to the Public Hearings – if both parties agree that certain items will be covered under the forthcoming agreement, is that enough to assuage MVEIRB concerns? *Who: Parties at a hearing, MVEIRB* 

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Key Issue	Timing for Completing SEIA vs. IBAs and SEAs Continued
Ideas / Action Items continued	Spend more time focusing on getting appropriate commitments and conditions related to socio-economic environment into the Report of EA; and then finalize the SEA or IBA.  Who: MVEIRB, all Parties to an EIA
	Use the tools of SEIA to do community-based assessment – visioning exercises, 10-20 year plans, goal statements, levels of acceptable change determinations – before developments come along and before negotiating access and benefit agreements.  Who: Communities with support of Government
Key Issue	Measuring Success of SEAs and IBAs and Imposing Additional Mitigation
Challenges	Most SEAs and IBAs are based on loosely worded targets, with little definition of thresholds of acceptable change and triggers for adaptive management once thresholds are breached. Currently, there doesn't seem to be any way of evaluating whether these agreements have: a) met their initial goals; or b) been adequate in the face of any unforeseen impacts. The existing Socio-economic Monitoring Agreements for the diamond mines were singled out as having failed to build adaptive management on top of monitoring programs.
	In addition, there is almost never money set aside in case an unacceptable alteration does occur, so changes to the socio-economic environment rely on the availability of non-earmarked government discretionary funds for mitigation – these are often not available
Ideas / Action Items	All SEAs and IBAs should include not only targets, but also continual monitoring and reporting at set intervals on progress, thresholds of acceptable change for the chosen indictors being monitored, an available pool of funds in case adaptive management is required, and set triggers based on thresholds for same.  Who: Industry, Communities and Government
	Good Neighbour Agreements between industry and communities
	Single socio-economic monitoring agency for all the diamond mines/diamond fields; this is especially important for cumulative regional impact assessment; use either Diavik Communities Advisory Board or CIMP in this role?  Who: Industry and Communities

Key Issue	Measuring Success of SEAs and IBAs and Imposing Additional Mitigation Continued
Ideas / Action Items continued	Third-party auditing of monitoring efforts related to IBAs and SEAs, to be done at a specific time into the project, and accompanied by a list of goals and measurement indices. This sort of mid-project EIA update is rarely done, yet might be hugely effective.  Who: Independent Monitoring Agencies (set boards or external auditors)
	Develop a security deposit system, similar to that for reclamation bonding, with both company and government monies set aside and invested, as insurance against a Threshold of Acceptable Change – linked to the development and requiring adaptive management of the socio-economic environment – being breached.  Who: Government and Industry funding
	Other options for this type of security system relate to percentages of revenues from the development and might be worth considering; it is the principle – risk insurance – that is most important. The common complaint that companies are asked to be socio-economic managers is belayed by this dual contribution agreement (which might well actually be extended to three parties, if communities would agree to set aside some "boom time" IBA funds into the pool).  Who: Government and Industry funding

# **6.7** Building Sustainable Development into SEIA

#### What is Sustainable Development?

The concept of sustainable development (also known as sustainability) can be difficult to define but relates to appropriate balancing of social, economic and ecological needs now so that future generations are not left without adequate resources to maintain their quality of life. For this discussion, the groups defined sustainability as the ability of the land to support future generations. The group recognized that no project is infinitely sustainable, so assessing the sustainability of the project is not as useful as assessing the sustainability of communities. A particular project may be designed to be ecologically sustainable, but may cause unsustainable socio-economic conditions in communities.

Key Issue	Mitigating Long Term Impacts of Short Term Projects
Challenges	Mining and other development brings about rapid and significant changes to people's lifestyles, but are short-term in relation to the lifespan of a community. The groups asked how you can sustain communities and human health faced with these changes. Also, it is difficult to even gauge the changes brought about by development, as the dynamic nature of human social interactions make it very difficult to determine baseline conditions in communities.
Ideas / Action Items	Creating durable benefits through re-investment of project revenues into social and physical infrastructure that promotes community health and well-being: elementary, secondary and post-secondary educational institutions, investment in training for the types of jobs that will be available from resource development (e.g., Mines Training Society), investment in traditional activities (bush schools, community hunts, cultural festivals), investments that improve human health (water treatment, etc.), investments in small business opportunities and training for a more diverse local economy (e.g., greenhouses). These community investments might be costly but can generate income, enhance community pride.  Who: Government and Industry
	Creating programs to promote healthy family life.  Who: Communities and Government  There may be pressure to rush into development because of future economic benefit. Government should act as a brake and slow this p rocess to properly assess risks.  Who: Government

Key Issue	Gauging Benefits
Challenges	When we conduct environmental assessments and plan development, there is an assumption that the desirable outcome is that communities will maintain their current condition. However, we also at the same time strive to better the conditions of the community and create opportunities for people. Considering that happiness is subjective, how do you correctly weigh the benefits of better quality of life? Do we presume that traditional lifestyles are better and therefore more desirable than wage economies and modern houses and vehicles? One community may have completely different values, judgments, choices, ideals than a neighbouring community. Which view is considered?
Ideas / Action Items	Mitigation and monitoring are very important. Creating real benchmarks of success and setting goals that reflect real results.  Who: Government and Communities  Determine useful indicators of sustainable development. For example,  • numbers of jobs created  • type of jobs created  • changes to use of traditional skills and languages  • increased substance abuse  • increased crime  • amount and type of educational opportunities created  • number of days spent on the land  Who: Industry, Government and Communities  Baseline information must be gathered responsibly and diligently, using the best available information and relying on traditional knowledge. The best way to ensure the accuracy of traditional knowledge is to involve loca people in gathering the information.  Who: Industry, Government and Communities
	Requiring a 'damage deposit' from the developer that can be invested <i>Who: Government</i>

Key Issue	Diversifying Economies
Challenges	When discussing sustainability of communities, we should "think small". However, programs designed to promote economic diversity in the NWT are not working. Communities experience feelings of disempowerment and pessimism and their experience makes achieving sustainable communities challenging. For example, in Wha Ti there has been an economic development officer for 10 years and in that time there has not been a single local business development in the community. Talking about sustainability is useless unless we can set benchmarks and see real results to measure the success of mitigation strategies.
Ideas / Action Items	The best way to diversify economies and stabilize communities is to encourage grassroots development. Small businesses and secondary industries may be sustainable post-development.  Who: GNWT and Communities
	<ul> <li>Creation of an institution similar to the Alberta Heritage Fund.</li> <li>Investing in local economy</li> <li>Creating investment opportunities</li> <li>Training local businesses</li> <li>Who: GNWT</li> </ul>
	Economic diversification, e.g., the promotion of tourism to offset resource reliance in the Yukon.  Who: GNWT
	Government and industry should be responsible for community investments.  Who: GNWT and Industry

# 6.8 Follow-up and Monitoring

### What is Follow-up and Monitoring?

The groups did not define monitoring or follow up specifically for this discussion but used the terms in a broad sense. The group recognized that for many of the challenges listed below to be overcome a common understanding of what exactly monitoring of social, cultural or economic impacts means will have to be developed. This is in itself a key challenge.

Key Issue	Responsibility
Challenges	He who does, pays? – No legislated mandate (unlike biophysical) to require the "polluter to pay".
	Too often an afterthought in assessments.
Ideas / Action Items	Ideally legislation; not realistic in the short to medium term; stop gap solutions are available.  Who: GNWT and INAC <sup>12</sup>
	Write into IBA or SEMA (Socio-economic Monitoring Agreement – an SEA with a built-in monitoring component) .  Who: Parties to Agreement
	Make part of EA process from the beginning.  Who: MVEIRB
KEY ISSUE	Lack of Baseline Data
Challenges	Baseline needed to compare monitoring results to; trends not snapshots as socio-economic environment very dynamic (change exists and can be good).
Ideas / Action Items	Collect baseline data .  Who: NWT Bureau of Statistics
	Research cause and effect relationships.  Who: Academia
	Health Canada and Stats Canada to create baseline health indicators . <i>Who:</i> Health Canada

Key Issue	Enforcement	
Challenges	"The legislative capacity of someone to do something." There must be real consequences.	
	Who is enforcement directed at, developer, government?	
	Disconnect between assessment and follow up. In other jurisdiction same agencies.	
Ideas / Action Items	Memorandum of Understanding between MVEIRB and agencies that implement measures on reporting back to MVEIRB; translate EA measures into enforceable conditions; security deposits.  Who: MVEIRB and regulators	
	"Handbook" for communities (list of agencies).  Who: Review Board	
	MVEIRB to be more explicit about follow up; not rely on IBA. Who: MVEIRB	
	Communities to bring ideas to EA, not rely on IBA. Who: Communities	
	Government and communities negotiate funding.  Who: Government and Communities	
Key Issue	Timeframes, Consistency and Impartiality	
Challenges	1. Ongoing, not snapshot.	
	2. Consistency within and between programs.	
	3. Developer has vested interest.	
	4. Types of monitoring (compliance, thresholds, learning).	
Ideas / Action Items	Land and Water Board clearing house for reporting; similar valley wide agency could be created. government rather than a new board. <i>Who:</i> No answers from groups	
	Independent 3 <sup>rd</sup> party.  Who: No answers from groups	
	Central framework for methods".  Who: No answers from groups	
	Canary in the coal mine approach (focus on a few key indicators). Who: No answers from groups	

Key Issue	Involvement of People Affected	
Challenges	Consultative approach. (Contradictory to consistency between programs listed above.)	
Ideas / Action Items	KISS (Keep it simple, stupid) principle. Community not interested complex programs or statistical analysis. Straightforward, understandable and above all honest.  Who: Everybody	

# 7.0 Moving Forward: Lessons Learned and Suggestions for Change

It was clear from the two day Workshop that SEIA has to become a more central part of development planning and impact assessment in the Mackenzie Valley. Several respondents made it clear that they would be taking what they learned and incorporating it immediately into their assessments of proposed developments. The Review Board will be incorporating what it has heard into the *SEIA Guidelines*, providing more clarity on issues identified by participants. Many great ideas for improvements emerged in the "Filling the Gaps" sessions; we encourage parties to identify and act on specific areas they can improve upon. And the Review Board will be encouraging greater dialogue among all parties – government, boards, industry, communities, aboriginal groups, NGOs, and others – about how to continually "raise the bar" for SEIA in the Mackenzie Valley.

Attached here is a summary of the key ideas taken away and potential solutions for socio-economic impacts or process problems, as identified by Workshop participants. (*Note: responses are not included here verbatim.*)

### Key Ideas Taken Away

- People feel SEIA is a very young science, one that is subjective and values-based, and requiring democratic approaches to work to its full potential. While this Workshop grounded people in the field and raised consciousness, there is a long way to go to make it an equal consideration alongside biophysical EIA. There is a need for government, communities and individuals to get more involved.
- There are some serious concerns that SEIA is an overtly political process, and political motivations can override analytical rigor during many SEIAs. There is often the creation of a highly adversarial environment, often linked to outstanding legal concerns over treaty and land claim rights issues, which interferes with what SEIA is truly meant to be a multiparty planning exercise. Some people feel that the Review Board is swayed too much by subjective, "anecdotal" evidence from communities; others feel that a goal of project approval is already set before an assessment takes place, and that human and biophysical health is relegated to an afterthought. A better balancing of quantitative and qualitative data was called for in making determinations of probable impacts and their significance.
- The role of government in SEIA was something many participants felt was currently lacking. Some people felt that it was inappropriate that government pay for social economic impacts rather than the developers (as seen in the \$500 Million set aside by the federal government for socio-economic impacts from the Mackenzie Gas Project), while others felt that Socio-economic Agreements signed

- by the GNWT and developers neither correspond to the determination of the assessment, nor are their commitments lived up to over the long haul. This present lack of enforceability of socio-economic measures and commitments is troubling.
- Community involvement was particularly prioritized. Communities have expertise that has not been tapped adequately in past SEIA. One of the main reasons behind this is lack of capacity at the local level to get involved; another is that the process has been developer driven. Building community capacity through education, additional funding and tools for community-based assessment, sharing of experiences between communities, and the creation of multi-stakeholder impact assessment organizations at the community level (e.g., Resource Development Impact Groups or Interagency Committees), were all identified.
- Time pressures, especially on communities, were a major theme. Community members often feel they don't have enough time to properly review and understand information, especially considering the limited calendar days between notification and comment deadlines, for them to gather and express concerns, prepare technical reports, or get input from independent experts. Some people called for extra time to educate the community members about the nature of the development prior to the start of a SEIA, not during it.
- ☐ Community input would be valuable at all levels of assessment, but particular mention was given to linking the SEIA indicators to community Valued Components, allowing communities to participate in the interpretation of trends in the socio-economic environment and prediction of likely impacts, and in follow-up and monitoring programs to ensure that mitigation of socio-economic impacts is successful.
- In addition, there was discussion about how control over information and decision-making has been in the hands of developers and governments in the past, and how is not helpful at the local level. Some people felt that data collected by communities should belong to communities in the same way that traditional knowledge does (and meriting the same protections), and that we need to invest those people closest to the development with more influence in decision-making.
- While the bar was raised for each, all of the "Six Steps" of SEIA still need to be understood better, according to participants. Key among these were better understandings of:
  - a. Ways of identifying community and regionally appropriate indicators
  - b. Ways of doing economic impact assessment
  - c. Ways of defining significance (particularly how it is defined and used by the Review Board)
  - d. What makes for an effective follow-up and monitoring system for socio-economic impacts
  - e. How to incorporate gender impact differences into SEIA
  - f. How to build the concept of sustainable development into SEIA in the Mackenzie Valley
  - g. How contractual agreements between parties (e.g., IBAs, SEAs) can best contribute to good decision-making and outcomes of SEIA
  - h. How to incorporate cumulative impact assessment into SEIA
- One participant stated that "SEIA is doomed without strong baseline information". While there was less discussion during the proceedings about this step than others, some people strongly emphasized

the requirement for long-term baseline socio-economic and cultural information and data collection, to ensure that impacts to communities can be measured and thresholds established from which meaningful and sound socio-economic and cultural indicators that correspond to community Valued Components can be selected.

- The current lack of adequate follow up and monitoring was identified as the main missing link. Thinking more about who is responsible for follow-up and monitoring and how to accomplish it was commonly identified as a priority item. Consensus opinion was that currently, monitoring and adaptive management of socio-economic impacts is either ignored or just "tacked on", without much teeth.
- Speaking of "tacked on", some respondents noted that we should not rush the early stages of project review; that good SEIA takes time that it currently is rarely given.

### Potential Solutions to Improve SEIA Process<sup>13</sup>

#### **Process Solutions**



#### Things the Review Board can do:

- Define better the currently ill-defined roles of the parties to the assessment.
- Ensure that social and economic impact assessments are completed for any development that might have significant impacts on the socio-economic environment.
- Press ahead with and allow wide public input to the SEIA Guidelines (several people mentioned).
- Gear SEIA Guidelines to appeal equally to consultants, industry, government and communities.
- Guidelines and practice should separate economic and social impact assessment tools, information and analytical methods.
- Provide clear guidance for development of, and clarity about role of, Impact Benefit Agreements in relation to SEIA.
- Provide clarity and guidance on how sustainable development will be considered in EIA.
- Keep community expectations of the role of SEIA realistic by making it known within its process that new developments can't necessarily fix old problems.
- Get frontline, community-based agencies with social service mandates more involved in SEIA, and provide plain language documents to them well in advance (this advice was also for Developers).
- Provide tools (e.g., plain language SEIA Handbook), an expanded list of information resources (CD and SEIA Guidelines), and training for communities on how to participate effectively in EIA process.

- Provide education on community engagement models/strategies.
- Define what constitutes good SEIA for each of the "Six Steps" in the SEIA Guidelines.
- Train Land and Water Board staff on the identification, prediction and effective mitigation of cultural and social impacts.
- In the absence of regulatory permits for social impacts, obtaining commitment from developers and/ or government for adaptive management based on on-going monitoring results.
- Review Board needs to establish performance measures that will be reviewed after a particular set amount of time to evaluate how well its SEIA recommendations have been implemented.
- Collect and make available community-produced monitoring documents (published and gray literature).
- Reporting back to all participants about the progress made toward things brought forward in this Workshop as actionable items (several people mentioned).
- Follow-up Workshops on insights from practice and determine how to implement stronger SEIA.
- Provide additional direction on Developer's SEIA requirement in project Terms of Reference.
- Provide explanation in SEIA Guidelines on how to choose indicators, report on them and analyse what they mean.
- Research is needed to determine mechanisms of enforceability and compliance in the areas of mitigation, follow-up and monitoring of social, economic, and cultural impacts.



#### Things developers and their SEIA consultants can do:

- Incorporate the Population Health models "Determinants of Health" into SEIA in EAs.
- Need to look at full project life cycle expectation effects and perceptual effects at beginning of project can be equally damaging with actual!
- r Incorporate NGOs and communities into EIA process more use more consultations.
- The Define true social and economic costs and benefits of resource development projects, using full cost accounting techniques. These techniques take into account the social and environmental costs that often get externalized by other accounting techniques.
- We risk assessment tools: Need formulas to identify what monetary values should be assigned to risks posed to the social, economic or cultural by developments.
- Need multiple indicators to get at inequality as an indicator, both qualitative and quantitative, including perceptual surveys and tools such as the Gini Coefficient (which measures the inequality of distribution of some variable, such as income).
- F Identify economic models that allow for comparison of "value" of wage and non-waged based economic activities; as well as comparative values of development in question and alternative economic activities ("futures foregone") that may be eliminated or reduced by that development.

- SEIA should primarily be conducted by Social/Cultural experts informed by the economic data and not the other way around. Current emphasis on describing economic benefits may hide adverse social outcomes.
- Consultants/assessors should spend more time in communities in order to develop deeper, more informed relationships.
- Fearn from good practice in other jurisdictions and incorporate more case studies into SEIA.

  Practitioners should be able to adopt the decades of social science research methods regarding development study and learn form past mistakes. This should include focus on retrospective studies of prior developments that assess the differences between predicted and actual outcomes.
- Pay more attention both to academics and community members -both valuable resources.
- \*\* Attempt greater community involvement in work. This can include expanding the type of people talked to in "key informant" interviews to include broad demographic cross-section this will assist in identifying the differences in concerns, and vulnerabilities, of different sub-populations.
- r Gender based analysis should be undertaken (particularly by local women) mentioned several times.
- Using age standardized percentage data so that communities of different age distribution are comparable.
- The archives of the Dene Nation and other aboriginal groups should be considered valuable baseline data sources.
- To One way of getting around the privacy problem surrounding baseline data collection in small communities (i.e., the danger that data can be linked to individuals) is to aggregate over time rather than space. By combining data for one community from several years the danger than an individual can be identified is greatly diminished.
- More analysis of power differentials between parties in the system required.
- reaction Companies must pay for direct measurable effects plus more to fund Genuine Progress Indicator and cumulative effects research.



#### Things communities can do, if given the capacity:

- A Conducting community surveys to gage community reactions/positions with respect to development and community priorities.
- A Do more perceptual surveying of potentially impacted communities and recognize the findings as evidence of or against the existence of "public concern".
- A Have a system set up whereby Community-Based Assessment (setting goals based on identified Valued Components, and Limits of Acceptable Change) can be undertaken by community members *prior* to developments coming in (mentioned by several participants).
- A Require community environmental and socio-economic monitors to work on continual impact *re-assessment* and reporting as part of monitoring and follow-up.

- A Collect their own SEIA data.
- An NWT-wide Community-Based Social, Economic, and Cultural Impact Monitoring Framework should be developed based on the model used in Lutsel K'e. Communities should endeavour to engage with each other to share experiences.



#### Things government or multi-stakeholder groups can do:

- Provide funding for communities ahead of development in order to properly engage in the SEIA.
- Better coordinate issues between MVEIRB and the GNWT regarding development and implementation of SEIA follow-up programs.
- Understand the implication of consultation and aboriginal rights in SEIA and the need to distinguish between responsibilities of public institutions versus government.
- \* Cumulative SEIA should be conducted for future development scenarios in the NWT. One way to do this is to revitalize the Cumulative Impacts Monitoring Program to have better socio-economic monitoring. Sustainable regional impact assessment (e.g., that being done in Norway) could also be a pursued option as opposed to continuing with isolated project reviews.
- Development of a master list of indicators, with individual assessors choosing the appropriate indicators (mentioned by several respondents).
- Use Genuine Progress Indicators to establish a socio-economic baseline to measure project-related changes (mentioned by several participants).
- Promotion of multi-party groups like Resource Development Impact Groups and Interagency Committees, with support from GNWT Municipal and Community Affairs.
- Get all diamond mines and INAC to provide long-term funding to set up an independent and empowered regional socio-economic cumulative effects assessment group (mentioned by several respondents).
- \* Improve the calibre of *Communities and Diamonds* reports of the GNWT, to include identification of potential causal change factors and proposed mitigation, not just a yearly indicator summary.
- Determine who is responsible for baseline information collection on quality of life indicators create organization if necessary.
- \* Implementation of Asset-Based Community Development that uses partnerships of knowledge and resources, integrated approaches, partnerships with government, industry, university and foundations.
- Development of a public repository of all data collected on communities (privacy protected as required).
- Use some resource development funds to ensure appropriate capacity building in communities.
- Need improvement of preliminary screenings for land and water boards to capture social, economic and cultural issues.
- Need for consistent treatment of SEIA throughout Mackenzie Valley by all Boards.

There were also some ideas that would require policy shifts by government and/or agreement by contractual partners before they happen. For example, that "SEIA and socio-economic agreements be required early in the EA relative to the rest of the EA to ensure determination of significance matches the mitigation measures. Aboriginal communities need to be aware of the SEIA findings before signing any IBAs or SEAs, to ensure findings from SEIA are 'caught' in agreements". There was no consensus found on this matter (see Section 6.6 for further discussion). In addition, Socio-economic Monitoring Agreements could include a mechanism whereby failure to keep impacts below the identified Limits of Acceptable Change requires closure of the operation until acceptable remedy is found.

One participant stated, "We need to go to decision-makers with this info and try to get them to 'buy in'; all our best wishes may be lost due to lack of importance to those with the power to make a difference."

The last word goes to this participant, who stated:

"Give more power to SEIAs, which provide the peoples' voice. They should be read carefully & respectfully & mitigation measures should be enforced. SEIAs should be an instrument to attain: well-being & fair conditions for all." 80

# Appendix A Workshop Agenda

#### Environmental Assessment (EA) Practitioners' Workshop

Raising the Bar for Socio-Economic Impact Assessment (SEIA)

March 15 & 16, 2006

Katimavik Rooms B & C Explorer Hotel, Yellowknife

#### Day One Wednesday, March 15 2006

\*Socio-Economic Impact Assessment Resource Area – Both days outside room\*

8:15-onwards	Registration and Package Pick-up in Foyer outside Katimavik Rooms
8:45-9:15am	Welcome – Gabrielle Mackenzie-Scott, Review Board Chair
	Opening Prayer – TBA
	Introductions, Review Agenda – Barbara Saunders, Facilitator
9:15-9:30am	Workshop Objectives – Mary Tapsell, Review Board
	• Why we do these EA Practitioners' Workshops – results from last year.
	• Workshop goals: To improve understanding of how to do good SEIA, and identify
	areas in the Mackenzie Valley process needing improvement, and come up with
	some creative solutions.
	Workshop structure explained.
9:30-10:00am	Review Board SEIA Introductory Presentation
	– Alistair MacDonald, Review Board
	<ul> <li>Review of the reasons behind, and process of,</li> </ul>
	creating Socio-Economic Impact Assessment Guidelines.
	<ul> <li>An introduction to how SEIA works (the "Six Steps").</li> </ul>
	Question and answer to follow.
10:00-10:15am	COFFEE BREAK
10:15-11:30am	"SEIA Talk Show" – Multiple Parties

Dart R. Doing G	ood Socio-Economic Impact Assessment – Step-by-Step
12:00 – 1:00pm	LUNCH – Buffet Provided
11:30-12:00pm	"Table Talk" – <i>Breakout Tables</i> Your chance to follow up on the panel discussion. Questions will be posed to help identify gaps in the current practice of SEIA in the Mackenzie Valley.
	A facilitated panel will allow people from different walks of life (government, consulting, industry, community, independent board) to talk about the roles of different parties in, challenges of, importance of, and prospects for SEIA in the Mackenzie Valley. A public question period will follow.

#### "The Six Steps in Practice" - Presentations 1:15-2:20pm Two presenters will focus our attention on how the six steps can be undertaken in specific topic areas or "lenses" of impact assessment. Question and answer to follow the second presentation. "Health Impact Assessment" - Carolyn Dunn, Health Canada "Ensuring Gender Equity in SEIA" - Barbara Saunders, Facilitator 2:20-3:20pm Doing Good SEIA, Steps 1 & 2: Scoping & Baseline - Presentation & Breakouts

- 1. Presentation on Good Practice of SEIA Scoping and Baseline Conditions Assessment: "Appropriate Indicators for Social Impact Assessment" - Lois Little, Lutra Associates
- 2. Posing the Questions: Main SEIA Scoping and Baseline Concerns
- 3. Table Talk: Brainstorming Better Scoping & Baseline
- 4. Sharing Perspectives: 2 or 3 Tables chosen to report

#### **COFFEE BREAK** 3:20-3:35pm

#### 3:35-4:50pm Doing Good SEIA, Step 3: Impact Identification & Prediction

- Presentation & Breakouts
- 1. Presentation on Good Practice of SEIA Impact Identification and Prediction: "Economic Impact Assessment in the Mackenzie Valley"
  - Roy Ellis, Ellis Consulting
- 2. Posing the Questions: Main SEIA Impact Identification and Prediction Concerns
- 3. Table Talk: Brainstorming Better SEIA Baseline

	4. Sharing Perspectives: 2 or 3 Tables chosen to report
4:50-5:00pm	Recap and Thoughts for tomorrow Facilitator
5:00-7:00pm	Food and Drink Mixer at Explorer Hotel's Trapline Lounge

#### Day Two Thursday, March 16 2006

8:45-9:10am	Summary of Day 1, Review Agenda for Day 2 - Facilitator		
9:10-10:30am	Doing Good SEIA, Step 4: Determining Significance  - Presentations & Breakouts		
	<ol> <li>Presentation on Good Practice of SEIA Significance Determination     "Good Practice – Socio-economic Impact Significance Determination"     – David Lawrence, Lawrence Environmental</li> </ol>		
	2. Posing the Questions: Main SEIA Significance Determination Concerns		
	3. Table Talk: Brainstorming Better SEIA Significance Determination		
	4. Sharing Perspectives: 2 or 3 Tables chosen to report		
10:30-10:45am	COFFEE BREAK		
10:45-11:30am	SEIA in the Mackenzie Valley: The Lutsel K'e Experience – Presentations		
	1. Presenter <b>Brenda Parlee of the University of Alberta</b> will be talking about her experiences in community-based impact assessment and monitoring in Lutsel K'e in the 1990s.		
	2. A community member will provide an update on what is currently going on with monitoring in Lutsel K'e.		
	3. Question and answer to follow.		
11:30-12:30pm	Doing Good SEIA, Steps 5 & 6: Mitigation & Monitoring  - Presentations & Breakouts		
	<ol> <li>Presentation on Good Practice of SEIA Mitigation and Follow-up "Keeping the Agreements of SEIAs Alive: Mitigation and Follow-Up" – Naomi Krogman, University of Alberta</li> </ol>		
	2. Posing the Questions: Main SEIA Mitigation & Monitoring Concerns		
	3. Table Talk: Brainstorming Better SEIA Mitigation & Monitoring		

4. Sharing Perspectives: 2 or 3 Tables chosen to report
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#### 12:30-1:30pm LUNCH – Buffet Provided

Part C: Filling tl	ne Gaps	
1:30-2:40pm	Filling the Gaps I – Presentation & Breakouts	
	1. Facilitators will introduce the list of "Key Gaps to Good SEIA" identified at Workshop	
	<ul><li>2. Breakout Tables devoted to specific questions on how to fill those gaps</li><li>– distribute yourself accordingly</li></ul>	
	3. Various tables asked to report back at the end	
2:40-3:00pm	COFFEE BREAK	
3:00-4:00pm	Filling the Gaps 2 – Breakout Groups	
	1. Attendees to switch tables for fresh ideas on same questions	
	2. Various tables asked to report back at the end	
4:00-4:45pm	Drawing it all Together: Next Steps - Facilitated Discussion	
	There will be a list of follow-up items created around the SEIA issues	
	discussed in the Workshop, and main action items identified. All parties	
	involved in question and answer session on major priorities.	
4:45-4:50pm	Workshop Evaluation Period	

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### Appendix C Health Impact Assessment

#### Presentation: Carolyn Dunn, Health Canada

Presentation slides available on the SEIA Workshop CD or at http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_Workshop/4-Carolyn\_Dunn-Health\_Impact\_Assessment.pdf

"Coping skills enable us to be self-reliant, solve problems & make informed choices to enhance health."

The universal definition of human health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." "Population Health" is an approach that recognizes health is a capacity or resource rather than a state – it is a tool we use to cope with change, and it is either bolstered or eroded by that change. This broader notion of health recognizes the range of social, economic and cultural environmental factors that contribute to health alongside the biophysical. The best articulation of this concept of health is "the capacity of people to adapt to, respond to, or control life's challenges and changes."

The determinants of the population health framework include; Income and Social Status; Social Support Networks; Education; Employment and Working Conditions; Physical Environments; Biology and Genetic Endowment; Personal Health Practices and Coping Skills; Healthy Child Development; Health Services; Culture; and Gender. The indicators of each determinant can be used to establish baseline conditions and in determining appropriate mitigation. For example:

#### **Social Support Networks Determinants**

More social contacts = better health – family & friends to help provide basics of food & shelter – strong families, and communities conducive to social interaction = less discrimination and more social tolerance. Indicator: level of family violence

#### **Social Environments Determinants**

Values and norms of a society – social stability – recognition of diversity – good working relationships-cohesive communities

Indicator example: level of involvement in community organizations

#### **Culture Determinants**

Importance of way of life – importance of language – interaction between dominant and minority cultures – linked to social support networks, education – traditional activities

Indicator example: use of native language in home and community. (Note: Health Canada reviews reports on traditional knowledge for use in their work on health assessments.)

The goal of a Health Impact Assessment (HIA) is similar to that of the SEIA: to minimize negative effects, maximize positive effects and reduce inequalities. A population health approach establishes indicators related to mental and social well-being, quality of life, life satisfaction, income, employment and working conditions, education and other factors known to influence health. More information on Population Health can be obtained on Health Canada's website at www.hc.sc.gc.ca and indicator data is available from Statistics Canada and the GNWT.

## Appendix D Gender Analysis

#### Presentation: Barbara Saunders, Consultant

Presentation slides available on the SEIA Workshop CD or at http://www.mveirb.nt.ca/documents/guidelines/socioeconomic\_impact/2006\_workshop/5A-Barbara\_Saunders-Ensuring\_Gender\_Equity\_in\_Socia-Economic\_Impact\_Assessments.pdf

# "Meaningful social & environmental change results from community empowerment of women in that community."

In the past, women's voices have been largely excluded from public debate. To correct gender imbalances politically, economically, socially and environmentally numerous pieces of legislation have been adapted. In EIA, women's voices are slowly being integrated using tools like Gender Based Analysis, which focuses on understanding and documenting differences in gender roles, needs and opportunities in a given context.

Like SEIA, gender analysis is an assessment process, a tool for understanding social processes and for responding with informed and equitable options. It involves the disaggregation of quantitative data by gender and it highlights the different roles and learned behaviour of men and women. Gender analysis does not, however, treat women as a homogeneous group. *Applied to SEIA, gender analysis helps to*:

- Identify gender-based differences in process and participation;
- Determine if women have equal capacity and resources to participate in all aspects of the assessment and
- Identify how different members of household, groups and societies relate to each other <sup>14[1]</sup>
- Reveal how development impacts women and men differently socially and economically
- Reveal differential access to benefits from development for women and men
- · Reveal different perspectives on what is considered significant

Women's perspectives are key to understanding the realities of the social, economical and cultural life in a community. Women's voices, experiences and knowledge should be included in all six steps of the SEIA, even when it calls for special measures to be taken to accomplish this. It is a responsibility of government, community, and the proponent of a project to ensure equality in environment impact assessments. And it starts from political will to commit to a sustainable, equitable process, and the provision of more funding to make it happen.

<sup>14[1]</sup> For example, statistics of local and regional income may artificially mask extreme differences between men and women. Ensuring women's views are included in SEIA is part of good practice of SEIA. The perspectives of women should be actively sought out during scoping and community profiling. For more information, see Status of Women Canada (2004). *An Integrated Approach to Gender-Based Analysis*. Ottawa: Status of Women Canada. Available at http://www.swc-cfc.gc.ca/pubs/gbainfokit/gbainfokit\_pdf\_e.html.

### Appendix E Summary Of Socio-economic Impact Concerns and Potential Solutions

#### Introduction

The following list of socio-economic impact concerns and potential solutions was compiled from a mixture of the Pre-Workshop Questionnaire, the "Sticky Notes" exercise, and comments on the Part C "Filling the Gaps" Worksheets. (*Comments are not included verbatim here; they have been edited for clarity.*)

#### Health, Well Being and Culture

Participants expressed a great deal of concern for individual and community well being. Mental health, addictions, family violence and resulting family disruption related to development activities were common concerns. Several wrote that their health and well being is jeopardized because their health and social programs and services will be impacted (presumably by increased demand due to population growth and increased social problems). It was also written that "The root causes of crime e.g., poverty, family violence, alcohol/drug abuse etc, will be exacerbated with development." A big part of SEIA is the identification of these root cause. People are concerned with:

- The potential impacts of industry substances on human and environmental health;
- Safety and security issues, including issues like consideration for women's safety and sexual health;
- Increase in Sexually Transmitted Infections, suicide, and family violence, all associated with the increased abuse of alcohol and drugs with the introduction of more and new drugs;
- Lack of funding, narrow scope and vision of health and social service departments impacting on need to manage effects on the broad suite of determinants of health
- Family stress and increased break up from rotational employment and pressures on women to take the bulk of home duties;
- Impact of higher proportion of women in wage economy than men on social order;
- Increase in number single-parent households;
- Increased school delinquency of children from homes with parents working rotation;
- Inability to control pace of development and rates of change and impacts that overwhelm the communities' ability to cope and adapt, thus affecting societal well being and function at a fundamental level (evidenced by, e.g. substance abuse, identity crises, violence, etc.);

- Poor housing and overcrowding;
- Social cohesion (higher crime rates and family violence, breakdown of traditional supports, less communal activities);
- Cultural impacts, including erosion of Aboriginal culture through loss of traditional ways of life
  including spirituality, aboriginal identify, culture, elder-youth knowledge transfer and language (one
  respondent stated that industrial society is transforming traditional culture into a "optional" hobby
  culture); and
- Personal safety and mental well-being in the work environment (impacts on morale of workforce on site include occurrences of discrimination or harassment of Aboriginals at work)

#### **Education, Employment and Training**

- Lack of access to quality education and training opportunities is a major impact that needs consideration when examining labour supply issues
- The "lack of skilled or trained workers in a project area" and "lack of training to prepare for upcoming projects"
- Difficulty of staffing dry work camps as workers may want to drink after long days
- Differences in education levels between communities
- Impacted community education levels vs. non-impacted communities in the NWT Employment of
  aboriginal workforce is largely at the entry-level and in seasonal jobs, with little real commitment to
  developing creative means to promote aboriginal advancement, which in turn contributes to lower
  employee retention.

#### **Economy**

- Increases in disposable income lead to gambling, alcohol and drug abuse
- The widening gap between the rich and the poor
- Affordability of housing and general cost of living as inflation rises from increased demand for goods and services
- Impacts on alternative economic activities: traditional economy and tourism due to industrial development
- Little reinvestment of monies made through industrial development into small NWT communities, employees, government and industry all have this problem, which accentuates boom and bust cycles
- Long-term natural resource depletion without adequate investment in replacement social or economic capital
- There were several expressions of concern that communities could not take advantage of speedily
  arising developments, especially where there is a limited workforce and many projects. An impact
  equity issue

#### Political and Governance Issues

- Government capacity to respond to (especially small) community needs under pressure from development
- There has been political unrest in northern communities since diamond mining industry arrival
- Pressures and demands imposed on government and communities to maintain adequate protective and safety needs

#### Wildlife and Land Use

- Wildlife and their habitat is taken as a secondary concern compared to economic gain in a community
- Lack of planning a concern, with multiple, conflicting land use options for the same land base
- Impact of industry activities on subsistence uses and resource base (e.g., loss of access to, or lesser value of, lands used by industry, to traditional harvesters)
- How to best protect environmental, cultural and heritage resources and mitigate impacts
- Changes in animal migration patterns due to mines, wells, pipelines, etc.
- Environmental disaster, inadequate on the ground resources to respond

#### **Identified Impact Solutions**

- Establish recreation centres with adult/elder recreation coordinators to maintain order and fairness
- Provide more educational/cultural programs like training on land by elders (hunters and trappers)
- Slow the pace of development to better match the pace at which the community can absorb and manage change
- Construction periods should be extended so that communities have time to adjust and participate
- Locate major projects and associated work camps as far away from communities as feasible
- Appoint independent liaison workers, employed at worksites, that deal with grievances with developer, or colleagues
- Developer to offer courses to improve money management skills among workforce to curtail bad expenditures
- Communities should be fairly compensated for loss of land and resources
- Increased Aboriginal language training in school system needed to withstand development pressures
- Creation of a more mobile northern workforce able to relocate to where jobs are
- Monitoring of morale at workforce

# Appendix F Part C: Exercise Determining The Gaps to Fill

When filling out the "Filling the Gaps" Worksheet, results of which were in the Table on page 49, respondents were also asked to write in specific issues they wanted to focus on for any of the topics. Below are some of the key Gaps that were identified as needing filling, only some of which were discussed at the eight tables on the afternoon of Day Two:

#### **Building Community Capacity/Community Involvement in SEIA:**

- Strengthening an independent infrastructure; building local human resource capacity to be involved in SEIA
- How and when will communities get involved in SEIA of specific projects?
- Who should fund research? Feds? GNWT? Proponent? Or some combination?
- Need to improve individual community capacity to get involved
- Need frameworks for guiding communities (toolkits, guidelines, case studies) give them tools!
- Especially important for small and "outlying" communities
- Need better local staff recruitment and retention
- Balancing community involvement with avoidance of "meeting fatigue"
- Need to have communities with higher capacity to collect baseline data, confirm appropriateness of mitigation, etc.
- Need for adult education, more cultural exchanges, more recreation, leadership training
- At the impact level, municipal infrastructure was identified as a major capacity issue

#### **Incorporating Traditional Economy:**

- Who much economic importance does the traditional economy have? Can this be translated into
  dollar terms for comparison as an alternative to other types of development, or for compensatory
  purposes in case of losses attributable to development?
- How to quantify traditional knowledge inputs to be able to track changes over time?
- Economic valuation of non-market effects of development as well as of the traditional economy.
- Think beyond traditional harvesting when developing a sustainable traditional economy (e.g., establish commercial networks for crafts and arts to make them profitable)
- Need to teach traditional skills; pass knowledge between generations

#### **Improving Baseline Data:**

- Use more community generated information
- · A must to start the process off on the right foot
- · Need to assess current and past baseline info to determine trends
- Need to utilize Traditional Knowledge
- · Need better funding for baseline data research

#### **Heritage Resources Assessment:**

- · Loss of resources
- You can't understand the future if you don't know the past

#### **Determining Appropriate SEIA Level of Effort for Specific Projects:**

- What should the parameters guiding level of effort be: project size? Total dollars spent? Number of people employed?
- Small drilling projects vs. large diamond mines

#### **Cumulative SEIA:**

- · Better understanding of thresholds required
- Focus on fact even small projects can contribute to cumulative impacts small projects could contribute small share to set up fund to mitigate against multiple small impacts
- Need to address cumulative impact assessment in SEIA Guidelines
- How to partition Cumulative Effect to different inputs attribution
- Who is responsible for Cumulative Effects Assessment?
- Need to establish role of Cumulative Effects Assessment in significance determinations for specific projects
- Determine direct/indirect impacts attributable to development from other underlying social change factors

#### **Developing Thresholds of Acceptable Change:**

- How do we do this? What are the challenges?
- Thresholds should be community specific and community driven
- Develop useable Northern targets for threshold: goal posts to measure against

- Need to know when we should act to stop a change from becoming either significantly adverse, or worse, unfixable
- Inextricably tied to definitions of future sustainability
- Need to slow down the pace of development in Aboriginal world
- A threshold is by definition a perceptual thing in SEIA; there is a need to find some communitydefined limits of acceptable change
- Analogy of "end-of-pipe" discharge limits for water quality need to quantify existing levels, set limits
  for what would be damaging, accurately and timely monitoring of effects, and ensure compliance
  through enforcement lack of research and anyone brave enough to quantify limits of acceptable change
  is the present challenge

#### IBAs and Other Agreements – How Do They Fit in SEIA?:

- If IBAs mitigate social impacts, how can MVEIRB properly assess when we are not privy to the closed arrangements?
- What is the home for MVEIRB socio-economic measures. Is it an IBA or SEA?
- These agreements should not be confidential?
- How should IBAs mitigate impacts?
- Need for municipal developer agreements, not just aboriginal and/or territorial
- General lack of understanding of the role of these agreements in SEIA, and how monitoring and feedback is built in
- IBAs and SEAS and SEIA should be complimentary processes; one feeding the others; timing is a major issue! Which came first?

#### **Identifying Appropriate Valued Components and Indicators:**

- Need community specific Valued Components
- Most important aspect of this is the process of determining the indicators and VCs, not the outcome; democratize SEIA
- Meet requirements of the SEIA, but also use as a planning process that determines relevant needs and goals of communities

#### **Doing Good Economic Impact Assessment:**

- Expanding the scope of economic impact assessment beyond jobs to include the economic impacts that communities, regions and territories define as useful
- Identify and evaluate Valued Components then do a full cost economic evaluation Cost Benefit Analysis (CBA) using community specific values, valuation, significance rating

- Incorporate traditional market/non-market activity changes in SEIA
- Include health changes in CBA
- Need a better understanding of impact pathways and relationships between direct and indirect impacts and other outcomes (e.g., mental mapping)
- What are the tools available to determine impacts on municipalities?
- Valuation of non-market impacts

#### **Health Impact Assessment:**

• What are the methods of doing good Health Impact Assessment?

#### **Impact Prediction – How To?:**

- Balancing qualitative and quantitative inputs when predicting impacts
- Separating out the existing issues from degree of exacerbation caused by development and new impacts essential (attribution; correlation vs. causality)
- Rarely does impact prediction use scenarios that actually estimate real change; we end up doing only an analysis of what state our communities are already in!
- There is a general lack of knowledge on how developers do this and what constitutes good practice

#### Significance Determination:

- What are the degrees of significance (very significant, slightly significant)? Can these distinctions inform the SEIA process?
- How to incorporate qualitative data with quantitative data and weigh them in determining significance?
- Need to develop best practices and minimum standards of practice for developers when they are making significance estimations in SEIA
- There is a general lack of knowledge on how developers do this and what constitutes good practice
- What role for communities in significance determination (echoed by several people)?

#### Follow-up and Monitoring:

- How to build enforcement into follow-up and monitoring for SEIA?
- How do you set targets for when adaptive management systems kick in to mitigate impacts (related to thresholds of acceptable change)?
- Focus on enforceability and community involvement in

- Need to integrate project specific monitoring with Cumulative Effects Assessment (e.g., Cumulative Impacts Monitoring Program)
- An important part of environmental assessment that is often completely overlooked
- Building follow up and monitoring into mitigation measures of the Review Board and then finding a regulatory home for enforcement/compliance

#### **Employment and Training:**

- How to enforce targets; capacity of regulators to enforce
- Timing of training ramp up needs to be considered; do it well in advance of new development
- Need a lot more work done on education and training for jobs, no point in having targets if not
  enough Northern and aboriginal people can get the necessary training in addition, concerns about the
  quality of the work environment

#### Measuring Well-being and Quality of Life:

- How to measure, given that different people have different priorities (echoed by a couple of people)?
- Developing useful and meaningful indicators of quality of life and well-being (several people mentioned this point)
- · Community specific process of finding adequate measuring sticks

#### **Cultural Maintenance:**

- Need to understand the impact pathways that lead to both vulnerability and resilience of communities!
- Need to find appropriate indicators that reflect ability to maintain culture
- Promoting Aboriginal activities, cohesion the key
- Need to analyse cultural loss cumulatively with an open definition of development to include the influx of mainstream Canadian cultural values

#### Maintaining Benefits in the North:

- How to maximize business, employment and training opportunities of this development to northerners?
- Focus on enhancing benefits to the north in general, but also to most likely affected communities in particular
- Benefits have to last long term, need to diversify economy look towards a post-mineral economy
- In addition, keeping results of SEIAs in northern hands!

#### **Ensuring Impact Equity:**

- At the community and inter-community level
- Ensure inter- and intra-community equity, gender, and other sub-populations within communities are studied (disabled, uneducated, traditional harvesters)
- Must realize existing regional disparities as part of baseline and assessment

#### **Building Sustainable Development Into SEIA:**

- What will be the social impacts incurred by a series of developments, including the looming presence of the pipeline, into the foreseeable future
- And WHAT IS sustainable development? Who defines it? Are there competing definitions?
- What constitutes sustainable community development?
- Need to better understand what elements of society, economy and environment actually contribute to sustainable development!
- Use Genuine Progress Indicators
- Sustainable Development should be used as a gauge of impact prediction and significance
- Need to recognize elements both of society and the development that are not currently sustainable
- How will Robert Gibson's work on sustainability be addressed within MVEIRB?
- Need better balancing of positive and negative impacts in analysis, and find ways to quantify lifestyle opportunities and positive impacts into the future

#### **SEIA in Preliminary Screenings:**

• Cost Benefit Analysis of some sort should still be held early in process even if numbers small, not a full analysis, a preliminary analysis, including community input, of balance of positive and negative impacts

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