Mackenzie Valley
Environmental Impact Review Board

EIA PRACTITIONERS' WORKSHOP – 2007

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"The D.E.W. Line for Envrionmental Impact Assessment"
(D.E.W. = Do Early Work)

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List of Acronyms

EA	Environmental assessment (by the Review Board)
EIA	Environmental impact assessment
GNWT	Government of the Northwest Territories
IAIA WNC	International Association of Impact Assessment (Western Northern Canada affiliate)
INAC	Indian and Northern Affairs Canada
LUP	Land Use Plans
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
NIRB	Nunavut Impact Review Board
NWT	Northwest Territories
PWNHC	Prince of Wales Northern Heritage Centre
SARA	Species at Risk Act
SEIA	Socio-economic Impact Assessment

1.0 Introduction and Background

The Mackenzie Valley Resource Management Act (MVRMA) came into effect December 1998, as a result of requirements from comprehensive Land Claims Agreements. The MVRMA provided for the establishment of an integrated system of land and water management through the establishment of a number of co-management boards, such as the Mackenzie Valley Environmental Impact Review Board (MVEIRB or the Review Board).

The Review Board is the main instrument responsible for the environmental impact assessment (EIA) process in the Mackenzie Valley of the Northwest Territories. It was established to ensure the environment is protected from significant adverse impacts, and to protect the social, cultural and economic well-being of residents and communities in the Mackenzie Valley.

The Review Board is committed to continual improvement of its processes and to ensuring that all interested individuals and organizations clearly understand the MVEIRB's roles and responsibilities as well as their own roles and responsibilities in the EIA process. To assist in this long-term goal of continual improvement, the Review Board has hosted "EIA Practitioners' workshops" to bring together a range of stakeholders to examine different aspects of the EIA process, to identify information needs, to identify problems and potential solutions and to educate each other on roles and responsibilities in the EIA process.

The Review Board hosted its 4th Environmental Impact Assessment (EIA) Practitioners' Workshop in Yellowknife on February 27 and 28, 2007. The workshop's theme was "Do Early Work." This theme was chosen because it has become very apparent in the EIA processes that developers, who have done a lot of work up front before they even apply for a permit or license, are more apt to go through the EIA process in an expedient manner.

Also by obtaining information in an early stage of a proposed development, solutions can be found early in the process, versus issues backlogging at the final stages of an assessment.

There was a wide range of participants in this workshop (see Appendix C) including approximately 140 representatives from: various resource management boards; regulatory boards; Aboriginal, federal and territorial governments; communities; non-government organizations; consultants and developers. The Review Board is grateful to Indian and Northern Affairs Canada who generously assisted funding the workshop.

Each day began with a plenary session, followed by concurrent workshops and these are summarized in this document. The attached appendices also include: a detailed agenda; a list of workshop participants; biographies of speakers/presenters; and some pertinent information relating to workshops. All presentations associated with the plenary sessions or workshops are available online at http://www.mveirb.nt.ca/

2.0 Workshop objectives

The goals of the 2007 EIA Practitioners' workshop were to:

1. Emphasize the importance of the theme "Do Early Work" and encourage participants to do early work within their own capacities in EIA.
2. Provide an environment where EIA practitioners could interact and meet in a professional atmosphere.
3. Highlight the need for clear communication with a strong recognition of the importance of "two-way" communication in EIA through dialogue and discussions.
4. Provide an opportunity for participants to choose from a wide-variety of interesting and relevant topics in the EIA field.
5. Provide an opportunity for participants to actively participate and share knowledge and ideas.
6. Focus on the identification and solving of process issues.
7. Identify issues and possible ways to "move issues" forward, including who should be the lead for future discussions on a topic.

3.0 Overview of Workshop

Link to presentation: Overview of EIA Practitioners Workshop "06

The workshop was organized to offer opportunities for information sharing, knowledge building as well as opportunities for active discussion, debate and collaboration. The workshop "kicked off" with welcoming comments form the MVEIRB Chair, Gabrielle Mackenzie-Scott. Mary Tapsell acted as the "hosting" facilitator and she reiterated of the workshop objectives and provided an overview of how the two days would run. Alistair Macdonald provided a summary of highlights from last year's EIA Practitioners' Workshop: "Raising the Bar for Socio-economic Impact Assessment"(see website http://www.mveirb.nt.ca/).

Each day started with a plenary session involving all participants, after which, the rooms were divided and participants had an opportunity to choose from two concurrent workshops – with a total of twelve workshops offered over the two days. Summaries of the workshops are provided.

The following summarizes some of the content and ideas form the workshop sessions. Presentations and additional information on individual sessions can be found on the MVEIRB website http://www.mveirb.nt.ca/

4.0 So Many Workshops!!?? How to Choose??

To assist participants in their selection of a "mini-workshop", the following brief summaries of each workshop were provided:

1. **How the Federal Species at Risk Act Affects Project Review under the MVRMA: Roles and Responsibilities**

   Environment Canada and the Government of the Northwest Territories will lead a discussion on the project review requirements of the federal Species at Risk Act (SARA). In particular, the discussion will focus on how SARA interacts with the MVRMA and how this affects roles and responsibilities of proponents, preliminary screeners, land and water boards, MVEIRB, and territorial and federal governments.

2. **Cumulative Effects in the NWT: Who is in charge and where are the limits? Case study: Cumulative Environmental Management Association – Alberta's Wood Buffalo (oil sands) region**

   An example of where cumulative effects assessment has failed its original purpose can be found in the oil sands region of Alberta, where companies have failed to adequately consider existing or future development and the impacts to land, air, water and socioeconomic valued components. Most of the development in this region has occurred in the epoch of environmental assessment. The Cumulative Environmental Management Association (CEMA); a multi-stakeholder, consensus driven organization, has been tasked to research and make recommendations on cumulative environmental impacts of oil sands development. Overall though, CEMA has not worked out well. The Cumulative Effects Assessment and Management (CEAM) Strategy is a multi-stakeholder, consensus driven process that is developing a framework for cumulative effects in the NWT. However, there is no lead organization fundamentally responsible for this process, which is still far from operational. Without enforced timelines and strict regulations it is likely that large industrial projects could be approved in the NWT in the absence of agreed upon social and environmental limits.

   This presentation will provide a brief overview of CEMA in Alberta as a case study to inform northern decision makers. A workshop to discuss how cumulative effects management could be best tackled in the NWT will follow.

3. **What is Section 35 Crown Consultation and what does it mean for you?**

   In late 2004, the Supreme Court of Canada rendered two landmark decisions – Haida River and Taku River Tlingit – regarding consultation with Aboriginal peoples. In these cases and subsequent decisions (e.g., Mikisew Cree and Dene Tha') the Courts have said that the Crown has a duty to consult (and where appropriate accommodate) Aboriginal groups when it has knowledge that conduct it contemplates may adversely impact an existing or potential Aboriginal or treaty right. Since that time, governments across the country have been analyzing these and other court decisions to determine how they can practically meet this duty to consult. This workshop will provide an overview of how Indian and Northern Affairs Canada has reacted to this challenge and provide insight on how consultation during the Environmental Assessment process can play a part in fulfilling the Crown's duty to consult.

4. **How Much is Enough? Determining the Appropriate Level of SEIA**

   Socio-economic impact assessment is an important but underutilized element in EIA. With this premise in mind, this workshop has two goals. One is to officially "roll out" the MVEIRB's newly

released Socio-economic Impact Assessment (SEIA) Guidelines, which is a guidance document designed to make clear to developers, government, communities and other parties to EIA what the Review Board's expectations for SEIA are. Alistair MacDonald will walk participants through the key points of the SEIA Guidelines in the first part of the mini-workshop.

The second goal is to allow you, as EIA practitioners, to discuss one of the more complex issues in SEIA in the Mackenzie Valley: How Much is Enough? Determining what level of effort is required, and when, for SEIA is a challenge that the SEIA Guidelines addresses in principle. We want you to address it in practice. Table exercises will look at three different development scenarios and you will be asked to determine what is the appropriate level and focus of the required SEIA. Your feedback will also be sought on how to better integrate SEIA into EIA.

5. Tools for Scoping Cumulative Effects Assessment

"Cumulative effects" have become a key consideration in environmental assessments in the Mackenzie Valley. At least there hasn't been an assessment in recent times where the term has not been mentioned over and over again. While concern over cumulative effects is now a major driver in the environmental assessment process, agreement on what constitutes good cumulative affects assessment, or what should be included in a cumulative effects assessment, remains elusive. In many ways cumulative effects assessment has been a frustrating exercise.

In this seminar participants will apply a few simple tools to a development scenario. The objective is to shed some light onto, and generate discussion about, such concepts as "reasonably foreseeable". At the end of the seminar participants should have a clearer understanding of how scoping for cumulative effects assessment differs from scoping for assessing direct impacts of a single development, what some of the difficulties are, and how one might work around them.

The seminar is based on the premise that: the valued environmental components for cumulative effects assessment will generally be the same as those for assessing the direct impacts of a single development; fundamentally the methods used to predict cumulative effects are the same used to predict direct impacts of a single development; scoping is not a one step process but rather an iterative one where the scope generally narrows (and in some cases widens) as more information becomes available; an identified impact need not be significant to be considered in cumulative effects assessment (the essence of cumulative effects assessment is to consider effects that by themselves are not significant); cumulative effects assessment is not an exact science (uncertainty exists at all levels and particularly with "reasonably foreseeable" future developments, necessitating different levels of detail in the analysis); and mitigation for cumulative effects can also be "cumulative" and is not necessarily achieved through the development under assessment.

While the seminar deals only with scoping for cumulative effects of several developments rather than cumulative effects of various components of a single project, the tools presented are applicable to both.

6. Talking the Talk: How to communicate effectively with communities

Developers are asked by the Review Board to conduct and report on community engagement activities. However, the challenges of working in a bilingual setting as well as accurately reporting the outcomes of the activities are impeding the success and value of requiring evidence of community engagement. In this session, Renita will facilitate discussions with participants on how to be aware of language use and presentation styles when participating in bilingual community meetings. Renita will also present and hold a discussion on what the Review Board commonly expects from both developers and communities when reporting on community engagement work in applications.

7. **Mineral and Petroleum Rights: How they are assigned and what obligations they create**

The purpose of this workshop is to give a picture of the Crown's regulatory regime as it relates to mineral and petroleum tenure, as issuance of these rights generally triggers further regulatory processes (e.g. requirements for land use permits and water licences; various regulations under the Canada Oil & Gas Operations Act), and can ultimately lead to an environmental assessment.

8. **The International Association for Impact Assessment: What is it, and Why should you care?**

The International Association for Impact Assessment is the only multi-disciplinary international organization for impact assessment professionals. Its Western and Northern Canada (WNC) Affiliate is a dynamic professional association providing a range of EIA-related activities including guest speakers, local conferences, newsletters, networking opportunities and much more. All of this is done to support the continuing improvement of the professional practice of impact assessment. Membership in the Western and Northern Canada Affiliate is a diverse mix of professionals from government, consultants, NGOs, industry, and First Nations. Subjects deal with predicting, evaluating, managing and monitoring the impacts of human activities on ecosystems and people, in order to improve decision making about economic developments. Northern and Western Canada is home to much cutting edge practice in impact assessment, and IAIA WNC makes it easier than ever to learn from the experiences of others in the region. Join NWT Regional Director Ginger Gibson for an interesting look at what this organization is, what it does in the North, and what it can offer you as a person who is professionally involved with impact assessment.

9. **Incorporating Climate Change Considerations in Environmental Assessment**

Climate Change has been defined as the issue of our time, an issue that has huge implications in the way in which societies and ecosystems will function in the years to come. The earth's polar regions have been identified as being particularly vulnerable to the impact of climate change. The role that environmental assessment plays in addressing climate change, both from an adaptation and greenhouse mitigation perspective will be considered in this session. A presentation on the Ekati mine's energy efficiency and alternative energy programs will provide a real-life case example of how industry can cope with this important issue.

10. **Heritage Resources in the Environmental Impact Assessment Process**

In this workshop the Prince of Wales Northern Heritage Centre will outline its process for protecting archaeological sites in the context of the land use permitting and environmental assessment processes of the NWT. We will highlight the ways that development proponents can "do early work" to facilitate a smooth process, and will discuss the importance of incorporating traditional knowledge into the heritage resource impact assessments. We also hope to initiate a dialogue on how impacts to culturally important places contribute to overall impacts on traditional cultures, with a view towards discussing how this can be incorporated into the EA process.

11. **Creating Credibility: Using development scenarios to better assess impacts of difficult to predict outcomes**

In Canada, environmental assessments are carried out and projects are approved that do not adequately assess the impacts of proposed initiatives, which has resulted in some cases in unacceptable environmental consequences. Development scenarios are one tool that should be adopted by EIA practitioners and government bodies to create plausible and diverse scenarios to effectively assess and include issues or potential impacts that are so difficult to predict, quantify, or qualify that currently they are left completely outside of the assessment process or oversimplified, effectively rating their impact as zero.

This will ensure that projects that could result in or be negatively affected by difficult to predict scenarios are not approved or that there are a range of mitigation measures prepared for projects that could result in or be affected by a range of challenging scenarios. There are political and economic fears around discussing diverse and unpredictable future scenarios, however this sensitivity is limiting scenario creation that could lead to effective long-term regional planning. Following this presentation will be a workshop to discuss the relevance of development scenarios and difficult to predict impacts and how and where they could better fit into environmental assessment today.

12. Time for an Overhaul? A critical look at NWT preliminary Screening Forms

A generic series of questions are typically asked during preliminary screening in the Mackenzie Valley. For several years, these have been largely unchanged. This session, facilitated by Alan Ehrlich, will draw together the collective wisdom of those involved in preliminary screening to consider revamping preliminary screening forms. The Nunavut Impact Review Board, which conducts screening, has revolutionized its approach to screening by designing sets of questions that are tailored to the specific type of development proposed. For example, one set of questions applies to roads, while another to mines. Detailed forms have been designed by NIRB to capture each type of screening. Guest star Carolanne Inglis will provide participants with an inside look at the innovations that the Nunavut Impact Review Board has made to its screening questions. This session will then explore the merits of adopting a similar approach in the Mackenzie Valley.

DAY 1
– *Opening Plenary Session: Early Engagement – What Does It Mean To You?*

Link to presentation: Early Engagement – What You Said

Introduction:

This plenary session began with a "panel talk show" and was followed by table exercises. Trudy Samuel of Environment Canada was the host of the talk show. Her "guests" were

- Heidi Klein (Gartner Lee)
- Charlie Catholique (Lutsel K'e Dene First Nation)
- George Govier (Sahtu Land and Water Board)
- Grant Pryznyck (JGP Consulting)

The "talk show" format brings out the human element of working in areas where collaboration and communication are key. The audience members are asked to listen intently to each guest to explore the "real life" of different perspectives and value systems. Following the "panel discussion" the audience can make comments or ask questions to the guests. In the "talk show format" special attention is paid to the environment and context of the room to create intimacy and foster candidness between all participants.

After introductory statements, the moderator asks questions, flipping from guest to guest. The guests are encouraged to build on one another's comments and to consider the theme from a point of personal experience and philosophy, rather than the usual text book answers. The host directs the conversation towards the more "human interest" aspect of the guests' experience. After closing comments, the floor is opened to questions.

The "talk show" approach brings a sense of cohesiveness and deeper understanding of broader issues that underpin seemingly day-to-day decisions and occurrences. This tool helps participants to reflect on their past, present and future in a light-hearted and non-threatening way. It calls on people to see themselves as creative, active players in evolving, multi-faceted systems rather than passive reactors subject to the whims of change.

Main Themes:

The talk show guests were asked to relate their responses to two described scenarios:

Scenario 1: A proponent proposes an exploration project of 10 diamond drill holes on a site 100 kms from 3 different communities, planning to employ 30 people for 4 months over the winter .

Scenario 2: A proponent proposes to construct and operate a large scale mine. The company has completed the exploration and done all the bulk sampling necessary and is considering moving to apply for permits. The mine is projected to be operational for 20 years and to employ 500 people year round.

The questions posed to individuals varied but were in line with those listed below:

1. What role would an organization like yours play at this stage?
2. How would your early engagement role affect other organizations?
3. How would your early engagement role be potentially affected by other organizations?
4. What early engagement activities would you expect from other organizations?

The dialogue was animated and interesting. Surprisingly, even though the talk show panelists had different backgrounds and presumably different viewpoints one might expect in answers, the panel seemed quite united on the responses. They all agreed that while industry has a major role in initiation of engagement, ALL parties have a role in engagement.

All panelists agreed that engagement should happen as early as possible to be effective – and that the first most important focus group for any engagement should be communities. Interestingly, the panelist felt that the size of the project does not dictate the need for engagement – and they felt that no matter what the size of the proposed development, communities should be engaged effectively and early in the planning process.

Panelists all recognize the difficulties and challenges involved in engagement – but they felt the most critical link was strong communication, and a strong understanding of roles and responsibilities of all interested parties early in the process.

Exercises:

At the conclusion of the "panel talk show" tables were assigned exercises to discuss amongst themselves. Half the participants applied the questions to an exploration development, while the other half applied the questions to a large mine. It explored three types of engagement for each of the scenarios:

- Industry engagement with communities
- Industry engagement with government
- Industry engagement with regulatory board

For each scenario, and each relationship, participants were asked the following questions:

1. When should engagement begin and on what topic(s)?
2. How should engagement proceed? Give examples…
3. Do (communities / government/regulatory boards) have responsibilities during early engagement? What are they?
4. What are some of the hurdles to early engagement?

Key Issues Identified by Participants

Interestingly, there were many "common themes" and expectations expressed by the participants. The results showed that, regardless of the size of the development, there was little difference noted in the responses. There were some additional engagement steps identified for a large mine – and these are noted below. The following are some general observations for each of the questions posed to the participants. For a more detailed review of expectations for engagement with different organizations, the readers are referred to the attached slide summaries.

1. When should engagement begin and on what topic(s)?

Regardless of the size of the development all participants identified that engagement with the different parties should begin early in the process, when there is an interest in the area and when the project is being planned. It is noteworthy that participants felt that industry should engage with all three groups (communities, government and regulatory boards) early in the process. Participants felt that in many cases it was most appropriate that industry engage with communities first and then the other interested parties. There was little differentiation between the requirements of early engagement for a small and a large development.

2. How should engagement proceed? Give examples…

The participants supported a wide range of techniques on how engagement should proceed. However, they identified that whenever possible the most effective engagement is face to face engagement. Industry must engage with the "right" people and industry should not assume that information automatically flows from one source to others – they must ensure information reaches all the important parties. The participants supported that engagement should be "on-going" and that it should happen throughout the lifespan of a development.

3. Do (communities / government/regulatory boards) have responsibilities during early engagement? What are they?

All the participants agreed that responsibilities for engagement are shared. While industry must initiate the engagement, there are defined roles, responsibilities and expectations from the various parties. An overarching theme for all perspectives was that parties should be transparent, clearly state expectations, and share relevant information between each other.

4. What are some of the hurdles to early engagement?

Participants identified that capacity is the greatest hurdle/ obstacle for all the interested parties to engage effectively with industry. The power point presentation "Early Engagement – What You Said…" summarizes specific topic-related issues identified for each group (community, industry and regulatory boards).

Ideas to Build on/ Next Steps

This session demonstrated the interest and need for opportunities for parties to come together to talk about issues of mutual concern. The format of this session placed representatives from different backgrounds together and allowed them to have a dialogue in a non-threatening environment. The result was a great dialogue and opportunity for learning and sharing ideas.

If there is one lesson to take away form this session it is that despite having different mandates, agenda and priorities, we share similar expectations and beliefs on how engagement should proceed. Communication is an important element for the success of any development in the NWT. Meaningful engagement is a two-way process and all interested parties have responsibilities for involvement and transfer of knowledge.

Mini-workshop #1
– *How the Federal Species at Risk Act Affects Project Review under the MVRMA: Roles and Responsibilities*

Link to presentation: SARA and Project Review in the Mackenzie Valley

Introduction

The protection of species at risk in the NWT is an important part of environmental management and best practices. The federal *Species at Risk Act (SARA)* came into force in June 2003 and is meant to prevent species in Canada from becoming extinct by providing specific protections and interest in species that are extirpated, endangered, threatened and of special concern. *SARA* was written with the framework of the *Canadian Environmental Assessment Act*, meaning that integrating the provisions of *SARA* into the regulatory process that exists under the *Mackenzie Valley Resources Management Act (MVRMA)* presents challenges.

This workshop focused on the requirements of *SARA* in environmental assessment and the role of Environment Canada, as well as how a diverse group of organizations involved in the business of assessment can work together to fulfill these requirements.

Main Themes

The main requirement of *SARA* for environmental assessment is in Section 79 of the Act, which states that reviewers must notify the competent minister in writing if the proposed project has the potential to affect any species at risk, including species of special concern. The reviewer must also identify potential adverse impacts to the species and their critical habitat, identify mitigation measures, and ensure that impacts are monitored if the project proceeds.

This notification must be made if there is any potential impact to a species at risk, regardless of the severity of the impact or whether the impact is adverse or beneficial. The mitigation measures and monitoring program should be developed with a mind to the recovery strategy for the species in question, to ensure a consistent approach.

SARA frames the protection of species at risk as a shared responsibility, stating that these responsibilities be carried out by "Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted…" This description applies to a diverse group of agencies in the NWT. In practice, it is unclear which agencies should be taking an active role in this process and this question was a main theme of this workshop.

Key Issues Identified by Participants

Lack of clarity in the identification of roles and responsibilities

SARA was drafted within the context of the *Canadian Environmental Assessment Act*. This makes it difficult to translate its provisions directly to the existing regulatory framework in the Mackenzie Valley. There was a great deal of concern from various agencies that their roles are not clear, and that they may lack the capacity to make expert determinations on the 'likelihood' or 'severity' of potential impacts.

Lack of guidance material

Participants noted the lack of any policy or guidance document as an obstacle to determining their responsibilities in the protection of species at risk. Environment Canada acknowledged that there is a lack of guidance materials to assist reviewers and proponents in their efforts to comply with *SARA*. They have internally identified the creation of these guidance materials as a priority, and plan to begin drafting them soon.

Concern with confidentiality

There is a provision under *SARA* that deals with the confidentiality of information. Keeping certain information confidential may conflict with the principles of transparency in environmental impact assessment. Environmental impact assessment is a public process, and interested parties are entitled to see all information presented to reviewers and used to reach a decision. Environment Canada noted in their presentation that the confidentiality provision has never been used in the NWT.

Lack of identified critical habitat

As of yet, there is no identified critical habitat for any species at risk in the NWT. Environment Canada is still working towards identifying these habitats, which is a challenge depending on the species in question. For instance, whooping cranes have a very easily definable critical habitat (nesting sites) but for a species such as woodland caribou, with geographically larger ranges and more diffuse uses of their habitat, this would be more challenging to identify

Ideas to Build on/ Next Steps

Participants identified the need for additional workshops and information sessions with Environment Canada and GNWT, ENR to deal with and address some of the concerns raised at this session.

Tools Available to Practitioners

SARA registry: www.sararegistry.gc.ca

Environment Canada's SAR web site: www.speciesatrisk.gc.ca

COSEWIC website: www.cosewic.gc.ca

Species at Risk web-mapping application: www.speciesatrisk.gc.ca/map/default_e.cfm

Mini-workshop #2
– *Cumulative Effects in the NWT: Who is in charge and where are the limits?*

Link to presentation: Cumulative Effects in the NWT

Introduction:

Ellen Francis began her talk with a description of the Pembina Institute and a physical demonstration to illustrate how impacts add up to destabilize an ecosystem. She used the oil sands region of Alberta as an example of the failure of cumulative effects assessment. Fort McMurray continue to grown bigger and bigger with no thought to the end of the boom. Most of this development in this region has occurred in the realms of environmental assessment

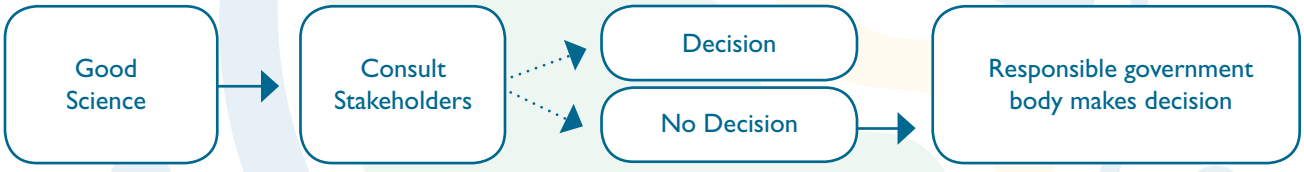
Main Themes:

The Cumulative Environmental Management Association (CEMA) is a multi-stakeholder, consensus-driven organization in Alberta. It has been tasked to research and make recommendations on the cumulative environmental impacts of oil sands development. Overall though, CEMA has not worked out well. Although some good science has been done, CEAM has been a large drain of human and financial resources and has not created an effective management system. The boom mentality and leases continue while the members of CEMA discuss solutions.

The NWT should use the shortfalls of Alberta's CEMA to improve the NWT's Cumulative Effects Assessment and Management (CEAM) Strategy. CEAM is a multi-stakeholder, consensus-driven process that is developing a framework for cumulative effects in the NWT. However, there is no lead organization fundamentally responsible for this process. The CEAM organization and the blueprints it has created, while excellent documents, have no teeth. CEAM is currently funded by INAC, but there is no funding to operationalize the recommendations.

To be proactive, Ellen suggested that all the resources focused at project-based environmental assessment in the NWT be refocused towards "the early work": get the management system in place before development proceeds. Requiring a cumulative effects strategy prior to development will put pressure on stakeholders to get the work done, and give industry the clear rules it requires. When developing a cumulative effects strategy, it will helpful to use other land use plans as models. As a final comment, Ellen encouraged participants to be proactive and not doom and gloom about cumulative effects assessment.

Ellen suggested that decisions about cumulative effects should be taken in the following way:



Exercises:

Ellen posed the following questions to the tables:

- Can environmental conditions in the NWT be maintained or improved?
- Who is in charge of cumulative effects and long-term development planning for the NWT?
- What are the mechanisms in place today to create effective long-term environmental management systems?
- What hurdles are in the way of cumulative effects management in the NWT?
- What is the best way to implement and enforce effective management?
- What are you/your organization doing to make this happen before it is too late?

The question *"Who is in charge of cumulative effects and long-term development planning for the NWT?"* generated a lot of discussion. Most tables determined that many agencies were in charge and noted that has meant no agency is taking responsibility for cumulative effects planning. One table noted that organizations are trying to broaden the perspective of their organization but that this is not being coordinated in any way. Another table believed that consensus was a good process in the NWT and that the process doesn't need a leader. One group felt that this question will continue until land claims are settled and land use plans are complete.

Ideas to Build on/ Next Steps

Without enforced timelines and strict regulations it is likely that large industrial projects could be approved in the NWT in the absence of agreed upon social and environmental limits.

CEAM is currently funded by INAC but there is not the funding to operationalize the recommendations. Find the resources to operationalize CEAM.

Mini-workshop #3
– *Section 35 Crown Consultation and what does it mean for you?*

Link to presentation: What is Section 35 Crown Consultation

Introduction:

Julie Jackson, a senior policy analyst with INAC made a presentation on the role that existing consultations in the environmental assessment process can play in an interim policy to conduct s.35 Crown Consultations the NWT.

Main Themes:

In late 2004, the Supreme Court of Canada rendered two landmark decisions – *Haida Nation* and T*aku River Tlingit First Nation* – regarding consultation with Aboriginal peoples. In these cases and subsequent decisions (e.g., *Mikisew Cree First Nation* (2005) and *Dene Tha' First Nation* (2006)) the Courts have said that the Crown has a duty to consult (and where appropriate accommodate) Aboriginal groups when it has knowledge that conduct it contemplates may adversely impact an existing or potential Aboriginal or treaty right.

The duty to consult is not a fiduciary duty, but rather a duty to uphold the honour of the Crown and to ensure that s.35 of the *Constitution Act, 1982* is upheld. In the NWT, it is difficult to determine who the Crown is because of grey areas. The Crown is all of the departments of the government of Canada, not just INAC, and in some cases the Crown is the GNWT.

The courts have not given details about how to implement this s.35 Crown Consultation. INAC is currently creating a federal policy on how to implement s. 35 consultation. It will be several years before it is released. Regionally, INAC is creating a practical interim approach. This approach focuses on unsettled land claim areas (Akaitcho, Dehcho & the NWT Métis Nation). There are fewer possible infringements of Aboriginal rights in settled land claim areas because the settled land claims contain mechanisms for consultation and dispute resolution. Although Aboriginal rights in unsettled claim areas remain undefined, Aboriginal rights have already been proven to exist everywhere in the NWT.

The courts have said that procedural aspects of s.35 Crown Consultation can be delegated. The MVLWB and MVEIRB are also public government institutions, and can therefore be delegated procedural aspects of consultation. These boards already conduct consultations, and INAC considers this consultation when making a final determination on the meeting of s.35 Crown Consultation requirements.

Key Issues Identified by Participants

What is the difference between "C"onsultation and "c"onsultation?

The "C" consultation refers to s.35 Crown Consultation, while "c" consultation is done for reasons of good governance, or statutory or contractual reasons.

The difference between a fiduciary and a s.35 Crown Consultation requirement

A fiduciary duty applies in the South where you have bands and reserves. The government of Canada is entrusted with persons or things and Canada must act in the best interest of their interest. A Treaty right is a s.35 right and therefore consultation should occur in treaty land entitlement processes. It is not always clear if Aboriginal rights exist, as these are currently being negotiated, but Treaty rights are more certain, (i.e. hunting, trapping, fishing . . . .)

Application of s.35 duty to consult in a settled claim versus an unsettled claim area

There is a difference in the s.35 duty to consult between settled and unsettled claim areas. In the Sahtu, for example, s.35 consultation issues have not entered into the management board processes because the claim directs how consultation and accommodation will occur.

Concern about the timing of when consultation occurs

Many exploration permits, mineral rights are issued and yet there is no consultation until the company actually finds something. Participants felt that there should be an extra consultation process that occurs before a mineral claim is awarded. INAC representative agreed that this area needs further examination and that exploration rights are another area of policy they are currently working on. The earlier the consultation the better.

Criteria to use to examine if s.35 Crown Consultation requirements are being met

- Does the need to consult arise?
- If it arises, what is the scope of the impacts?
- What level of consultation has occurred to date?
- A review of all consultation records is conducted
- Each case is unique and it is different every time

Additional information on this topic is forth coming from INAC. See the response to the IR for Ur Energy

Ideas to Build on/ Next Steps

The next step of this policy development is to look at permits issued outside of the MVRMA. There has been success working directly with First Nations to reach practical arrangements for non-MVRMA processes.

Tools Available to Practitioners

Julie Jackson is the unofficial contact person for questions about s.35 Crown consultation. Her expertise comes from developing the interim policy on s.35 Crown consultation in the NWT at the same time as she participates in actual consultations.

Julie Jackson

Tel: 867-669-2891

E-mail: JacksonJL@inac.gc.ca

Mini-workshop #4
– *How Much is Enough?: Determining the Appropriate Level of SEIA*

Link to Presentation slide: Determining the Appropriate Level of SEIA Link to: Level of SEIA Worksheet

Introduction:

Alistair MacDonald of the Review Board hosted a two-part workshop focusing on the recently released *Socio-economic Impact Assessment (SEIA) Guidelines* and their application. The first part of the workshop focused on "rolling out" the *SEIA Guidelines*, talking about their contents, application and key ideas. The second part asked participants "How much SEIA is enough?", challenging them to discuss what triggers, if any, could be used to determine when a development should be required to undergo a higher level of SEIA. The three levels of SEIA chosen by the Review Board were presented. The workshop closed with participants engaging with the "Level of SEIA Test", a subjective test included in the SEIA Guidelines to help determine the scope and scale of SEIA necessary for an individual development.

Main Themes:

In the first part of the workshop, Alistair encouraged people to think about the terms "risk" and "context". He spoke of SEIA in terms of assessing the *risk* of potential changes to the human environment in a specific situational *context*. Discussion identified that "blanket" statements about potential impacts have little value up north, because we want to identify community-specific impacts from individual developments.

Alistair walked through the *SEIA Guidelines*.
The guidelines can provide:

- Expectations for good SEIA methods in all "Six Steps";
- Tools to assess the required scope and scale of effort for developments;
- Information on responsibilities and how parties can get involved; and
- Resources, questions, and tips for good SEIA.

The *SEIA Guidelines* cannot provide a "cookie cutter" approach to SEIA. Again, the key is to assess the specific development in its context.

"Doing early work" is just as important in SEIA as it is for any other aspect of planning a proposed development. The *SEIA Guidelines* make it clear that the time for determining how much SEIA to do, and doing the bulk of that SEIA, is during the initial developer analysis, before a developer applies for any licenses and permits. If early work is not done, those developments that have social, economic or cultural considerations that require analysis during an EIA will face unnecessary delays. In most cases, SEIA is not an overnight exercise to be conducted by non-experts. At the same time, the *SEIA Guidelines* are at pains to note that for most developments, only a basic amount of SEIA information is required; usually just enough to assure the preliminary screening organizations and the Review Board that there are no human environmental concerns related to the development. Section 3 of the *SEIA Guidelines* provides tools for developers to provide this info concisely and consistently.

The second part of the workshop began by describing the three levels of SEIA from the new guidelines, and the work expectation associated with each level. They are

1. **Basic SEIA** – for small developments, or somewhat larger developments which can show they will not have social, economic or cultural impacts of more than minimal magnitude.

2. **Moderate SEIA** – for medium-sized developments, or smaller developments that have more than a couple identifiable impacts on the human environment.
3. **Comprehensive SEIA** – for very large (again, in the Mackenzie Valley *context*) developments, or large and complex developments in sensitive socio-economic locations.

The workshop then put the ball in the participants' court, getting them to look at two key questions to ask when determining the level of SEIA to do for an individual development:

1. Can "triggers" be found that would make the "Level of SEIA Test" quantifiable? and
2. How does/should the "Level of SEIA Test" described in the SEIA Guidelines work?

Exercises:

Currently, there are no triggers to determine what level of effort is required from developers during SEIA in the Mackenzie Valley. Participants brainstormed whether any triggers are possible and what variables would make good triggers. Groups were encouraged to think of both numerical and non-numerical variables that might be triggers for additional SEIA.

Group Results

Groups generally agreed that it is not currently feasible to use any of these variables as set "triggers" for additional SEIA requirements. However, they can be used to identify key issues that need to be examined further during the subsequent SEIA. In particular, groups found "contextual numerical variables", those that take development component information and say "what does this mean in the local context", extremely valuable.

Four types of variables that would make good triggers were identified:

1. Raw Numerical Variables

- Number of employees required
- Project time length
- Size of project physical or ecological footprint

2. Contextual Numerical Variables

- Capital cost as a % of total local or regional business activity
- % of labour feasibly from local communities (comparing the number of required employees by the available local labour force with adequate skill)

3. Community Sensitivity Variables

- Sensitivity of community to new development (e.g., how reliant community is on the traditional harvesting economy, health status of community, current level of access to "outside world", cost of living – including housing, currently available social and health services)

4. Likely Development Impact Variables

- Proximity of development to community and/or heritage resources
- Likely project drain on community services

Exercise 1 was used as a segue into talking about the "Level of SEIA" test built into the *SEIA* Guidelines (see www.mveirb.nt.ca). The participants were provided three development scenarios (a mineral exploration, a large mine and a highway) and then applied these to the tables to conduct a mock "Level of SEIA" test. Although we ran out of time to do full justice to this exercise, participants got a taste of the level of rigor expected up front. "Doing early work" can refine SEIA down to the scope and scale that is necessary to identify likely significant impacts of a development on the human environment. A copy of the worksheet used to undertake the "Level of SEIA" test is included on the MVEIRB website at: www.mveirb.nt.ca

Key Issues Identified by Participants (with some comments by Alistair):

Currently, many developers provide only gross GNWT statistics, not any analysis of how the development might affect the local human environment.

This is not acceptable, especially for any project that has even a small chance of being referred to an environmental assessment.

One reason identified why developers are reluctant to "Do early work" on SEIA is fear this will open a "Pandora's Box" where every social, economic or cultural problem becomes the developer's problem. It is attractive for developers to wait until the Review Board identifies what SEIA issues need to be considered in an EA's terms of reference. That way developers do not do "too much" SEIA beforehand. After all, Preliminary Screeners don't require all this SEIA.

Three things here:

1. The SEIA Guidelines make it clear that the relationship between the development components and the human environment is being assessed, not all the ills of society.
2. Any development that has SEIA issues will need to "Do early work" prior to Preliminary Screening or face future delays when it attempts to do an 11th Hour SEIA. Good SEIA – the expectation during EA in the Mackenzie Valley – takes time.
3. The SEIA Guidelines state that a Comprehensive SEIA, for example, should be well underway prior to filing for a Preliminary Screening. While is not expected is that the developer file all of this information with its Preliminary Screening, it just makes good business sense to have it in their back pocket. There simply isn't the timeline to start SEIA during the formal EIA process for large developments.

Some of the items in the "Level of SEIA" test could go either way (e.g., level of interest in the development might be read as a good thing – no SEIA concerns, or a bad thing – high SEIA concerns).

Good point. It is incumbent on the developer to have generated enough knowledge about the socio-economic context they plan to work in to be able to gauge whether the issue is one of concern or not, and they should be prepared to defend their rationale.

What if you are unsure on the level of effort required after conducting this test?

Discuss issues identified with other parties. Take your findings to communities to vet your choice of category. Also touch base with regulators and Review Board. Be precautionary – a "maybe" issue merits attention until it can be shown to be "not" an issue.

Concerns were also expressed that for moderate or small projects, no one will come out to public meetings, and the only feedback you get is subjective from a community representative. In addition, going out to key contacts can be dangerous when there are set protocols for how to interact with the community. The *SEIA Guidelines* talk about considerations for early community engagement. Individual communities have their own protocols for interaction. Land & Water Boards have requirements. The point is that there is plenty of information on how to try to interact with potentially affected groups. The inability to get timely answers does not exempt the effort to ask the timely question.

Ideas to Build on/ Next Steps

1. Practitioners were very eager to learn more about the SEIA Guidelines, and the Review Board will run workshops in the spring and summer of 2007. *If you would like to have one of these workshops, contact Alistair MacDonald (see below).*
2. Practitioners identified that trying to find quantitative triggers for different levels of SEIA effort are not within reach at the present time. A subjective test like the one promoted in the SEIA

Guidelines is a more valuable contextualized tool.

3. Practitioners felt one of the best tools for determining the level of SEIA effort is to take the raw numbers behind developments (e.g., capital costs) and compare them to the local context as a percentage of total activity in the area. For example, if capital costs for a development are $100 million, this might represent 75% of business activity for Town A, and only 10% for Town B. The impacts on Town A may merit more attention.
4. The comparison of available jobs to available skill sets and labour force in communities was identified as an essential part of SEIA for any project with a medium-to-large workforce. Not only are their issues of job opportunities for internal economic growth to be considered, but if there is a large incoming labour force, this means that in-migration issues need to be scoped into the SEIA.

Tools Available to Practitioners

Anyone interested in SEIA and the resources the Review Board has made available can contact:

Alistair MacDonald, Environmental Assessment Officer

amacdonald@mveirb.nt.ca
Ph: (867) 766-7052 Fx: (867) 766-7074

In addition, many documents are stored on the Review Board website at http://www.mveirb.nt.ca/reference_lib/other.php

DAY 2
– *Keynote Address: David Milburn on "The Business of Environmental Assessment"*

Link to presentation: The Business of Environmental Assessment

Introduction

The keynote speaker that opened Day 2 was David Milburn, a Senior Consultant with DPRA Canada/ Terriplan. David retired from the Government of Canada in 2006 after more than 30 years in various positions with the Department of Environment and DIAND. His expertise is water resource management and science issues in Northern Canada. His address, "Some Perspectives on the Business of Environmental Assessment", generated a wealth of discussion in and after the morning plenary.

Main Themes

David took a historical perspective on the evolution of Environmental Assessment (EA), arguing that it has evolved from an art to a science over time, and hinting that perhaps it is or should be evolving further into a business model. He defined a "business model" as "the careful development and execution of plans to achieve pre-determined goals". This focus on using environmental assessment as a planning tool, that treats all citizens as stakeholders in a similar way as corporations treat shareholders, found favour with many practitioners.

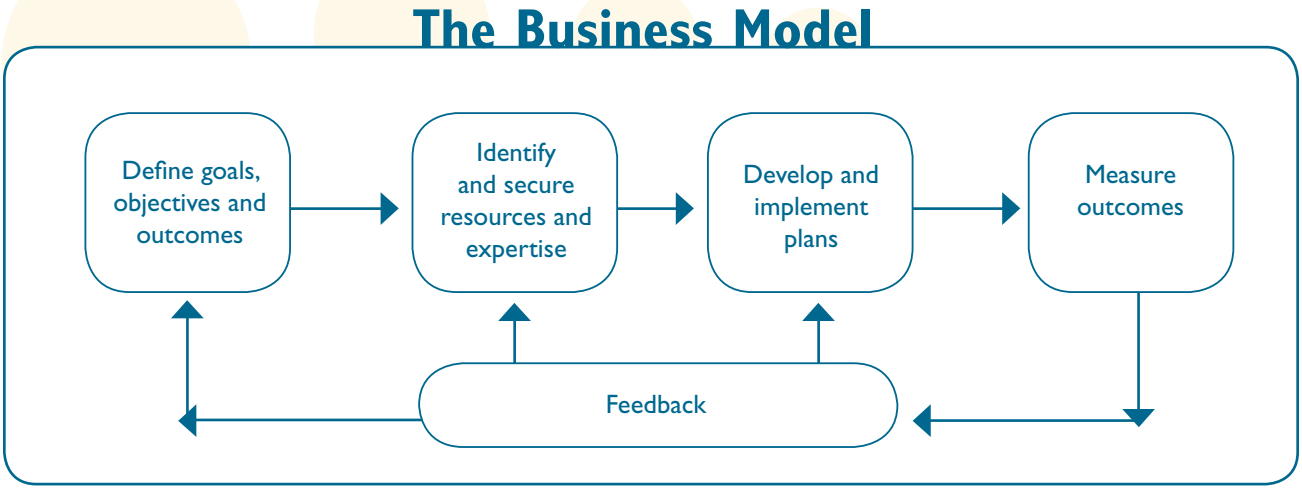
David noted that while the goals behind EA (identifying protective and precautionary measures to avoid undue disturbance of the natural environment by human activities) have been around for hundreds of years, it was only in the 1970s that EA became a tool in law and action. As a practitioner for most of the interim, David was able to give us an overview of changes he has seen:

- Environmental – increasing climate warming and its effects on the relatively fragile NWT ecosystems
- Information – scientific knowledge and input into EA has expanded exponentially, alongside the equally important recognition of traditional knowledge as an input
- Technological – improvements in measurement of change and mitigation treatments
- Industrial – larger and more complex developments and greater public concern about these developments
- Socio-economic – a move from traditional to cash society, and the rise of access benefit agreements between corporations and Aboriginal groups
- Geo-political – the MVRMA and land claims creating new co-management system and governance models

David went on to talk about the elements of a "good" EA, using the "Business Model" as described below. This model uses strong up-front planning and continuous feedback loops to reach an objective. In this case, the objective is to find the best way for a development to have minimal adverse impacts on the environment and still be able to accomplish its business objectives.

Sticking with the theme of the workshop, David identified "doing early work" as key. Especially important is describing the baseline conditions and developing a meaningful, clear and rigorous methodology for identifying and predicting likely impacts. In addition, once impacts are found, he argued that mitigation needs to "be reasonable, use best practices and have a high chance of success".

Toward the end of his talk, David focused on the differing needs of EA versus regulatory processes. The Mackenzie Valley Resource Management Act stipulates that no



regulatory processes can begin until the Environmental Impact Assessment (EIA) process ends. Preliminary Screenings, EAs and Environmental Impact Reviews are the three stages of the integrated EIA process. David noted that the information required in an EA is wider and more conceptual, while subsequent regulatory processes around the issuance of land use permits and water licenses look at very specific, detailed information related to the same issues. In a perfect world, EA should not get bogged down in any specific issues that will be covered by regulators. However, there has not yet been any delineation of the line between the EA and the regulatory sphere and this topic merits further discussion between boards and different levels of government.

A final interesting point in the talk was David's opinion that the amount of information included in EAs has increased exponentially over the past four decades. In the past, the professional judgment of practitioners was the largest input into the process (the aforementioned "art" of EA where decisions needed to be made in the face of vastly imperfect information), whereas nowadays there is a large amount of information available to make better decisions (EA as a science with a heightened level of rigor). David felt this represents an improvement, but argued again that if we want both an efficient and effective EA process, greater planning and early work is required. David feels this can be accomplished if EA is re-envisioned as a business with the shareholders being the residents and communities of the NWT, and our unique lands, waters and wildlife a priority.

Key Issues Identified by Participants

This keynote address got people talking at the tables and asking questions. One particular concern noted by several people was with the use of the term "business" as the proper model for EA. For some audiences, the term can have a connotation of a "money above all things" perspective that is not appropriate for environmental protection, the ultimate priority of EA.

David was very quick to point out that he is not advocating that environmental protection take a back seat to a financial bottom line. He clearly advocated the "Triple Bottom Line" of sustainability – economic development balanced with environmental protection and wide societal acceptance. His point was that the early and strategic planning, goal setting, structured follow-through and continuous feedback model utilized so effectively by businesses to make money could easily be translated into better planning for EA. He stated "Businesses are responsible to their shareholders (in the case of EA, responsible to the public). We can use the mentality of business to get better benefits for people." He also noted that by advocating a move from a "science" to a "business" model, he is not stating that the role of science (or traditional knowledge, for that matter) should be of lesser value; only that science should be a vital input into a more strategic process.

In terms of how public participation fits into this business model, David stated that public participation is essential. It makes good EAs. The client is the public, and furthermore, in the NWT public participation is part of the decision-making process.

In the plenary discussion, participants stated some concerns about how EA is conducted today:

- **Fear of significance:** As one person stated "it is clear that often the defined objectives of [a developer's] EA are to find that there are no adverse impacts", that no developer ever finds significance because they fear the ramifications of this finding. This makes for the perception of a less than sincere EA process on the developers part.
- **Lack of Long-term Monitoring:** Inability (or simply inaction) to measure accuracy of predictions in the long term in the post-EA phase.
- **"Orphan measures":** The lack of responsible authorities taking on "super-added" responsibilities when there is no legal mechanism for measure implementation.

Overall, David Milburn gave us a talk that challenged EIA practitioners to be more strategic, more goal-oriented, and to make sure that our "shareholders" – be they businesses, communities, governments, Aboriginal groups – know that EA is not a regulatory hurdle to be overcome or an adversarial zero sum game. Rather it should be seen as a planning process for sustainable development in which we all have a stake.

Mini-workshop #5
– *Tools for scoping Cumulative Effects Assessment*

Introduction:

Cumulative effects have become a key consideration in environmental assessments in the Mackenzie Valley. At least there hasn't been an assessment in recent times where the term has not been mentioned over and over again. While concern over cumulative effects is now a major driver in the environmental assessment process, agreement on what constitutes good cumulative affects assessment, or what should be included in a cumulative effects assessment, remains elusive. In many ways cumulative effects assessment has been a frustrating exercise.

Martin Haefele, of the MVEIRB, began his presentation by commenting that while cumulative effects is one of the most used terms in environmental impact assessments, it is also one of the most misused and abused terms.

The objectives of this workshop were to

- generate discussion about concepts such as "reasonably foreseeable";
- help participants gain a clearer understanding of how scoping for cumulative effects assessment differs from scoping the direct impacts of a single development; and
- introduce ways of doing cumulative effects environmental assessment through two tools: the matrix and the conceptual model.

Main Themes:

During his presentation, Martin expressed some views about cumulative assessments:

- the valued environmental components for cumulative effects assessment will generally be the same as those for assessing the direct impacts of a single development;
- fundamentally the methods used to predict cumulative effects are the same methods used to predict direct the impacts of a single development;
- scoping is not a one step process but rather an iterative process where the scope generally narrows (and in some cases widens) as more information becomes available;
- an identified impact need not be significant to be considered in cumulative effects assessment (the essence of cumulative effects assessment is to consider effects that by themselves are not significant);
- cumulative effects assessment is not an exact science (uncertainty exists at all levels and particularly with "reasonably foreseeable" future developments, necessitating different levels of detail in the analysis);
- mitigation for cumulative effects can also be "cumulative" and mitigation is not necessarily achieved through the development under assessment; and
- the tools presented in this workshop can be used to scope for cumulative effects of several developments in the same way as they can be used to scope cumulative effects of various components of a single project

Exercises:

Participants were given a matrix with which record the impacts of a past, present, and future developments. See Appendix E for the matrix. To engage with the matrix tool, Martin used the example of the extension of the Mackenzie Highway. One side of the matrix included all of the past, current, and future development related with extending the Mackenzie Highway. The other side of the matrix listed impacts. Participants were instructed to take the potential impacts of the projects and try to determine their interactions and impacts. Tables were invited to have a discussion about the likelihood of the impacts.

Key Issues Identified by Participants

- Participants suggested that socio-economic impacts be included in future cumulative effects matrices.
- The matrix help in identifying projects that would possibly have impacts that interact with the impacts of the highway, but it did not help in deciding which of these projects is reasonably foreseeable.
- Results differed from table to table; overall participants found the exercise rather difficult.
- There was interest in further workshops on this topic (approximately 75%).

Ideas to Build on/ Next Steps

Some tables had difficulty deciphering the matrix and did not know what was expected of them. It appears that while cumulative effects assessment is widely seen as important, it is difficult to understand exactly what cumulative effects are. Participants seemed to have difficulties deciding which impacts would add to each other (and thus be cumulative) and which would not. More work is required to build a common understanding of what cumulative effects are and how cumulative effects assessments should be scoped in the Mackenzie Valley.

Tools Available to Practitioners

- Appendix H of the MVEIRB EIA Guidelines (www.mveirb.nt.ca).
- The Canadian Environmental Impact Assessment Agency's Practitioners and Reference guides (www.ceaa.gc.ca). *(Please note that the MVEIRB interprets certain terms, such as 'reasonably foreseeable' differently than CEAA.)*

Mini-workshop #6
– *"Talking the Talk" Communicating Effectively with Communities*

Link to presentation: Talking the Talk

Introduction

Developers are asked by the Review Board to conduct and report on community engagement activities. However, the challenges of working in a bilingual setting as well as accurately reporting the outcomes of the activities are impeding the success and value of requiring evidence of community engagement. In this session, Renita Schuh of MVEIRB briefly presented on what the Review Board commonly expects from both developers and communities when reporting on community engagement work in development proposals. She then presented the value of using plain language participating in bilingual community meetings. Participants used exercises to become more aware of appropriate ways to use plain language in meetings with interpreters.

Main Themes

In the first part of this workshop, Renita outlined the purpose of documenting community engagement activities in development applications and developer assessment reports. Communities are a necessary information source for conducting and ground truthing traditional knowledge studies and socio-economic impact assessments. Just as the methodology of scientific studies is critiqued for its thoroughness, so is community engagement work. The Review Board is interested in seeing the following information in development applications and developer assessment reports:

- Names of individuals present and their organizations (if any)
- Dates and forms of communications
- Issues raised and if/how they were addressed in the design of the development
- Any outstanding follow-up work to be done

It is important to "ground truth" the minutes and consultation log with the groups involved before reporting back to the Review Board. Ground truthing is sharing the consultation findings with those groups before submitting it to the Review Board to ensure that the findings are accurately reported. You can disagree on the issues, but at least both parties will know the viewpoints are being correctly expressed. On the flip side, after the log is shared with the Review Board, communities and individuals who were involved need to let the Board know if the information is accurately represented.

In the second part of the workshop, Renita provided an overview of how plain language use is vital to working in bilingual community meetings. She highlighted two important considerations to have when working with interpreters.

Interpreters need:

1. Understanding – They have to understand the technical concept as simply as possible so that they can explain it and translate it translate that into their Aboriginal language.
2. Time – Too often interpreters are not given the time to explain the concepts in their language, because the length it takes to describe loaded technical words, does not match the time presenters are taking to explain them.

Participants were asked to relate to one another their experiences of working in bilingual meetings.

Renita then explained that using plain language to convey your message is one of the surest ways of ensuring that it will be translated correctly. Presenters need to take responsibility in the way they are communicating. It's

neither fair nor wise to rely solely on the interpreters to figure out a way to say technical concepts in plain language and then translate the concept into an Aboriginal language. Renita went through some examples of technical concepts and the participants translated them into plain language together. The participants were then referred to a worksheet at their tables, where they were asked to provide an alternative plain language explanation to a list of technical words. (See exercises section)

Renita finished off her presentation with some tips for the participants.

1. Meet with your interpreters to explain what your presentation is about, give your important terms to them to translate before, and work with them on the key messages – this will give them understanding.
2. During your presentation, make sure you are always summarizing key points to allow them to take advantage of your plain language message. Give the definitions after you use jargon – this will give them time.

Exercises

In the first exercise, where participants discussed with one another their experiences with participating in multilingual community meetings, participants were asked:

1. What are some of the language barriers you are experiencing when involved in EIA?
2. Why do you think they were barriers?
3. What can you do to help it? What should others do?

Renita prefaced the discussion with the recognition that it isn't only English terms that do not have good matches in Aboriginal languages; the reverse is true as well. Interpreters often have the difficult job of fairly describing in English what the Elder or community member is saying to the meeting participants. Participants were encouraged to share their experiences in relation to that as well.

The second exercise has participants working together to come up with plain language ways of describing some technical words. They were instructed that "percentages" are not easily described in aboriginal languages, "environment" is best translated by what part of the environment you are focusing on (i.e. land or water) and "development" is most times translated as "big work" or "big job."

Participants were also asked to practice using the plain language descriptions in paragraph format. Here are some suggested ways of describing those words.

1. Baseline conditions:

- **technical definition** – a usually initial set of observations or data about the environment used for comparison or a control *

note: "used for comparison or a control" is extra information that will make the definition harder to translate even though it contributes to understanding of the term. What is important to get across in your presentation? Is it the meaning of the word or the purpose/use of the concept?

- **plain language** – The way the land (or water, or animals, or people) is before the new work happens.

2. Employment rate:

- **technical definition** – the percentage* of working-age people who have jobs.

note: percentage is not translatable…

- **plain language** – The number of people who have jobs.

note: when you start a sentence with How or What, sometimes it can get translated in the form of a question, so be aware of that. (I.e. "How many people have jobs." It could be translated as "How many people have jobs?")

3. Ore Body

- **technical definition** - The parts of a mineral deposit where the ore minerals are concentrated into an economically extractable mass
- **plain language** –The place where the special rocks are in the ground.

4. **Hydrology:**
    - **technical definition** – Science dealing with the properties, distribution, and circulation of water on and below the earth's surface and in the atmosphere.
    - **plain language** – The way the water moves

Key Issues Identified by Participants

Participants identified barriers to working in multilingual settings. They included

- cross cultural communication difficulties,
- difficulties using plain language,
- lack of understanding of how Aboriginal languages function,
- finding the appropriate translators for the topic and the dialect, and
- presentations being too quick and complicated.

It is believed these issues arise from a lack of awareness about the limits and needs of interpreters, the lack of understanding of technical terms by interpreters, lack of cross cultural understanding, timelines and priorities for meetings, a sense that presenters are hiding being jargon and technical concepts as a "comfort zone" to avoid the tough questions.

Some suggestions include speaking more slowly, keep it simple and use graphics, workshops to improve cross cultural understanding, guidance for plain language presentations and "terms and concepts" to avoid, meeting with translators prior to meeting, training for interpreters and presenters.

Ideas to Build on / Next Steps

The majority of respondents had a medium to high interest in more detailed workshops on the topic. Overall, respondents felt plain language training would help communication in the areas of community consultation, working partnerships, and research. Communities, First Nations, management bodies, government, and researchers want to understand the other party's perspectives and messages, and want to communicate their own message more clearly.

A number of suggestions were provided to the Review Board for consideration. Firstly, there were several calls for the Review Board to develop a set of guidelines. This could include tips on using plain language, including a list of words to be avoided and words that are hard to translate. The guidelines could also list a consistent set of plain language terms. These guidelines could be posted online.

Secondly, as commented in the workshop, some people asked for Aboriginal terms to be translated into English. This could increase communication, change the power dynamic, assist research, and help technical specialists understand the difficulty of working with translated concepts. This would include cross cultural awareness training to improve the understanding of those presenting in the community about the language, culture and values that people are trying to communicate in their own Aboriginal language as well.

Thirdly, there was high interest in having more plain language use workshops. Some people suggested specific workshop topics related to plain language and suggested specific participants.

Lastly, many suggested the Review Board act as a role model by using plain language in all of its processes and encouraging others to use plain language.

Tools Available to Practitioners

The NWT Literacy Council has a number of tools and references for participants if they wish to learn more about plain language use http://www.nwt.literacy.ca/plainlng/resourc.htm

Some useful tools from the Literacy Council:

Write for Your Reader

- An easy-to-use 'how to' manual for people who write or edit reports, memos, minutes, brochures, or other documents.
- Step-by-step.
- Before and after writing samples.
- Collection of alternate words and phrases.
- Summary checklist of plain language guidelines.

Plain Language Audit Tool

- Uses a checklist to tell you which plain language guidelines are present and which are absent in your documents.
- Readability tests to tell you the grade reading level a person should have to read, understand, and use the information in your document(s).

Mini-workshop #7
– *Mineral & Petroleum Rights Issuance on Crown Subsurface Lands in the NWT*

Link to presentation: Mineral and Petroleum Rights

Introduction:

Carolyn Relf is the Director of INAC's Minerals & Petroleum Resources in the NWT Regional Office. She made a presentation to summarize the way INAC administers mineral and petroleum rights on Crown subsurface lands in the NWT. She contrasted the two administration regimes to demonstrate their impacts on early consultation and the negotiation of benefits.

Main Themes:

INAC regulates three types of mineral interests.

1. **Prospecting Permits** do not confer mineral rights. Usually the exploration that is done on a prospecting permit is below the threshold for land use permits.
2. **Mineral Claims** confer mineral rights to the claim owner. They must stake their claim on the ground. More investment/acre/year is required than on a prospecting permit. After 10 years a claim must convert to a mineral lease.
3. **Mineral Leases** allow mining to happen on the land. Mineral leases require a survey of the land to be done and require more investment than a mineral claim.

Petroleum tenure on Crown land is governed by the *Canada Petroleum Resources Act*. This act also sets the amount of royalties and outlines the collection of royalties. All types of petroleum licenses confer the exclusive right to explore and drill for petroleum and develop lands for production. There are three types of petroleum dispositions.

1. **Exploration licenses** are secured through a bidding process; the highest bidder receives the license. When a parcel is put up for bid, all relevant authorities are notified. An exploration license is valid for a maximum term of 9 years.
2. **Significant discovery licenses** have an indefinite term. These licenses result from a significant discovery being declared to the National Energy Board.
3. **Production licenses** confer title to the petroleum produced. Royalties apply to this petroleum. A production license has a 25 year term. This term is automatically renewed if commercial petroleum production is underway.

Carolyn's presentation clearly showed the difference between the free entry system that applies to mineral rights and the government-controlled development of oil and gas. Mineral rights are issued to the first applicant whereas petroleum rights are issued to the highest bid. The Crown and First Nations can manage the pace of land acquisition, exploration and development of petroleum resources. Since governments control petroleum development, benefits are negotiated early in the process. In contrast, industry controls the pace of mineral development and subsequent consultation is not conducted until the development is part of the regulatory process.

Carolyn justified the differences between the regimes by stating that both regimes are similar to their counterparts nationally and internationally. Furthermore, minerals and petroleum have different scales of exploration and development, different magnitudes of investments, different infrastructure requirements, and different timelines. Most notably, the exploration phase of

mineral and petroleum developments contrast. Mineral exploration has a smaller camp size, has less impact on the land, costs less, and requires less infrastructure than petroleum exploration.

Key Issues Identified by Participants

Participants were not satisfied with the explanation of why INAC does not control access to minerals in the same way it controls access to oil and gas.

Ideas to Build on/ Next Steps

Throughout the conference, and especially at this session, participants raised concerns about prospecting permits and the free-entry system of mineral claims. Prospecting licenses are often below the threshold of the land use permit. This means little "early work" is happening. Furthermore, prospecting is now often done through other means than people on the ground. This can be upsetting for citizens who do not expect alternate forms of prospecting.

1. Again on the topic of prospector permits… Caribou management boards provide government information about caribou calving grounds. This information is not being relayed to prospectors. When land use plans are developed, mineral claimants are shocked to find that they are on caribou calving grounds. This communication breakdown must be addressed.
2. Regulatory reform of prospecting licensing would have to come from Ottawa. That is not happening. Our legislation is currently out of synch with the case law *(Taku River Tlingit, Haida River)* and signed Interim Measures Agreements. Until the legislation is re-worked by Ottawa, INAC is trying communicate and act closely with communities. It has been going well in the Akaitcho, but less so in the Dehcho. It is not a good process, but it is a process for now. Regulatory reform is needed.

Four other issues were identified:

3. First Nations are not being given enough time to respond to notifications by INAC. According to Ms. Relf the notification feedback loop will be extended in the near future.
4. The GNWT and INAC need to coordinate who the Crown is in different situations.
5. The Department of INAC has responsibilities under SARA and needs to develop a better process on how these responsibilities are considered in the issuance of surface and subsurface rights.
6. Minerals and hydrocarbons are difficult to manage, or co-manage in the case of settled land claims, because there is not a good inventory of minerals and hydrocarbons in the NWT.

Mini-workshop #8
– *The International Association for Impact Assessment, Western and Northern Canada Affiliate- What is it, and why should you care?*

Link to presentation: Western and Northern Canada IAIA Affiliate

Introduction:

In this information session, Ginger Gibson and Alan Ehrlich familiarized participants with the fine work of the Western and Northern Affiliate of the International Association for Impact Assessment (IAIA WNC). The following summarizes the presentation:

Main Themes:

The International Association for Impact Assessment is the only multi-disciplinary international organization for impact assessment professionals. Its Western and Northern Canada (WNC) affiliate is a dynamic professional association providing a range of EIA-related activities including guest speakers, local conferences, newsletters, networking opportunities and much more. All of this is done to support the continuing improvement of the professional practice of impact assessment.

Membership in the WNC affiliate is a diverse mix of professionals from government, consultants, NGOs, industry, and First Nations. The affiliate focuses on predicting, evaluating, managing and monitoring the impacts of human activities on ecosystems and people, in order to improve decision making about economic developments. Northern and Western Canada is home to many cutting edge practices in impact assessment. IAIA WNC makes it easier than ever to learn from the experiences of others in the region. Ginger and Alan provided participants with a look at what this organization is, what it does in the North, and what it can offer participants professionally involved with impact assessment.

Tools Available to Practitioners

IAIA's website, http://www.iaia.org/, provides reference materials and can guide practitioners to training opportunities, conferences, and activities.

Mini-workshop #9
– *Incorporating Climate Change Considerations in Environmental Assessment*

Link to presentation: Climate Change and Enviromental Impact Assessment

Introduction:

Climate change is arguably the most pressing environmental issue that the earth faces. The issue, after years of being the fixation of the environmental community, has recently broken into the mainstream through a number of well-publicized efforts, such as the surprising popularity of the documentary, *"An Inconvienent Truth"*. Efforts to incorporate climate change considerations into environmental impact assessment (EIA) is relatively recent compared to more established aspects of EIA, but there is a growing knowledge base on the subject. The organizers of the EIA Practitioners' Workshop were of the opinion that the topic of climate change was deserving of attention given its importance, particularly to the north, which is predicted to be disproportionately affected by the phenomenon.

In her introductory comments, Zainab Moghal (Environmental Planner, Gartner Lee Ltd.) described the presentation as being a combination of both theory and practice as it related to dealing with climate change for EIAs in the Mackenzie Valley. The first section of the presentation was intended to give participants a contextual overview of the issue, particularly how the Northwest Territories fits into the overall climate change scenario. This section was also to provide an overview of the two principal climate change themes; *Greenhouse Gas* considerations and *Impact* considerations.

The second section of the presentation was to deal specifically with the case of the Ekati diamond mine, a development which, although well past the EIA stage, is conducting a major energy efficiency and renewable energy program leading to substantial reductions in greenhouse gas emissions.

Main Themes:

Section 1 – Climate Change and Environmental Impact Assessment – Perspectives from the Mackenzie Valley and Beyond

Patrick Duxbury of the MVEIRB presented the first section of the presentation. As a means of introduction he provided the audience with a selection of recent Canadian news headlines and political cartoons regarding climate change. He expressed the view that the response to climate change will be a fundamental societal shift. The greenhouse gas world will require a change in consciousness that in turn will change the way environmental impact assessments are conducted.

Some slides regarding the northern context were shown. Patrick pointed out that while the Canadian north is a small polluter relative to the rest of Canada, NWT residents on a per capita basis are big greenhouse gas polluters. This is likely to increase with the ever-increasing industrialization of the north. He also noted that climate change is predicted to affect northern landscapes and northern people is a disproportionate manner.

How might the greenhouse gas contributions from a development be addressed in an EIA? The Yellowknife Gold Project Terms of Reference were offered as an example of how the MVEIRB has requested information of a developer regarding greenhouse gas considerations. Challenges to incorporating greenhouse gas considerations in EIA were discussed, including the issue of *significance determination*, as well as the lack of regulatory or legislative frameworks. The opportunities available to the MVEIRB to consider greenhouse gas emissions in EIA through the powers granted to it under the Mackenzie Valley Resource Management Act were discussed. The application of the precautionary principle

in EIA was cited as a tool that should guide practitioners when dealing with greenhouse gas considerations during the review of projects.

The manner in which climate change may impact a development and the role of EIA in dealing with such an impact was discussed. Patrick stated that EIA is a tool that can help practitioners plan developments that are more resilient to impacts related to climate change. As such, good EIAs can reduce the potential risks to people and the environment. The Terms of Reference for the Mackenzie Gas Project were cited as an example of a development where potential impacts due to climate change were required to be considered. The challenges of realistically predicting potential future risks with modeling tools was mentioned, as well as the need to tie impact risks to the lifespan of a development, including reclamation and post-closure.

Patrick finished the section by asking the audience if the north's vulnerability to climate change obliged EIA practitioners to deal more assertively deal. He asked what tools could be used to ensure that climate change considerations are taken into account.

Section 2 – Energy Smart Program – An Example of Energy Efficiency at the EKATI Diamond Mine

Link to presentation: Energy Smart Program

Brent Murphy is Chief Environment Officer-Operations at the Ekati Diamond Mine. He made a presentation about the Ekati Mine's effort to become a more energy efficient operation. He noted that these efforts stem from BHP Billiton's Charter and Sustainable Development Policy.

Brent reported that the Energy Smart Program has been very successful at reducing the amount of fuel expended in electricity generation. Since 2002, three million litres of diesel fuel have been saved. These savings have come from a variety of initiatives including the installation of motion light sensors, replacement of computer monitors with efficient LED models and changes in shower heads and toilets. More recently, Ekati has retrofitted its power house to provide energy more efficiently, as well as to also provide space heating through co-generation. The results to date have been very encouraging and major fuel savings have occurred.

Brent discussed a no-idling program that Ekati has implemented to reduce fuel consumption in its small vehicle fleet. The results have indicated significant reductions in fuel consumption for the winter of 2006-2007.

The development of wind power was the final aspect discussed by Brent Murphy related to the Energy Smart Program. He described the reasons why wind power is being considered by the mine, which included increasing fuel costs and the desire to reduce greenhouse gases. Ekati has been conducting baseline research on wind patterns around the mine site and attempting to determine what areas would be suitable for an installation site. The wind turbines are expected to be constructed in the summer of 2008.

Key Issues Identified by Participants

On Section 1

The following points were made in response to the question posed about need for northern EIA to respond more assertively to climate change considerations:

- Climate change was acknowledged as a long term issue. It was noted that for the Sahtu Land and Water Board questions about greenhouse gas emissions are part of the preliminary screening form, however there are no legislations, regulations or standards that would compel a land and water board to consider any mitigation. It was expressed that the hands of the land and water boards are tied; despite identification of the issue, there is never a solution.
- A case regarding the capping of drilling sumps in clay was cited. The regulations states that such sumps are required to be capped with one metre of clay as per regulation. However it was noted that seventy years later the cap will be gone because of the growth of trees. It was expressed that there are serious issues about relying on permafrost to

contain sumps and that regulators must look at soil material and its capability to contain sumps without relying on permafrost. It was stated that decision-makers must look long enough ahead into the future and consider the possibility of having no permafrost.

- An audience member stated that the MVEIRB was established for a reason, which is to examine things that are important to northerners, not just things that are regulated. MVEIRB work on social impact issues was is an example where MVEIRB has weighed in on an unregulated area. Many years ago, no one conducted cumulative effects assessment, but it now has become important. The speaker concluded by saying that given the importance of climate change to northerners, the answer to the question is probably yes.
- A participant stated that it is probably a little early to say yes and that it was first needed to better understand climate change.

In response to the question posed regarding challenges and opportunities, the following comment was made:

- It was noted that long term monitoring is a constraint and that there is a challenge to monitor things long enough to verify 100-year predictions. It was stated that the solution to this is probably not on a project by project basis.

A final comment was made that some northerners will benefit from greenhouse gas intensive development. However there are others who will not.

On Section 2

Brent Murphy responded to a number of questions as cited here:

Comment – It was noted that Ekati has set a good example but the reductions do not really achieve the goal of zero harm.

Response – Ekati Mine aspires to zero harm, but realistically the mining industry cannot easily do that. There are technical issues with using wind power as the sole or main source as it is not reliable enough to provide the base load of power required for the mine.

Question – Has BHP considered the use of solar power?

Reponse – It was noted that solar energy would require a huge battery bank; wind power fits well into the existing grid and complements peak demands.

Question – Does the Ekati mine extended its sustainability philosophy to its suppliers? Is the company's philosophy unique or is it widespread in mining sector?

Response – BHP Billiton has strong social responsibility and there is much greater emphasis today in the mining industry regarding corporate social responsibility. BHP brings forward its policies in discussions with suppliers.

Question – What would happen to the wind generators following mine closure, and is there another use planned for them?

Response – The current reclamation plan is to dismantle all infrastructure and move it back south; there is no specific plan related to the wind mills, but it will be re-evaluated.

Question – Why are trucks used for local transportation instead of smaller vehicles?

Response – Trucks are used because the mine health and safety act and the mine requires the use of sturdy vehicles. Ekati is evaluating fuel additives for cleaner burning.

Ideas to Build on/ Next Steps:

A minority of participants indicated that they were interested in workshop sessions dedicated to climate change considerations in northern EIA. However one participant suggested that the development of written guidance documentation might be useful.

Resources Available to Practitioners:

Canadian Environmental Assessment Agency, 2003. Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners. Located at http://www.ceaa.gc.ca/012/014/index_e.htm

Government of the United Kingdom, 2006. Stern Review on the Economics of Climate Change. Located at: http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm

Arctic Council and the International Arctic Science Committee, 2004. Impacts of a Warming Arctic: Arctic Climate Impact Assessment. Located at: http://www.acia.uaf.edu/pages/overview.html

Mini-workshop #10
– *Heritage Resources in the Environmental Assessment Process*

Link to presentation: Heritage Resources in the EA Process

"What are the effects of a development on people's ability to engage with the important places in their cultural landscapes?"

Introduction:

Glen Mackay described how NWT Cultural Places Program at the Prince of Wales Northern Heritage Centre (PWNHC) manages heritage resources through the land use permitting and environmental assessment processes. Leon Andrew, an Elder from Tulita who has participated in several traditional knowledge projects related to development in the Sahtu Settlement Area, made a brief presentation. Both presentations were followed by a table discussion.

The NWT Cultural Places Program at the Prince of Wales Northern Heritage Centre is responsible for managing heritage resources in the land use permitting and environmental assessment processes of the NWT. The program also issues permits to archeologists to ensure that archeological research is conducted according to high standards.

The PWNHC uses the following definitions from the *NWT Territories Archaeological Sites Regulations* to manage heritage resources in both the land permitting and the environmental impact review processes.

- "Archaeological site" means a site where an archaeological artifact is found.
- "Archaeological artifact" means any tangible evidence of human activity that is more that 50 years old, in respect of which an unbroken chain of possession cannot be demonstrated.

Archaeological sites are recorded by qualified archaeologists holding a valid NWT Archaeologist's Permit. The PWNHC maintains a database of archaeological sites recorded in the NWT, which has approximately 6,000 entries.

Main Themes:

The PWNHC reviews land use permits at the preliminary screening stage. The environmental assessment provides another forum for heritage management. In both cases, the PWNHC may recommend conditions for the land use permit.

The PWNHC uses the following standard heritage management tools in their recommendations to both land and water boards, and environmental assessment boards.

- If there are recorded archeological sites in the area, the PWNHC often recommends that proponents obtain the locations of the archeological sites by accessing the NWT Archaeological Sites Database (via a license agreement). The PWNHC requests that proponents avoid archeological sites by 100m.
- The PWNHC often recommends that proponents conduct a heritage resource impact assessment prior to project construction. This involves hiring an archaeologist to inspect the development area and identify any heritage resources. This archeologist must first obtain an NWT Archeologist's Permit.
- The PWNHC may recommend measures to mitigate potential impacts on for heritage resources. The two most common are
  - The proponent is asked to realign the project to avoid the heritage resource
  - Requiring an archeologist to recover data from the site prior to development disturbance.
- In rare cases, the PWNHC recommends a follow-up effects monitoring program. Typically, this allows

a development project to proceed in the winter but the proponent must hire an archaeologist to inspect areas of development disturbance in the following summer. This approach is not ideal because heritage resources assessed by the archaeologist may already be disturbed.

Management decisions are difficult in the NWT because few heritage sites are recorded. The PWNHC estimates that less than 1% of heritage resources are documented in their database. Traditional knowledge experts in the various regions of the NWT have expertise about the heritage resources present on the land. Heritage resources are best managed when both archeological and traditional knowledge experts are consulted. The PWNHC takes into account knowledge from

- Publicly available traditional knowledge,
- The NWT Archeological Sites Database, and
- Archeologists' expertise (for example to highlight distribution patterns, i.e. what geographic features are likely to embrace archeological sites).

The PWNHC has the following expectations of other parties in the environmental assessment and land-use permitting process:

- **Boards** – If recommendations from the communities conflict with recommendations from the PWNHC, the PWNHC recommends that the board inform both parties of the conflict so that the best management approach can be discussed.
- **Boards** – Boards should compile traditional knowledge information and review comments from the PWNHC to make sure that heritage resources are being managed consistently.
- **Developers** – Do early work! Consider heritage resources early in the planning stages. Archeological fieldwork can only be done in the summer.
- **Developers** – Do early work! In consultation with the PWNHC and communities, developers can identify heritage resources, and avoid them in their project design before the permitting process has even begun. Avoiding heritage resources is the best option for the resources and it is less costly than the alternative of excavating an archeological site. Incorporating diversions in the preliminary design saves time and effort.
- **Aboriginal organizations and communities** – Inform developers and boards of heritage resources and culturally significant areas in development areas. This information might be incorporated in
  - a traditional knowledge study conducted by the proponent
  - in consultation meetings between the proponent and the community,
  - or as review comments submitted by the community to a board.

In the land use permitting and environmental assessment processes the PWNHC's recommendations are limited by the definition of an archeological site in the NWT *Archaeological Sites Regulations*. The term "cultural place", as opposed to archeological site, encompasses significant cultural places where there is often no material evidence of its use. In contrast to the land-use permitting process, the MVRMA states that environmental assessments must examine the cultural environment. The environmental assessment process is therefore able to consider cultural places in the assessment of the cultural environment and is not confined by the requirement for material evidence.

Exercises:

Participants were given two discussion topics:

1. Discuss approaches to ensure that both traditional knowledge and archeological perspectives inform management decisions related to heritage resources in the land use permitting and environmental assessment process.
2. What are the key obstacles for "doing early work" on heritage resources in the land use permitting and environmental assessment processes?

Participants felt that it is important that good, community-based, TK research is done before development and land use planning. Increased money and capacity should be available to First Nations and community groups

who need and want to research heritage resources. Respondents also suggested that the PWNHC continue to be a source of information for both industry and communities and that the PWNHC should enhance these roles. Respondents stressed the need for early consultation and clear communication between industry, communities, and the PWNHC.

Participants identified the following key obstacles:

- Lack of knowledge/information.
- Low capacity of First Nations and of environmental assessment staff to conduct traditional knowledge studies. This also includes a lack of time to conduct research.
- Funding for research and studies.
- Many forms of poor communication ex. Awareness about development is not wide-spread enough, consultation fatigue means little community input, site-specific focus looses regional perspective.

Key Issues Identified by Participants

Prospecting activities are below the threshold of the review boards, and so the chain of communication that identifies heritage resources may break down.

Given the high interest about prospecting licenses at the workshop, it is important to note that Glen commented that the PWNHC does review prospecting permits. However, other non-MVRMA activities may not go through the PWNHC.

Ideas to Build on/ Next Steps

During table discussions, many groups raised concerns about the ability of the PWNHC and regulatory boards to keep knowledge confidential. The PWNHC and MVEIRB have strategies to protect the confidential nature of some traditional knowledge. These strategies need to be more clearly communicated to environmental assessment practitioners.

Glen identified the need to develop approaches for assessing what effects a project will have on people's ability to engage with the important places in their landscape. For example, if the habitat of a caribou population is affected by a development project, will Aboriginal hunters, if they so choose, still be able to engage with significant places while practicing a traditional economy.

Tools Available to Practitioners

The Prince of Wales Northern Heritage Centre has many programs and resources to help communities document cultural places. Contact the NWT Cultural Places Program

http://www.pwnhc.ca/programs/nwtcpp.html

Of special interest is a manual that will soon be released:

Living With the Land: A manual for Documenting Cultural Landscapes in the Northwest Territories

This a manual for documenting cultural landscapes in the Northwest Territories for use by communities and other organizations. It provides plenty of techniques and practical advice for documenting cultural values in the landscape, information which can be used by communities in the environmental assessment process.

Mini-workshop #11
– *Creating Credibility: Using Development Scenarios to Better Assess Difficult to Predict Outcomes*

Link to presentation: Development Scenarios and Prediction of Outcomes

Introduction:

Ellen Francis began her talk about development scenarios by identifying a problem. Over the past 30 years that environmental assessments have been in use in Canada, environmental assessments have not adequately addressed the impacts of proposed development. As a result, there have been some unacceptable environmental consequences. When issues or potential impacts are difficult to predict, quantify, or qualify they are currently left outside of the assessment process or oversimplified, so as to effectively rate their impact as zero. Ellen suggested that development scenarios are a tool that should be adopted in EIAs to include and assess these impacts. Throughout her talk, Ellen used the Mackenzie Gas Project as an illustrative example.

Main Themes:

Decision-making forums need to incorporate development scenarios. At the MGP hearing there are many calls for the hearings to look at cumulative impacts. The process is focused on the project only, rather than the impacts of the development of proven and unproven reserves that will follow the MGP. Currently, even if there was a forum to use development scenarios, there are not the human resources to use the forum.

Development scenarios should use existing information and historical precedent. Looking at examples of oil development on Alaska's North Slope can shed light on how development is likely to occur. There is a sequence of activities that can be drawn from precedent. E.g. As new reserves are found, the initial pipeline and gathering systems are extended and expanded.

Use multiple development scenarios. Development scenarios are created by using valued indicators. Overlap maps that illustrate different valued components. Use multiple maps for multiple scenarios.

There is a fear about displaying scenarios, especially extreme scenarios. All sides of the development are politically and economically afraid of showing an unsavoury scenario. Ellen suggests that despite these fears, we must use development scenarios to make better decisions. A scary scenario will not always result in a rejection of the development. Using scenarios may result in project not being approved, or it may approved with a range of measures to mitigate potential impacts, or a development may be approved in phases.

An noteworthy incident happened during the question and answer period. An audience member suggested that development scenarios were better used in land use planning activities rather than in the regulation of projects. Ellen Francis asked the audience how many people thought that the MGP would not incite further activity. No one raised their hand. The point was that we are only looking at the MGP as a stand-alone project while it is generally believed that several developments will occur.

Exercises:

Workshop participants were asked to draw their responses to the following questions:

- Possible Futures: *What may happen?* (from your own perspective)
- Probable Futures: *What is most likely to happen?* (from the perspective of caribou)

- Preferable Futures: *What would you prefer to happen?* (depending on the participant's real-life role, he/she was asked to answer this question from a different perspective of industry, community, or government.)

Participants predicted changes in the territories' demographics, community locations, governance structure, climate, and wildlife.

Ideas to Build on/ Next Steps

Incorporate development scenarios into the decision-making processes.

Tools Available to Practitioners

Ellen presented the study *A Peak into the Future: Potential Landscape Impacts of Gas Development in Northern Canada* as an example of development scenarios. The study was carried out by the Pembina Insitute for the Canadian Arctic Resources Committee and the Canadian Parks and Wilderness Society, Yukon and NWT Chapters. It examined the potential footprint that could result from the development of proven and unproven reserves in three study areas in the NWT and the Yukon . The study used ALCES, a software tool that can be used to track the ecological footprint of development over time. The development scenarios are not predictive models. They use a combination of typical gas production patterns and proposed gas development figures. These scenarios cast a picture of what gas development could look like using conservative estimates of reserve size and the land disturbance required. Scenarios were also created to show how the development footprint could be reduced if a series of best practices were introduced

Available: http://www.pembina.org/pubs/pub.php?id=183

Mini-workshop #12
– *Time for an Overhaul? A Critical Look at Screening Forms in the Mackenzie Valley*

Link to presentations: Screening Forms in the Mackenzie Valley
Preliminary Screening for NIRB

Introduction

A generic series of questions are typically asked during preliminary screening in the Mackenzie Valley. For several years, these have been largely unchanged. This session, facilitated by Alan Ehrlich, attempted to draw together the collective wisdom of those involved in preliminary screening to consider revamping preliminary screening forms. The Nunavut Impact Review Board, which conducts screening, has revolutionized its approach to screening by designing sets of questions that are tailored to the specific type of development proposed. Guest star Carolanne Inglis-McQuay provided participants with an inside look at the innovations that the Nunavut Impact Review Board has made to its screening questions. This session then explored the merits of adopting a similar approach in the Mackenzie Valley.

Main Themes

Alan's presentation familiarized participants with preliminary screening, its purpose (to function as an early trip wire to determine whether an environmental assessment is required) and its legal foundation (s124 and s125 of the *Mackenzie Valley Resource Management Act*).

To provide background information, the presentation also elaborated on the following topics: Screenings are conducted by land and water boards and others, and not by the Review Board. However, *the Review Board is still involved*, because it is responsible for issuing guidelines regarding the form and content of screenings. Also, the Review Board may conduct an environmental assessment on a proposed development even if screeners determine that one is not necessary.

Alan's presentation then reflected on the form currently used for screening. The same form is used for screening all different types of development. It has gone without substantial change over at least six years, even though screeners have a growing body of experience over that time. The knowledge of screeners has developed over that time as well. Any new approaches have not been captured in the screening form. Also, new considerations, such as socio-economic expectations, have arisen, but have not been incorporated into the form.

To help workshop participants consider new approaches, Carolanne Inglis-McQuay delivered a presentation on the recently redesigned screening forms of the Nunavut Impact Review Board (NIRB). Carolanne provided a background on NIRB and its role in screening. She described in some detail the tools available to NIRB in conducting screenings, focusing on the project-specific information requirements. These are tailored to specific types of projects (e.g. all weather roads, mines, etc…), and gather information including:

- Project details
- Environmental baseline conditions
- Identification of project impacts (using a detailed impact matrix)
- Mitigation of impacts

Carolanne stated that the forms have helped in many ways, giving NIRB staff a better understanding of the project, reducing project splitting, and offering better understanding of project scope. Some challenges NIRB has experienced involve tight time limits, possible duplications in multiple forms, and a lack of socio-economic consideration in the form. NIRB is tackling some of these problems by amalgamating the forms into one guidance document, and building in more socio-economic assessment material into the form.

Exercises

Participants were divided into four small working groups, and asked to discuss among themselves the following six questions:

1. Any outstanding observations about the current screening form?
2. What features work well?
3. What should be changed?
4. Would a NIRB-style approach be useful here?
5. If yes, what kinds of adaptations are needed for the Mackenzie Valley?
6. Who should participate in the revisions, and how?

It was raised by a participant that these questions would also be well-applied to the application forms on which the screening forms are based, because the applications define the bulk of information available to screeners.

Groups were given approximately fifteen minutes to consider these questions, and one reporter from each table shared selected highlights of the small group conversations.

Key Issued Identified By Participants

Participants commented that the current preliminary screening form is simple and easy to use while providing a fairly comprehensive list of impacts and the foundation for socio-economic assessments. However, participants also believe that the current preliminary screening form

- Is outdated and is too simple
- Does not ask the right questions about socio-economic impacts.
- Misses information about Species at Risk.
- Could be updated as an online form with drop-downs for standard impacts and/or mitigation
- Have confusing terminology (e.g. "rental house" as an economic impact)
- Have some duplication between principle activities and principle development components sections
- Does not provide an adequate opportunity to identify projects that cross boundaries, either within the Mackenzie Valley or beyond, and to identify potential transboundary impacts

Some participants felt that the NIRB approach holds value for the Mackenzie Valley, and that their approach should be explored in further discussion. Participants cautioned that the different regulatory environment of the Mackenzie Valley must be considered before adopting NIRB's approach. Some participants felt the NIRB approach would be good to use the type of information we need, especially in tailoring application forms.

Ideas to Build On and Next Steps

There was a consensus in the room that directing efforts at fixing the application forms that provide the basis for screening would be a necessary first step before attempting to improve the screening forms.

- Similar questions should be raised about the application form.
- Government and communities should be involved in determining what is required for better application forms.
- Revisions are required to both application and screening forms, with a regulatory board, such as a land and water board, leading the effort and the Review Board providing oversight review.
- The group conducting the revisions should include a representative from the Akaitcho Screening Board.
- If there are any improvements to be made, all the different boards should be involved, to maintain consistency within the Mackenzie Valley.
- All people involved in preliminary screening need to be engaged in any changes.
- The Review Board's Socio-Economic Impact Assessment Guidelines offer alternatives to the existing screening and application forms for the social, economic and cultural issues. (Appendix F (matrix) and the checklist in Table 6 on page 25) These could be useful when the application forms or screening forms are revised.

Tools Available to Practitioners

Examples of the NIRB application forms used for screening are available online at:

http://ftp.nunavut.ca/nirb/NIRB_ADMINISTRATION/NIRB_PSIR_(Project_Specific_Information_Requirements)/

The MVEIRB *Environmental Impact Assessment Guidelines*, Section 2: Preliminary Screening (pp8-21) describes how to undertake preliminary screening, and provides guidance on the test involved. http://mveirb.nt.ca/documents/guidelines/MVE_EIA%20Guidelines.pdf

The MVEIRB *Socio-Economic Assessment Guidelines* provide an impact matrix (Appendix F) and an impact checklist (Table 6 ,p.25) that may be useful in providing SEIA considerations in screening. Appendix F is online at: http://mveirb.nt.ca/documents/guidelines/SEIA_Guidelines_Glossary_and_Appendices.pdf and Table 6 is at http://mveirb.nt.ca/documents/guidelines/SEIA_Guidelines_Chapter_3.pdf

The MVLWB has application forms online at http://www.mvlwb.com/html/appforms.htm

Appendix A: Workshop Agenda

EIA Practitioner's Workshop, 2007 : The D.E.W. (Do Early Work) Line for EIA
Day One – February 27 2007
Katimavik Rooms, Explorer Hotel

Time	Topic	Presenter(s)
8:15 – 9:00 am	**REGISTRATION**	
9:00 – 9:30am	**Introduction to the Workshop**	
	• Prayer & Welcome	**Mary Tapsell**
	• Opening Remarks	**Gabrielle Mackenzie-Scott**
	• Overview of Workshop	**Mary Tapsell**
	• Summary of last year's workshop	**Alistair MacDonald**
9:30 – 10:30 am	**Early Engagement – What Does It Mean To You?** Scenario description Join Trudy and her guests in this "panel talk show" where they will explore the many differing viewpoints and expectations various parties have regarding early engagement.	**Mary Tapsell** Talk Show Host: **Trudy Samuel** Panelists: **Heidi Klein** **Charlie Catholique** **George Govier** **Grant Pryznyk**
10:30 – 10:45 am	**REFRESHMENTS AND STRETCH**	
10:45 – 11:00 am	**Additional dialogue and questions**	**All**
11:00 – 11:30 am	**Table talk and discussions**	**All**
11:30 – 11:45 am	**Reporting back to larger group**	**All**
11:45 – 1:00 pm	**LUNCH (PROVIDED)**	
1:00 – 2:15 pm	**CONCURRENT WORKSHOPS**	
	KAT B: How the Federal Species at Risk Act Affects Project Review Under the MVRMA: Roles and Responsibilities Join this workshop for a discussion on the project review requirements of the federal *Species at Risk Act (SARA)*. In particular, discussions will focus on how SARA interacts with the MVRMA and how this affects roles and responsibilities of various parties involved with an EIA.	**Myra Robertson** **Vanessa Charlwood** **Karin Clark**

Time	Topic	Presenter(s)
1:00 – 2:15 pm	**KAT C: Cumulative Effects in the NWT – who is in charge and where are the limits? Case study: Cumulative Environmental Management Association – Alberta's Wood Buffalo (oil sands) region** This presentation will provide a brief overview of CEMA in Alberta as a case study to inform northern decision makers. A workshop to discuss how cumulative effects management could be best tackled in the NWT will follow.	Ellen Francis
2:15 – 2:30 pm	**GET UP AND WALK ABOUT**	
2:30 – 3:45 pm	**CONCURRENT WORKSHOPS**	
	KAT B: What is Section 35 Crown Consultation and what does it mean for you? This workshop will provide an overview of how Indian and Northern Affairs Canada has reacted to recent court challenges about Section 35 requirements and provide insight on how consultation during the Environmental Assessment process can play a part in fulfilling the Crown's duty to consult.	Julie Jackson
	KAT C: How Much is Enough?: Determining the Appropriate Level of SEIA Join Alistair in the "roll out" the MVEIRB's newly released *Socio-economic Impact Assessment (SEIA)* Guidelines and also , discuss one of the more complex issues – How to determine the appropriate level of SEIA for a development proposal.	Alistair MacDonald
3:45 pm	**End of the day** – local discussions and networking opportunities	All
4:00 – 6:00pm	**Mix & Mingle** – a great opportunity to meet new contacts, exchange ideas and business cards…	All

EIA Practitioner's Workshop, 2007 : The D.E.W. (Do Early Work) Line for EIA

Day Two – February 28, 2007

Katimavik Rooms B & C, Explorer Hotel

Time	Topic	Presenter(s)
8:30 am	**FILL UP YOUR MUG AND FIND A SEAT!!**	
8:45 – 9:00 am	**Summary of interesting points brought forward on Day 1**	Mary Tapsell
9:00 – 9:45 am	**Keynote Speaker: The Business of Environmental Assessment** Environmental Assessment (EA) is in a constant state of evolution. In its formative years, it was viewed as an art while over time, it has been suggested it is a science. In today's operating environment, perhaps EA should be seen as a business; that is, the careful development and execution of plans to achieve pre-determined goals. By adopting a "business model" for EA, the process could be more efficient and manageable, and more importantly, successful from the viewpoint of everyone involved. Presentation topics will include the evolution of EA over the last 35 years, a business model for EA, and differences between EA and regulatory processes.	David Milburn
9:45 – 10:00 am	**STEP OUTSIDE & GET A BREATH OF FRESH AIR**	
10:00 – 11:15 am	**CONCURRENT WORKSHOPS** **KAT B: Talking the Talk – How to communicate effectively with communities** Renita will facilitate discussions with participants on how to be aware of language use and presentation styles when participating in bilingual community meetings. Renita Schuh will also present and hold a discussion on what the Review Board commonly expects from both developers and communities when reporting on community engagement work in applications.	Renita Schuh

Time	Topic	Presenter(s)
10:00 – 11:15 am	**KAT C: Tools for Scoping Cumulative Effects Assessment** Participants will apply a few simple tools to a development scenario. The objective is to shed some light onto, and generate discussion about, such concepts as "reasonably foreseeable". At the end of the seminar participants should have a clearer understanding of how scoping for cumulative effects assessment differs from scoping for assessing direct impacts of a single development, what some of the difficulties are, and how one might work around them.	Martin Haefele
11:15 – 12:30 pm	**CONCURRENT WORKSHOPS**	
	KAT B: Mineral and Petroleum Rights – How they are assigned and what obligations they create The purpose of this workshop is to give an overview of the Crown's regulatory regime as it relates to mineral and petroleum tenure.	Carolyn Relf Gwenda Luxon
	KAT C: The International Association for Impact Assessment: What is it, and why should you care? The International Association for Impact Assessment, the world's premier professional association for those involved in EIA, has a thriving Western and Northern Canada Affiliate. NWT Regional Director Ginger Gibson will describe IAIA, discuss the many local activities the Affiliate holds in the North, and outline what this organization can offer you	Ginger Gibson Alan Ehrlich
12:30 – 1:30 pm	**LUNCH (PROVIDED)**	
1:30 – 2:45 pm	**CONCURRENT WORKSHOPS**	
	KAT B: Incorporating Climate Change Considerations in Environmental Assessment Come and explore the role environmental assessment plays in addressing climate change, both from an a daptation and greenhouse mitigation perspective. A presentation on the Ekati mine's energy efficiency and alternative energy programs provides a real-life case example of how industry can cope with this issue.	Zainab Moghal Patrick Duxbury Brent Murphy
	Kat C: Heritage Resources in the Environmental Impact Assessment Process The Prince of Wales Northern Heritage Centre will outline its process for protecting archaeological sites in the context of the land use permitting and environmental assessment processes of the NWT.	Glen MacKay Leon Andrew

Time	Topic	Presenter(s)
2:45 – 3:00 pm	**COFFEE OR TEA ANYONE???**	
3:00 – 4:15 pm	**CONCURRENT WORKSHOPS**	
	KAT B: Creating Credibility: Using development scenarios to better assess impacts of difficult to predict outcomes There are political and economic fears around discussing diverse and unpredictable future scenarios, however this sensitivity is limiting scenario creation that could lead to effective long-term regional planning. Following this presentation will be a workshop to discuss the relevance of development scenarios and difficult to predict impacts and how and where they could better fit into environmental assessment today.	Ellen Francis
	KAT C: Time for an Overhaul? A critical look at NWT Preliminary Screening Forms Alan will lead dialogue to look for ways to tailor the questions asked in screening to the type of development that is proposed. Guest star Carolanne Inglis will provide participants with an inside look at the innovations that the Nunavut Impact Review Board has made to its screening questions. The group will explore the merits of adopting a similar approach in the Mackenzie Valley.	Alan Ehrlich Carolanne Inglis
4:15– 4:30 pm	**Closing comments & adjourn**	Mary Tapsell

Appendix B: Meet the Speakers/Presenters

Charlie Catholique is a Lutsel K'e Dene First Nation Councillor and Sub-Chief. He is responsible for the Portfolios of Lands & Environment and Parks Negotiations. He has been an active member of the Wildlife, Lands & Environment Committee (WLEC) since its inception in 1998, and has served as Chairman for most of those years. Charlie is one of the LKDFN representatives on the Snap Lake Environmental Monitoring Agency (for the De Beers Snap Lake diamond mine), and is the alternate representative on the Environmental Monitoring Advisory Board (for the Diavik diamond mine). Charlie is also an accomplished hunter and fisherman, works as the fuel delivery man in town, and volunteers for many community events.

Vanessa Charlwood has worked for the Canadian Wildlife Service (Environment Canada) in Yellowknife for almost 5 years. For the last 1 1/2 years, she has been the Species at Risk Biologist and before that, she was the Environmental Assessment Coordinator.

Patrick Duxbury is an environmental assessment officer with the Mackenzie Valley Environmental Impact Review Board. He has worked for northern co-management boards for the last 4 _ years in both Nunavut and the Northwest Territories. Aside from having a keen personal interest in climate change, he has previously worked in the bio-fuels and bio-energy sector.

Alan Ehrlich is the Senior Environmental Assessment Officer of the Review Board. His Master's degree is in environmental science, from the University of Calgary's Faculty of Environmental Design. Alan's professional experiences range from conducting the first environmental impact assessment in the African Kingdom of Swaziland, to working for the Independent Environmental Monitoring Agency of the first diamond mine in the Canadian Arctic. Alan has also worked for the federal government as an environmental scientist and contaminants specialist. From 2001 to 2005, Alan has served as the NWT Regional Director for the Western and Northern Canada Affiliate of the International Association for Impact Assessment. He is currently the president of that organization. His interests include cumulative effects assessment, wildlife ecology and playing guitar (badly).

Ellen Francis leads Pembina's Arctic Program. Through her work at the Pembina Institute, she works in Canada and internationally to move communities towards sustainable energy production and consumption. She has led and been a key participant in research on environmental impacts associated with fossil fuel development, environmental externalities, greenhouse gas emissions, non-renewable resource funds, Latin American community energy projects, Arctic climate change, and development limits. As an Environmental Policy Analyst for Energy Watch, she provides contract research and advisory services to private sector corporations, government agencies, First Nations, public interest groups and non-government organizations. Ellen leads the coordination and facilitation of Pembina's Northern Oil and Gas and the Environment workshops. She has a Masters of Environmental Design in Environmental Science from the University of Calgary and an honours degree in Biological Sciences from the University of Guelph. Outside of her Pembina work, Ellen is a singer/songwriter and music teacher.

Rob Gau has worked on barren-ground grizzly bear research in the central Arctic of the Northwest Territories and Nunavut since 1991. After spending a number of years as a Wildlife Technician for the GNWT Carnivore Program and after being involved with a number of projects involving grizzly bears, wolverines, lynx, marten, and cougars he is now the Species at Risk Specialist for the GNWT Wildlife Division. Rob is working to develop and implement new species at risk legislation and has established the NWT Boreal Caribou Management Team. He sits on the National Boreal Caribou Technical Steering Committee, National Northern Mountain Caribou

Technical Advisory Team, and represents the NWT for the National Recovery Working Group.

Ginger Gibson has worked as an anthropologist for communities affected by the extractive industries in North and Latin America. Her work in Peru, Bolivia and Nicaragua with large and small scale mining communities developed programs in negotiations, empowerment and capacity building, while her dissertation work in northern Canada focuses on the experience of Dene miners and families in diamond economy. She has published and spoken on corporate social responsibility, conflict resolution, indigenous health and mining, and on poverty alleviation efforts of the World Bank Group through investment in oil, gas and mining. She serves on a national committee to the Mining Association of Canada.

George Govier is the Executive Director for the Sahtu Land and Water Board. George received his BA in Geography and Geology at Laurentian University and his Masters in Regional Planning and Resource Management from the University of Waterloo. Before moving to Fort God Hope in 1997, George had the opportunity to work in a wide-variety of planning-related fields across Canada. Ever modest at heart, when George is asked about his past work experiences he replies, "I'm just a man".

Martin Haefele is a geographer by training, variously specializing in soil erosion modelling, GIS, remote sensing, and now impact assessment. Martin came north in 2000 leaving academia behind to join the Sahtu Land and Water Board. He became part of the MVEIRB team in 2003. His assessment experience ranges from 5 drill hole mineral exploration programs, to seismic projects, to oil and gas wells, to the Mackenzie Gas Project, to a diamond mine. As an active member of the International Association for Impact Assessment, he is always on the lookout for new and improved assessment methods and his side projects at the MVEIRB have included research into measuring public concern and following up on EA imposed mitigation measures.

Carolanne Inglis-McQuay is a Technical Advisor for the Nunavut Impact Review Board (NIRB), based out of Cambridge Bay, Nunavut. She is responsible for managing the environmental assessment of project proposals, along with providing technical expertise to the Board regarding the impact project proposals may have on the bio-physical and socioeconomic environments. Carolanne began her career at NIRB as a Hearing Coordinator, where she was responsible for the coordination and facilitation of over 75 public meetings related to project proposals undergoing a Part 5 review. She has traveled extensively all over Nunavut, and has a thorough understanding of the complex political, social, cultural and bio-physical environments in which project Proponents must navigate. She has also successfully facilitated community roundtable discussions within Final Hearings for the Doris North Gold Project and the Meadowbank Gold Project, which played an important role in the decision-making process of the two project proposals.

Julie Jackson is a Policy Advisor with Indian and Northern Affairs Canada, and is currently working on policy and operational issues relating to Section 35 Crown consultation. Her education is in political science and public policy, with a focus on Aboriginal land claims and self-government processes. Julie is originally from BC, where she has worked in the BC land claims process and as an advisor to two BC Cabinet Ministers. Before moving to Yellowknife, Julie lived in Inuvik, working as the Implementation Negotiator for the Gwich'in and Inuvialuit at the Beaufort-Delta Self-Government Office.

Heidi E. Klein, B.Sc., MES *Senior Environmental Planner, Principal, Gartner Lee* began her career as a wildlife biologist and a contaminants laboratory technician. This experience led her to positions related to wildlife interpretation and public relations through explaining wildlife behaviour to the public. Eventually, this combination of skills led her to the practice of environmental assessment and a Masters concentrating on the integration of land use planning and environmental assessments. During her career in environmental assessment, she has managed consultation programs, as well as socio-economic impact assessment and traditional knowledge programs.

Alistair MacDonald has been an Environmental Assessment Officer with the Review Board since

December of 2004. He was the project lead for the Review Board in the development of the recently released Socio-economic Impact Assessment Guidelines. Alistair has a Master's degree in Geography from Simon Fraser University and has worked on issues related to resource extraction and sustainable development for the past decade. His newest (and favourite) environmental impact assessment is examining how much damage two small children (10 months and 3.5 years) can exact on an individual habitation over the course of a single day.

Glen MacKay is the Assessment Archaeologist at the Prince of Wales Northern Heritage Centre, where he has worked for two years. During his time with the PWNHC, he has participated in heritage projects in Trout Lake, NT and the Mackenzie Mountains. Glen holds an M.A. in Anthropology from the University of Victoria.

Gabrielle Mackenzie-Scott is the Chairperson for the Review Board. Previously she worked as the enrollment coordinator for the Tlicho land claim and self government agreement. For three years she worked in the human resources department at Diavik Diamond Mine. She has been a Dogrib Language Instructor for Aurora College and a Researcher on Whaehdoo Naowoo Ko, the Dogrib Treaty 11 Council Traditional Knowledge Project. Gabrielle has been a board member for the Native Women's Association of the NWT, the Dene Cultural Institute, the NWT Status of Women and a member of the Aboriginal Council of World Vision Canada. She was a board member for seven years and three years as President of the Ottawa-based National Anti-Poverty Organization. Gabrielle received a Canada 125 award in 1993 for her services to NAPO.

David Milburn is a Senior Consultant with DPRA Canada/Terriplan providing environmental consulting services for environmental assessments, regulatory reviews, natural resources management, climate change adaptations and water policy analysis. David retired from the Government of Canada in 2006 after more than 30 years in various positions with the Department of Environment and the Department of Indian Affairs and Northern Development. His expertise is water resource management and science issues in Northern Canada.

Zainab Moghal is a Yellowknife-based environmental planner with Gartner Lee Limited. Before moving to Yellowknife, Zainab worked for the Nunavut Impact Review Board in Cambridge Bay, Nunavut. Previous to coming north, she worked in both the government and private industry sectors in Ontario and Quebec.

Brent Murphy is the Chief Environmental Officer-Operations for the EKATI Diamond Mine

Grant Pryzynk completed a Diploma in Renewable Resources Technology in 1969 from Saskatchewan Institute of Applied Arts and Sciences in Saskatoon. He worked with the Manitoba and Saskatchewan provincial governments in the late 1960s and early 1970s before joining the Department of Fisheries and Oceans (DFO) as a fisheries technician working on rainbow trout aquaculture in Manitoba and Saskatchewan. In 1974 he moved on to the Fish Inspection Branch of DFO working in northern and central Saskatchewan with the occasional foray into Alberta. The NWT beckoned in 1979 and he and his family moved to Arviat (then part of the NWT) where he had accepted a GNWT Wildlife Officer position. A transfer to Rankin Inlet eventually led to a return to DFO as the Officer in Charge Keewatin District. A Yellowknife transfer followed in 1983 and in 1986 to Prince Edward Island with DFO as a fishery officer. In 1988, he returned to the NWT with DFO to work on legislation, fishery officer training and internal standards and procedures for fishery officers. With DFO he was involved in various local, regional and national committees and working groups. He retired from the federal public service in January 2006 and runs a Yellowknife consulting company, JGP, which provides organizational and environmental consulting services.

Carolyn Relf has worked as a geologist in the North since 1983. She has carried out regional bedrock mapping integrated with thematic research in both NWT and Nunavut for the GNWT and more recently for DIAND, and she helped to establish the NWT Geoscience Office (NTGO) in Yellowknife in 2001. She is an adjunct professor at the University of Alberta where she teaches a field-based mapping course and has supervised a number of student research projects. Recently she left the NTGO

to take on the position of Director of INAC's Minerals & Petroleum Resources in the NWT Regional Office.

Myra Robertson has been with the Canadian Wildlife Service, Environment Canada in Yellowknife for the past 11 years. Her work with the Wildlife Service has involved research on ducks and geese in the Inuvialuit Settlement Region and near Yellowknife, as well as studies of seaducks in Nunavut. For the last year and a half, she has been the Environmental Assessment Coordinator for the Canadian Wildlife Service for the Northwest Territories and Nunavut.

Trudy Samuel is a singer, storyteller, volunteer and public servant working with Environment Canada. Her passions lie in working with groups to achieve their goals and in taking advantage of all the outdoor recreational opportunities available in the North. She credits a long history of volunteerism as the source of her skills, her inspiration and her feeling of attachment to Yellowknife, where she has lived over the past seven years. She is a member of the Facilitator's Learning Team, an informal group of public servants who work together to develop their skills in facilitation and offer their skills to other organizations on a voluntary basis.

Renita Schuh is a Community Environmental Assessment Advisor for the Mackenzie Valley Environmental Impact Review Board in Yellowknife, Northwest Territories. She is responsible for coordinating and facilitating the involvement of communities into the Review Board's environmental impact assessments. Renita was the lead in developing and finalizing the Review Board's *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*. These guidelines were the first of their kind in Canada. Renita remains involved with organizing and facilitating translator workshops and assisting in the public involvement strategies for the Review Board's environmental assessments. She travels throughout the Northwest Territories to hold meetings and discussions with community members about how to better incorporate their concerns into environmental assessment. Renita received her Bachelor of Arts degree in Canadian Studies from the University of Calgary. She concentrated her program on Arctic Circumpolar Studies, which was offered through the Theme School for Northern Planning and Development Studies at the University of Calgary.

Mary Tapsell is a long(ish) term Northerner (20+years) and has had an opportunity to participate in a wide variety of environmentally focused work experiences across the NWT & Nunavut. Mary has worked in a variety of positions with the GNWT, Departments of Renewable Resources and Arctic College as well as the federal departments of Environment Canada and Indian and Northern Affairs. Mary is currently the Manager, EIA with the MVEIRB. When not in the office – you can most likely find Mary with her two kids, partner and a gaggle of dogs at her remote cabin outside of town.

Appendix C: Workshop Participants

First Name	Last Name	Organization	Email
Casey	Adlem	Indian and Northern Affairs Canada	adlemc@inac-ainc.gc.ca
Leon	Andrew		
Jennifer	Anthony	Environment Canada	Jennifer.Anthony@ec.gc.ca
Ginger	Arnold	Indian and Northern Affairs Canada	arnoldg@inac.gc.ca
Louis	Azzolini	Terra Firma	terrafirma@theedge.ca
Garry	Bailey	Ft Resolution Metis Council	frcn.nwtmc@northwestel.net
Sarah	Baines	Wek'eezhii Land and Water Board	sbaines@wlwb.ca
John	Bartlett	DeBeers Canada	John.Bartlett@ca.debeersgroup.com
Rhonda	Batchelor	Department of Transportation – GNWT	rhonda_batchelor@gov.nt.ca
Daniel	Beaudoin	Yukon Environmental and Socio-economic Assessment Board	daniel.beaudoin@yesab.ca
Sandra	Benson	Justice Canada	sbenson@justice.gc.ca
Rose	Bjornson	Deninue Kue First Nation	imadenegurl@hotmail.com
Alison	Blackduck	Mackenzie Valley Environmental Impact Review Board	ablackduck@mveirb.nt.ca
Sevn	Bohnet	Indian and Northern Affairs Canada	bohnets@inac.gc.ca
James	Boraski	Mackenzie Valley Land and Water Board	jboraski@mvlwb.com
Alan	Bouvier	Liidlii Kue First Nation	resources@liidliikue.com
Darren	Brown	Husky Energy	darren.c.brown@huskyenergy.ca
Peter	Burnette	Fisheries and Oceans	BrunetteP@DFO-MPO.GC.CA
Darren	Campbell	FPRRB	fprmb@airware.ca
Lynn	Carter	Mackenzie Valley Land and Water Board	lcarter@mvlwb.com
Charlie	Catholique	Lutsel K'e Lands & Environment	
Vanessa	Charlwood	Environment Canada	Vanessa.Charlwood@EC.GC.CA
Edward	Chocolate	Gameti Community Government	
Vern	Christensen	Mackenzie Valley Environmental Impact Review Board	vchristensen@mveirb.nt.ca
Rhian	Christie	Indian and Northern Affairs Canada	christier@inac-ainc.gc.ca
Karin	Clark	Environment & Natural Resources, GNWT	karin_clark@gov.nt.ca
Charity	Clarkin	BHP Billiton	charity.h.clarkin@bhpbilliton.com

Paul	Cobban	DeBeers Canada	paul.cobban@ca.debeersgroup.com
Shirley	Cook	Dene Nation	scook@denenation.com
Rachel	Crapeau	Yellowknifes Dene First Nation	rachelc@ykdene.com
Katherine	Cumming	Parks Canada	katherine.cumming@pc.gc.ca
Kelly	Cumming	Mackenzie Valley Environmental Impact Review Board	
Jennifer	Dallman-Sanders	Indian and Northern Affairs Canada	dallmansandersj@inac-ainc.gc.ca
Noel	Drybones		
Joel	Dryneck	Wekweeti Community Government	
Manik	Duggar	Terriplan	manik.duggar@dpra.com
Patrick	Duxbury	Mackenzie Valley Environmental Impact Review Board	pduxbury@mveirb.nt.ca
John	Edwards	Gwichin Land and Water Board	j_edwards@glwb.com
Alan	Ehrlich	Mackenzie Valley Environmental Impact Review Board	aehrlich@mveirb.nt.ca
Dora	Enzoe	Akaitcho IMA Office	doraenzoe@eastarm.com
Tony	Epp	CEAA	Tony.Epp@ceaa-acee.gc.ca
Eddie	Erasmus	Tlicho Government	eddieerasmus@tlicho.com
Patty	Ewaschuk	Wekeezhii Land and Water Board	pewaschuk@wlwb.ca
Frasier	Fairman	Indian and Northern Affairs Canada	fairmanf@inac-ainc.gc.ca
Paul	Falvo	Sierra Legal Defence	pfalvo@sierralegal.org
Ellen	Francis	Pembina Institute	ellenf@pembina.org
Heather com	Funnell	DeBeers Canada	Heather.Funnell@ca.debeersgroup.
Sarah	Gagne	DeBeers Canada	Sarah.Gagne@ca.debeersgroup.com
Ginger	Gibson	Gibson Consulting	vgibson@interchange.ubc.ca
Val	Gordon	Indian and Northern Affairs Canada	gordonv@inac-ainc-gc.ca
George	Govier	Sahtu Land and Water Board	sahtuexd@allstream.net
Kathleen	Graham	Mackenzie Valley Land and Water Board	kgraham@mvlwb.com
Sophia	Granchinho	Nunavut Impact Review Board	sgranchinho@nirb.nunavut.ca
Matt	Gray	Pembina Institute	mattg@pembina.org
Sheryl	Grieve	North Slave Métis Alliance	lands@nsma.net
Zodie	Groves	Yukon Environmental and Socio-economic Assessment Board	zodie.groves@yesab.ca

Claudia	Haas	North Slave Métis Alliance	claudia@nsma.net
Martin	Haefele	Mackenzie Valley Environmental Impact Review Board	mhaefele@mveirb.nt.ca
Tamara	Hamilton	Indian and Northern Affairs Canada	hamiltont@inac.gc.ca
Sheldon	Hancock	Health and Social Services – GNWT	sheldon_hancock@gov.nt.ca
Bruce	Hanna	Fisheries and Oceans	hannab@dfo-mpo.gc.ca
Amanda	Hanson	Nunavut Impact Review Board	alhanson@ualberta.ca
Kim	Hawkins	Gwich'in Tribal Council	khawkins@gwichin.nt.ca
Jim	Hawkins	Imperial Oil	jim.r.hawkins@exxonmobil.com
Tim	Heron	Fort Smith Metis Council	fscn.nwtmn@northwestel.net
Chris	Heron	Northwest Territories Métis Nation	rcc.nwtmn@northwestel.net
Patty	Hogg	Department of Transportation, GNWT	patricia_hogg@gov.nt.ca
Joel	Holder	Environment and Natural Resources – GNWT	joel_holder@gov.nt.ca
Dean	Holman	Sahtu Land and Water Board	sahtuwat@allstream.net
Ed	Hubert	DeBeers Canada	ed.huebert@ca.debeersgroup.com
Joline	Huskey	Tlicho Government	jolinehuskey@tlicho.com
Carolanne	Inglis-McQuay	Nunavut Impact Review Board	cinglis@nirb.nunavut.ca
Margaret	Ireland	Jean Marie River First Nation	
Julie	Jackson	Indian and Northern Affairs Canada	jacksonjl@inac-ainc.gc.ca
Jeremy	Jaud	Industry, Tourism and Investment – GNWT	jeremy_jaud@gov.nt.ca
Shelly	Johnson	Indian and Northern Affairs Canada	johnsons@inac.gc.ca
Teresa	Joudrie	Indian and Northern Affairs Canada	joudriet@inac-ainc.gc.ca
Heidi	Klein	Gartner Lee	hklein@gartnerlee.com
Frank	Lafferty	Deninue Kue First Nation	
George	Lafferty	Hay River Metis Council	hrcfw.nwtmn@northwestel.net
Karla	Langlois	EBA Engineering Consultants	klanglois@eba.ca
Nick	Lawson	Jacques Whiford	nlawson@jacqueswhitford.com
Peter	Lennie-Misgeld	Mackenzie Valley Land and Water Board	peter@mvlwb.com
Savanna	Levenson	Environment Canada	savanna.levenson@ec.gc.ca
Nicole	Lights	Sahtu Renewable Resource Board	eas@srrb.nt.ca
Jerry	Loomis	Mackenzie Valley Environmental Impact Review Board	jerryloomis@theedgenw.ca

Sherry	Lovely	Education, Culture and Employment	slovely@theedge.ca
Natalie	Lund	Northern EnviroSearch Ltd	
Gwenda	Luxon	Indian and Northern Affairs Canada	luxong@inac.gc.ca
Alistair	MacDonald	Mackenzie Valley Environmental Impact Review Board	amacdonald@mveirb.nt.ca
Glen	MacKay	Prince of Wales Heritage	glen_mackay@gov.nt.ca
Gabrielle	Mackenzie-Scott	Mackenzie Valley Environmental Impact Review Board	gmackenzie-scott@mveirb.nt.ca
Erik	Madsen	Diavik Diamonds Mines Inc.	erik.madsen@diavik.com
Keith	Maguire	Yukon Environmental and Socio-economic Assessment Board	keith.maguire@yesab.ca
Isidore	Manuel	Fort Good Hope Land Corporation	
Kelly	Mahoney	Industry, Tourism and Investment – GNWT	kelly_mahoney@gov.nt.ca
Lionel	Marcinkoski	Indian and Northern Affairs Canada	marcinkoskil@inac.gc.ca
Andrew	McAllister	Natural Resources Canada	amcallis@nrcan.gc.ca
Meg	McCluski	Mackenzie Valley Land and Water Board	meg@mvlwb.com
Ed	Mclean	Parks Canada	ed.mclean@pc.gc.ca
Jason	McNeill	Environment and Natural Resources – GNWT	jason_mcNeill@gov.nt.ca
Valerie	Meeres	Mackenzie Valley Land and Water Board	valerie@mvlwb.com
Pascale	Méra	Golder Associates Ltd.	pascale_mera@golder.com
David	Milburn	DPRA Canada/Terriplan	milburnd@nb.sympatico.ca
Zainab	Moghal	Gartner Lee Ltd.	zmoghal@gartnerlee.com
Tyree	Mullaney	Sahtu Land and Water Board	sahtulan@allstream.net
David	Munroe	Municipal and Community Affairs, GNWT	david_monroe@gov.nt.ca
Brent	Murphy	BHP Billiton	brent.murphy@bhpbilliton.com
Aliesha	Narain	Yukon Environmental and Socio-economic Assessment Board	aliesha.narain@yesab.ca
Zabey	Nevitt	Wekeezhii Land and Water Board	zabey@wlwb.ca
Albert	Nitsiza	Whati Community Government	
Sylvia	Novoligak	Nunavut Impact Review Board	snovoligak@nirb.nunavut.ca
Erika	Nyyssonen	Environment and Natural Resources – GNWT	erika_nyyssonen@gov.nt.ca
Kate	Odziemkowka	Bureau of Statistics – GNWT	kate_odziemkowska@gov.nt.ca

Carey	Ogilvie	Environment Canada	carey.ogilvie@ec.gc.ca
Sarah	Olivier	Natural Resources Canada	solivier@nrcan.gc.ca
John	Ondrack	Mackenzie Valley Environmental Impact Review Board	ondrack@ssimicro.com
Damian	Panayi	Golder Associates Ltd.	damian_panayi@golder.com
Adrian	Paradis	Mackenzie Valley Land and Water Board	adrian@mvlwb.com
Larry	Peckford	Inuvialuit Environmental Impact Review Board	eirb@jointsec.nt.ca
Nelson	Perry	Parks Canada	nelson.perry@pc.gc.ca
Michael	Peters	Canadian Association of Petroleum Producers	michael.peters@capp.ca
Darha	Phillpot	Canadian Parks and Wilderness Society	darha@cpaws.org
Linda	Piwowar	Mackenzie Valley Environmental Impact Review Board	secretary@mveirb.nt.ca
Angela	Plautz	Mackenzie Valley Land and Water Board	aplautz@mvlwb.com
Grant	Pryznyck	JGP Consulting	jgp@theedge.ca
Lorretta	Ransom	Environment & Natural Resources	loretta_ransom@gov.nt.ca
Carolyn	Relf	Indian and Northern Affairs Canada	relfc@inac.gc.ca
Myra	Robertson	Environment Canada	myra.robertson@ec.gc.ca
Pam	Romanchuk	National Energy Board	promanchuk@neb-one.gc.ca
Susan	Ross	Golder Associates Ltd.	susan_ross@golder.com
Trudy	Samuel	Environment Canada	trudy.samuel@ec.gc.ca
Lorraine	Sawdon	Environment Canada	lorraine.sawdon@ec.gc.ca
Renita	Schuh	Mackenzie Valley Environmental Impact Review Board	rschuh@mveirb.nt.ca
Benjamin	Scott	Education, Culture & Employment, GNWT	benjamin_scott@gov.nt.ca
Lorraine	Seale	Indian and Northern Affairs Canada	sealel@inac-ainc.gc.ca
Daryl	Sexsmith	Canadian Parks and Wilderness Society	daryl@cpaws.org
Jessica	Simpson	Arctic Indigenous Youth Alliance	jrsmpsn@mta.ca
Charlie	Snowshoe	Mackenzie Valley Environmental Impact Review Board	
Shirley	Standafer-Pfister	EBA Engineering Consultants	sstandafer-pfister@eba.ca
John	Stevenson	Mackenzie Valley Environmental Impact Review Board	johnrt@ssimicro.com

Ivy	Stone	Environment Canada	ivy.stone@ec.gc.ca
Marty	Swagar	Explorer	marty@explor.net
Freda	Taniton	Sahtu Secretariat Inc.	freda_taniton@gov.deline.ca
Mary	Tapsell	Mackenzie Valley Environmental Impact Review Board	mtapsell@mveirb.nt.ca
Tawanis	Testart	Mackenzie Valley Environmental Impact Review Board	ttestart@mveirb.nt.ca
Howard	Townsend	Sahtu Secretariat Inc.	wolverine@northwestel.net
Laura	Tyler	BHP Billiton	laura.tyler@bhpbilliton.com
Georgina	Vaneltsi	Fort McPherson Renewable Resource Council	georgina_vaneltsi@gov.tetlitzheh.ca
Jenica	von Kuster	Northern EnviroSearch Ltd	jenicavk@envirosearch.ca
Leslie	Wakelyn	Beverly Qamanirjuaq Caribou Management Board	wakelyn@theedge.ca
Rick	Walbourne	Sahtu Land and Water Board	sahtuhyd@allstream.net
Rob	Walker	Indian and Northern Affairs Canada	walkerr@inac.gc.ca
Ernie	Watson	Fisheries and Oceans	watsone@dfo-mpo.gc.ca
Eric	Yaxley	Indian and Northern Affairs Canada	yaxleye@inac-ainc.gc.ca
Lynda	Yonge	Environment and Natural Resources – GNWT	lynda_yonge@gov.nt.ca
Camilia	Zoe-Chocolate	Dene Nation	czoe_chocolate@denenation.com

Appendix D: General Comments and Observations

What did you like about the Workshop"?

- great presentations and presenters were excellent. Board staff were very helpful
- the timeliness of the sessions
- the wide selection and variety of topics
- the "affordability" of the workshop (i.e. no cost to attend and assistance to communities for participation) . . . "Thank you for making it free and therefore accessible to groups with low capacity, otherwise prohibited from attending"
- the variety of participants (it was noted that it would be nice to see more industry representatives in the future)
- the opportunities to interact. Some appreciated networking, meeting a diversity of people, and bonding with others over similar concerns. For even more it was the exchange of ideas, open dialogue, and think tanking that made the discussions the best part of the workshop.
- there was adequate seating so that no session was barred from anyone."

What could be improved in future Workshops?

- in future would like more time allocated to "table talk" discussions as these were very beneficial
- panel discussions were not that helpful – but table talk made up for it
- make topics and sessions more specific. For respondents, discussing the "nuts and bolts" means including tools, details, examples and research about EAs.
- some presentations didn't deliver what was promised on the agenda. "…avoid raising expectations too high"
- more healthier food including more fruit and veggies, and vegetarian / traditional options.

What topics would you like to see at a future EIA practitioner's workshop?

- there were many calls to look at cumulative effect assessments, in concrete and specific ways
- some respondents suggested general directions for topics in the future
- incorporate models used in other districts, countries… what is being done elsewhere
- more community-oriented
- more about Plain language, TK collection
- tailor some presentations to individual groups v. broad staff interests
- more direct discussion on the allocation of rights
- the following are some specific suggestions for topics
- the need for regulatory reform (i.e MVRMA, Mining)
- examples of how different countries facing similar challenges address regional environmental assessment or similar tools
- specific strategies for assessment (How to incorporate TK into assessments, cumulative effects assessment scoping, impacts prediction)
- follow-up
- corporate social responsibility
- SEIA (1/2 day session on new guidelines could have been done pre- or post- workshop)
- land-use plans and EIA

- full cost accounting (i.e. triple bottom line incorporating end-use of non-renewables)
- writing EAs (rationale: Noticed that a lot of people who review EAs have never had to write one, and that may be a good exercise so that they think through the process themselves)
- to design guidelines for incorporating climate change in EIA

Appendix E: Matrix worksheet – Tools for Scoping Cumulative Effects

	Past, present, future developments	Mackenzie Highway Extension Impacts					
		increased air pollution	spill potential	fish migration interuption	boreal caribou habitat fragmentation	increased hunting pressure on moose	stress on municipal infrastructure
Past	winter road						
	seismic exploration (oil and gas)						
	exploration drilling (oil and gas)						
Current	Norman Wells oil facilities						
	Enbridge pipeline						
	hunting/fishing outfitters						
	Mackenzie River barge traffic						
	Mackenzie Gas Project						
Future	seismic exploration (oil and gas)						
	exploration drilling (oil and gas)						
	Stewart Lake oil and gas facilities						
	Stewart Lake oil and gas pipeline						
	Colville Lake gas facilities						
	Colville Lake gas pipeline						
	Tulita coal mine						
	Tulita coal gasification plant						
	tourist establishments (camp grounds, hotels, etc)						