

# **Involving Canada's Indigenous Peoples in Environmental Impact Assessment: Co-management through The Mackenzie Valley Environmental Impact Review Board**

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Canada's vast and sparsely populated North is a land of striking beauty, abundant wildlife and small Indigenous communities – and massive quantities of non-renewable natural resources. Huge oil and gas reserves as well as extensive deposits of diamonds, gold, uranium and other minerals are being developed, bringing the prospect of economic growth, while reinforcing the need for diligence in safeguarding an especially fragile natural and human environment. Strong environmental regulation, anchored in thorough environmental assessment, provides the tools for local Indigenous and non-Indigenous people to work together to ensure development is beneficial for the people and the environment is protected.

The Indigenous peoples<sup>1</sup> of the Canadian North have a profound knowledge and understanding of their environment, rooted in deep spiritual connection to the land. With 'the land' so central to the Indigenous peoples' existence, large-scale resource extraction can threaten their culture as well as their material well-being no less than it threatens the land itself. Additionally, the claims of the Canadian state to sovereignty and control over the traditional lands of the Indigenous peoples long rested on uncertain legal grounds. And yet, from the time that the North's non-renewable resources were first exploited by Canadians of European extraction, starting with the Yukon gold rush of 1898 and the discovery of oil in the Northwest Territories (NWT) early in the last century, the Indigenous peoples had no role in government or private sector decisions on major infrastructure or resource extraction projects such as roads, mines and pipelines. Even when Canadian governments began to take environmental concerns seriously in the 1960s and 1970s, and instituted environmental impact assessment (EIA) regimes, Indigenous people were permitted at best a very limited role in decision making.

More recently, with the settling of 'comprehensive land claims agreements' and attitudinal shifts on the part of government, industry and the public, Indigenous peoples have come to play a major role in the rigorous EIA processes now applied to proposed developments. While the Canadian north is unique, these changes may represent an effective approach to participation in

EIA processes for Indigenous peoples in other parts of the world as well.

This paper examines the participation of the local Indigenous peoples of the Northwest Territories in the EIA activities of an important 'co-management' board, the Mackenzie Valley Environmental Impact Review Board (Review Board). Co-management in this context describes an arrangement whereby half of the Board is composed of members nominated by Indigenous land claimant organizations and half by the Governments of Canada and the Northwest Territories. The Chairperson is nominated by the Board members themselves. All members in turn are appointed by the Minister of Indian Affairs and Northern Development (IAND) in the federal (i.e. national) government who is responsible for the governing legislation, namely, the *Mackenzie Valley Resource Management Act* (MVRMA).

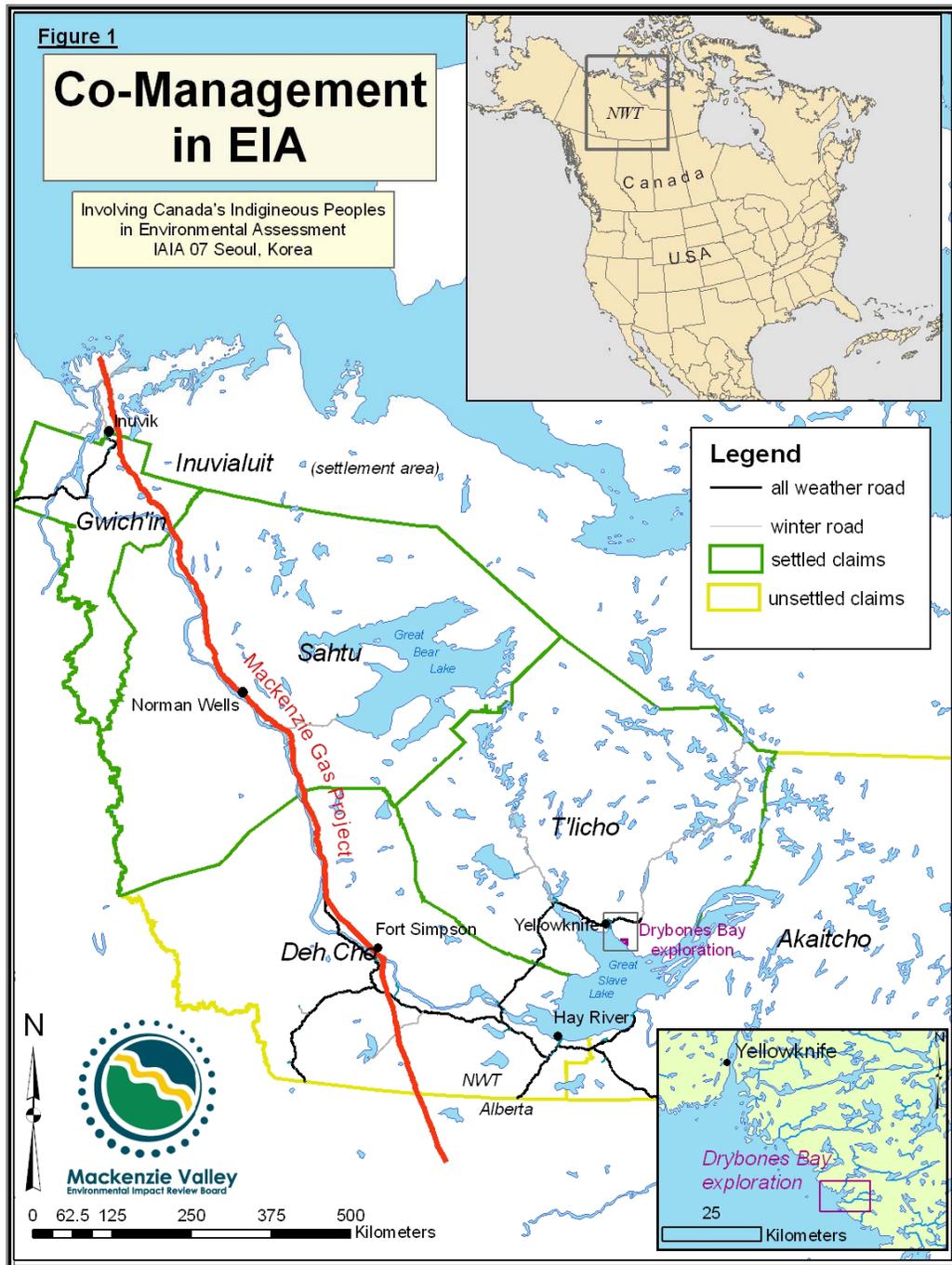
Following a brief overview of the geography, demography and politics of the NWT to set the context, the paper focuses on three central aspects of the Board's relations with the Indigenous population: its nature as a co-management board, with guaranteed Indigenous representation on the Board; its wide-ranging community consultation processes; and its efforts at integrating the 'traditional knowledge' of Indigenous peoples into its operations and decisions. The paper concludes with an assessment of the Board's accomplishments and the challenges before it.

### **The Mackenzie Valley: A Thumbnail Sketch**

The Northwest Territories encompasses some 1.14 million square kilometres, running north from the sixtieth parallel to the Arctic Ocean and the western islands of Canada's Arctic Archipelago. The 'Mackenzie Valley', over which the Review Board has jurisdiction, includes the entire NWT with the exception of the Inuvialuit Settlement Region (essentially the delta of the Mackenzie River and the Arctic islands) in the north and a large national park in the south – in total some 700,000 square kilometres, roughly the size of South Korea, Germany and the United Kingdom combined (see Figure 1).

Northern demographics are hard, even for Canadians, to comprehend: as of 2006, the NWT's population was roughly 43,000. With about 19,000 people residing in the capital, Yellowknife, (and another 2,000 in the Inuvialuit region) the total population of the other 29 Mackenzie Valley communities was only 22,000. Several communities are only accessible by land via ice roads during the winter months; even for communities on the all-weather road system, given the distances, travel by air is often the only option.

Yellowknife and Hay River, the next largest community, are predominantly non-Indigenous. Most other communities are predominantly Indigenous, though the Indigenous population is by no means homogeneous. The Dene ('Indians') include several regional tribal groupings, with related but distinct languages and cultures, as well as differing political organizations; different again, though often with close links to the Dene, are the Metis.<sup>2</sup>



The Mackenzie Valley is dominated by the Mackenzie River which flows 1800 kilometres from Great Slave Lake, one of the largest lakes in the world, to the Arctic Ocean. It encompasses far more than a river valley. The terrain varies from heavily forested hills to bare tundra to 2700-

metre mountains. Vast proven reserves of oil and gas exist throughout the NWT and additional stocks are continually being identified (and the Mackenzie Valley is the likely route for a multi-billion dollar pipeline to bring gas from the Arctic Ocean to southern markets). The NWT's diamond mines have turned Canada into one of the world's foremost diamond producing countries, while gold, lead, zinc, tungsten and other minerals are found in abundance. Many potential mine sites have been identified and extensive prospecting and exploration activity continues unabated. The logistics of resource extraction can prove daunting, because of limited transportation facilities and because of the harsh climate, which is marked by long, very cold winters.

Resource development and government are the mainstays of the economy, with the service sector – transportation, retail and related activities – construction and tourism making significant to modest contributions; agriculture and manufacturing are extremely limited. The 'traditional' economy of hunting, trapping and fishing does not produce much in the way of cash income but remains of substantial importance in providing fresh nutritious food, especially in the smaller communities and is of enormous cultural significance for the Indigenous peoples.

Governance in the Mackenzie Valley is complex. As a 'territory' in the Canadian federation, the NWT has a lesser constitutional status than the provinces which are found 'south of 60' and does not have the full range of jurisdictional powers available to them. Most notably, whereas in the south, 'Crown' (i.e. public) land – and thus control over non-renewable resources – is provincially owned; in the NWT the federal (i.e. national) government retains ownership. The transfer of jurisdiction over Crown land to the territorial government has been under negotiation with the federal government for some time and while progress has been slow, eventually the territorial government will assume control of Crown lands (by far the largest proportion of the land in the territorial North).

That said, even the territories of the Canadian federation enjoy substantial powers. The Government of the Northwest Territories (GNWT) has jurisdiction over health, education, culture, social welfare, renewable resources, local government and most transportation issues; it has law making ability for these and other delegated areas of responsibility. Although the GNWT receives the largest part of its funding from the federal government, most of these monies come in the form of an unconditional grant, which the GNWT may allocate accordingly to its priorities. The GNWT has the same wide-ranging taxing powers as the provinces of Canada, including personal, corporate and sales taxes. The GNWT is headed by a premier and cabinet selected from the elected legislature, who are supported by a large professional bureaucracy.

Some Indigenous political organizations dispute the legitimacy of the GNWT, arguing that it is an impediment to their nation-to-nation relationship with Canada and that it is exercising governmental powers properly belonging to them. The extensive governance provisions in the treaties and 'comprehensive land claims' which also set out the legal framework underpinning the Review Board, further complicate this matter. Throughout the NWT, Indigenous governments are engaged in developing policies and delivering services to Indigenous peoples in a variety of ways that are generally termed in Canada 'Aboriginal self-government'.

## **Treaties, Land Claims and the *Mackenzie Valley Resource Management Act***

The importance of the treaties signed between the Indigenous peoples of the NWT and the Government of Canada can scarcely be overestimated. The word ‘treaty’ is critical. Treaties are not simply real estate deals or other contractual arrangements; they are solemn undertakings between sovereign, self-governing nations. Within the NWT there are both the ‘historic treaties’ signed in 1899 and 1921 and the more recent ‘comprehensive land claims’ and ‘self-government agreements’, which the Government of Canada explicitly calls ‘modern treaties’. The provisions of these agreements are constitutionally protected under section 35 of the *Constitution Act, 1982*, Canada’s principal constitutional document.

The long and difficult process of negotiating the comprehensive land claims in the Mackenzie Valley need not be repeated here.<sup>3</sup> Of direct relevance to this paper, though, is that through them the federal government agreed to share its authority over the environmental impact assessment process with Indigenous people.

The three settled land claims in the Mackenzie Valley – the 1992 Gwich’in claim, the 1994 Sahtu claim and the Tlicho Agreement of 2005<sup>4</sup> – required the Government of Canada to establish a network of ‘co-management’ boards to form an integrated system of resource management. In 1998, the Canadian Parliament passed the *Mackenzie Valley Resource Management Act*, which in turn created a system of co-management boards, among them the Review Board. As with the land claims negotiation process, it took considerable time for the Indigenous people and the federal government to agree on the content of the MVRMA. Complicating the process was opposition from land claimant organizations representing Indigenous people who had yet to settle their land claims or who were pursuing different forms of political accommodation with the federal government.<sup>5</sup> These organizations, whose peoples’ traditional lands cover nearly half the Mackenzie Valley – the ‘unsettled areas’ in terms of the MVRMA regime – continue to negotiate with the federal and territorial governments on land and governance issues.

The MVRMA created three sets of co-management boards: for land-use planning, for project screening and licensing, and for environmental assessment (a fourth set of boards, established directly in the land claim agreements, deals with wildlife management). The *Act* also sets out the legal framework in which the boards are to operate, though much – notably, for example, their operating procedures – is left to the boards themselves. As well, though the *Act* is long and complex, in many instances the language of the legislation was kept deliberately broad to ensure maximum involvement for Indigenous people, and to ensure that all uses of land that could have an impact would be subject to proper environmental assessment.

Comprehensive land use planning, carried out by a series of regional boards, was to underpin the entire system. Thus far, however, this component has proven the weak link in the system as only one regional land use plan has been completed and approved and that only after significant delay.

The lack of land use plans has not prevented the other boards from carrying out their work, although it has meant that in many cases they have had to resolve land-use issues themselves directly.

Further, the federal government has begun to negotiate “self-government” agreements. The first self government agreement was signed in 2003 with the Tlicho people. Their self government agreement provided that a land use plan could be developed by the Tlicho, federal and territorial governments but it was not a requirement as initially envisioned by the MVRMA.

### **The MVRMA Process: An Overview**

Virtually all proposed developments require land-use permits or water licenses. In some instances, other authorizations may be needed such as a fisheries authorization if fish bearing waters are to be disturbed. This includes large projects such as proposed mines or roads, and small projects such as small gravel pits and small mineral exploration drilling projects. The EIA process established by the MVRMA consists of three progressively more rigorous tiers: first, preliminary screening, conducted primarily by land and water boards; second, environmental assessment (EA) by the Review Board; third environmental impact review (EIR), directed by the Review Board.

The EIA process is “triggered” if an application for a license, permit or authorization is required from federal or territorial regulatory authority to undertake a proposed development. The first step is a preliminary screening of the application. Typically a proposed development requires a land use permit or water license so the preliminary screening would be undertaken by one of the three regional land and water boards or by a territory-wide entity, the Mackenzie Valley Land and Water Board (MVLWB).<sup>6</sup> Alternatively, a preliminary screening may need to be carried out by another regulator such as the Department of Fisheries and Oceans if, for example, an authorization to disturb fisheries habitat is required.

The MVLWB screens proposals encompassing more than one claim area, and those in the ‘unsettled areas’ or which have ‘transboundary’ implications, that is, stand to affect neighbouring provinces or territories. The land and water boards issue permits and licenses, with conditions designed to eliminate or mitigate possible environmental damage. Water licenses for major projects require approval of the federal government.

If, upon reviewing an application, a land and water board concludes that, in the words of the MVRMA, the proposed development “might have a significant adverse impact on the environment or might be a cause of public concern”<sup>7</sup> the board refers it to the Review Board for an environmental assessment. Very few proposed developments are sent for EA; from its inception in 1998 until 2005, only about three per cent of all screened projects underwent an EA.<sup>8</sup> The Board can initiate an EA on a project without a referral from a screening agency.

In conducting an EA, the Review Board thoroughly reviews the extensive technical data

submitted by the proponents and by government agencies and departments as well as comments from Indigenous organizations and governments, the affected communities and the general public. The EA process frequently includes public hearings and all reports and submissions are posted on the Board's on-line public registry. The Review Board will typically have half a dozen EAs underway at one time. Currently the Board has 12 full-time staff and operates on an annual budget of approximately \$3.2 million.

An EA requires a minimum of six months to complete. Most EAs require more time to complete and complex cases may take over a year. Once the Board has reached a conclusion as to whether a proposed development should proceed and, if it is to proceed, what measures will be required to limit or mitigate damage to the environment, the Board makes a formal report to the federal government. Final authority on approving a development rests with the responsible ministers of the federal or territorial government having jurisdiction related to the proposed development under federal or territorial law. The Minister of IAND takes the lead in developing a response to the Board's report.

The federal Minister in consultation with other responsible ministers must take the Board's recommendation seriously. The MVRMA offers the responsible ministers few options should they disagree fundamentally with the Board's conclusions. In instances of disagreement a 'consult to modify' process comes into play, in which the details but not the intention of the Board's measures is subject to sometimes protracted negotiation. If the disagreement is unresolved the responsible ministers may require the Review Board to take the proposed development to a higher level EIR. The responsible ministers could ultimately reject the Board's recommendation (and mitigation measures) if the responsible ministers still do not agree; however, they must provide reasons to publicly explain their decision. To be publicly acceptable, the responsible ministers would need the most compelling reasons to reject a recommendation of the Board; given the very public, fair and transparent nature of the EA process leading up to the Board's recommendation. To date no Board recommendation has been rejected by government. Once the responsible ministers sign off on the Board's report, the proposed development would then move into the regulatory process where it receives its permits and/or licences.

Under the *Act*, the Board may conclude that a project "is likely ... to have a significant adverse impact on the environment ... [or] to be a cause of significant public concern"<sup>27</sup> and order an environmental impact review, which would bring an increased level of rigour and focus on the remaining important issues identified by the EA. Whereas the Board itself conducts EAs, an EIR is conducted by a panel appointed by the Review Board. On completion, the report of the EIR panel follows essentially the same route as an EA report. In the Board's first nine years, only two proposed developments – the mammoth Mackenzie Gas Project and the a large diamond mine development – were sent for EIR.

A glance at the definition – or lack of definition – of certain key terms underlines the scope and power of the Board. Nowhere does the MVRMA or the regulations passed under it define "significant adverse impact", "public concern" or "significant public concern". Accordingly, it is left to the Board to interpret these crucial but ambiguous provisions of the *Act*. Also noteworthy

is the expansive definition of “the environment”:

‘impact on the environment’ means any effect on land, water, air or any other components of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources.<sup>10</sup>

In this noteworthy provision the MVRMA regime differs from the EIA processes in place prior to the establishment of the claims boards. The *Canadian Environmental Assessment Act* (CEAA), which the MVRMA supplanted in the Mackenzie Valley, only took socio-economic effects into account under certain circumstances.

In adopting this holistic understanding of the environment, as encompassing more than the physical world, the MVRMA requires the Board to take strongly into account Indigenous peoples’ concerns that proposed developments may harm their culture or their social institutions. The significant extent to which the *Act* gives priority to Indigenous influence is evident from the ‘guiding principles’ which underpin the EIA regime:

- (a) the protection of the environment from the significant adverse impacts of proposed developments;
- (b) the protection of the social, cultural and economic well-being of residents and communities in the Mackenzie Valley; and
- (c) the importance of conservation to the well-being and way of life of the aboriginal peoples of Canada ... who use an area of the Mackenzie Valley.<sup>11</sup>

The priority accorded Indigenous traditional knowledge further underlines the MVRMA’s emphasis on the role of Indigenous people in EIA processes in the Mackenzie Valley.

## **Indigenous Influence on the Mackenzie Valley Environmental Impact Review Board**

### The Review Board as Co-Management Body

Environmental impact assessment in the Mackenzie Valley differs from the CEAA regime in a number of important respects, most of which are aimed at improving decisions about proposed developments by enhancing the influence of Indigenous people in the process. Perhaps the most significant change brought about by the MVRMA, in fulfilment of the government’s commitments in the land claims, was the transfer of the consultation, assessment and licensing functions required in the approval of new developments from the federal government to a series of independent boards. Not only are these boards independent of government, they are explicitly constructed on a co-management model. Co-management has a wide range of meanings and institutional forms, but in essence it involves power sharing<sup>12</sup>.

For the Review Board – as well as the other boards established by the MVRMA – co-management is enabled primarily through the appointment process. Board members are all

appointed by government, but four of the nine members are appointed on the nomination of the three Indigenous land claimant organizations with settled land claims and one which is still negotiating with the federal government; four others are nominated by the territorial and federal governments. The Chairperson is nominated by the Board. Co-management is reinforced in the quorum provisions: in order to conduct business, the Board requires a quorum of five members, but two of the five must be Indigenous nominees and two must be government nominees. These nomination and quorum provisions are not simply conventions; they are specified by the *Act*.

Once appointed, Board members do not take instructions from or act as delegates of the governments or organizations which nominated them. Rather, they exercise their own independent judgement. Members take very seriously the requirement that they be independent. Each Board member bring their own personal values and beliefs and experiences; formed in part by their heritage and the socio-economic environment in which they have lived. And of course, the Indigenous governments routinely nominate Indigenous persons (as, on occasion, do the federal and territorial governments), thus ensuring a strong Indigenous sensibility on the Board. The same influences apply to non-Indigenous Board members thereby enabling the Board to have a balanced sensitivity to the issues that are raised by both groups of people in the conduct of an EA or an EIR.

The result is that, in contrast to the pre-claim EIA regime, in which few if any Indigenous people held important decision-making positions, half or more of the members of the independent board which carries out EIA in the Mackenzie Valley are Indigenous. (Nor should it be forgotten that the land and water boards, which do most of the screening to decide which development applications warrant EA, have a similarly high proportion of Indigenous members.)

### Indigenous Influence on EA Through Consultation and Public Hearings

Among the most significant changes brought about by the MVRMA is the extensive level of consultation with people and communities who may be affected by developments. The MVRMA requires both the land and water boards and the Review Board to engage in thorough consultation with those potentially affected by proposed developments.

Consultation with potentially affected communities is an integral part of EAs carried out by the Review Board, but that is only one component of the consultation process. The land and water boards forward copies of all applications for land-use permits and water licences to communities and Indigenous organizations for comment as soon as they are received. Even before applications are submitted, however, the MVRMA regime requires developers to engage local communities about proposed projects. MVLWB guidelines warn would-be applicants that they “will be asked to demonstrate the extent of community involvement as part of the formal application and to provide an indication of how a specific proposal was modified or prepared to reflect regional community concerns”.<sup>13</sup> In all this, it is important to recall that, outside of Yellowknife and two or three other centres, the population of the communities of the Mackenzie Valley is predominantly Indigenous. Therefore, in most instances, “community” response is Indigenous

response.

As discussed in a later section, many communities and Indigenous governments lack the capacity to review and respond to all the applications they receive. It is essential that they have the option of making formal representations and indeed they do make their views known on major developments or even on minor projects which raise concerns. Indeed, one of the triggers for land and water board referral to the Review Board for an EA is “public concern” – a key measure of which is the response from potentially affected communities and Indigenous governments.

Once a project comes before the Review Board for an EA, the Board takes special care to solicit the views of local communities and Indigenous governments about the proposed project. This includes written and oral communications with political leaders and administrative staff, issues scoping meetings in potentially impacted communities, and formal public hearings, again, often conducted in the communities which stand to be most affected by the development.

An important feature of the EA process, which also stands in marked contrast to the pre-MVRMA regime, is its transparency. The Review Board’s public registry of EA and EIR documents which includes the project application, correspondence between the Board and the developer, reports from government agencies and departments, correspondence between the Board and government is readily accessible on the Board’s user friendly web site. Communities and Indigenous governments have complete access to the information on which decisions will be based. Indeed, through an ‘information request’ process, they can – and do – request and receive additional information about projects both from developers and from government.

When an environmental assessment commences; the Review Board invites communities, Indigenous organizations and other interested parties to apply for formal standing in the EA process. The Review Board also drafts Terms of Reference that will guide the content of the Developers Assessment Report (DAR). Based on the DAR, Indigenous organizations can determine how they wish to intervene in the process. This enables Indigenous organizations to participate in all phases of the EA process, including making their own presentations to the Board and asking questions and commenting on presentations from other parties at public hearings, including the developer and government departments and agencies. (As well, any member of the public attending the meeting is offered the opportunity to question presenters.)

Lack of capacity limits the extent to which communities and Indigenous governments can take advantage of the opportunities available to them. Recognizing this issue, the Board has taken important steps to encourage their participation and to remove possible barriers to their active involvement. This includes conducting meetings and hearings in potentially impacted communities, the development of plain language materials so the EA process is more understandable and the development of translated glossaries of words commonly used in EIA and relevant industries to facilitate interpretation of presentations and other information into aboriginal languages. More significantly, the Board is especially interested in gaining an Indigenous perspective on the proposed development and thus depends on the local communities and First Nations to bring their ‘traditional knowledge’ to the assessment process.

## The Review Board and Traditional Knowledge

In recent years researchers, scientists and governments have begun to realize that ‘Western’ science is not the only valid source of knowledge and understanding of the environment. What has come to be called ‘traditional knowledge’ (TK) – a part of which is ‘traditional ecological knowledge’ (TEK) – of Indigenous peoples is now widely recognized as being equally important as Western scientific knowledge, and also an essential element in environmental decision making.

Many definitions of TK exist. A well-known definition describes it as:

A cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission about the relationship of living beings (including humans) with one another and with their environment.<sup>14</sup>

It is worth quoting at length the Board’s understanding of aspects of TK that relate to the EIA process in the Mackenzie Valley (drawn from the work of Dr. Peter Usher<sup>15</sup>)

### 1) Knowledge about the environment

This is factual or “rational” knowledge about the environment. It includes specific observations, knowledge of associations or patterns of biophysical, social and cultural phenomena, inferences, or statements about cause and effect, and impact predictions. All are based on direct observation and experience, shared information within the community over generations.

### 2) Knowledge about use and management of the environment

This is the knowledge that people have about how they use the environment and about how they manage their relationship with the environment. Examples include cultural practices and social activities, land use patterns, archaeological sites, harvesting practices, and harvesting levels, both past and present.

### 3) Values about the environment

This knowledge consists of peoples’ values and preferences, and what they consider “significant” or valued components of the environment, and what they feel is the “significance” of impacts on those valued components. Aboriginal spirituality and culture plays a strong role in determining such values. This element of traditional knowledge includes moral and ethical statements about the environment and about the relationships between humans, animals, and the environment; the “right way” to do things.<sup>16</sup>

The MVRMA recognizes that the Indigenous people of the Mackenzie Valley possess invaluable TK by explicitly putting it on the same footing as scientific knowledge for Board decision

making.<sup>17</sup> For its part, the Board has not been content to simply accept the TK put before it. It has taken initiatives to encourage and facilitate the use of TK in Board processes. Several years ago, for example, the Board convened a large meeting of Indigenous leaders and elders and environmental regulators to develop ideas about how to integrate TK into environmental impact assessment. Following this gathering, the Board carried out wide-ranging consultations culminating in the publication of its *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*. These *Guidelines* set out practical policy directions for the use of TK in environmental impact assessment processes.

The Board also organized a series of workshops for the translators who must deal with the specialized terminology characteristic of both EIA and TK. (With substantial numbers of Indigenous people – especially elders, who are key repositories of TK – either speaking little English or being more comfortable expressing themselves in their languages, translation is an essential element of the EIA process in the Mackenzie Valley.) Rendering the technical terminology of environmental assessment into Indigenous languages is no small challenge, nor is translating subtle Indigenous concepts which lack English-language equivalents. Removing barriers to cross-cultural understanding in this way has enhanced the Board's capacity to incorporate TK into its decision making.

The Board must follow certain formal procedures set out in the framework of the MVRMA and other relevant elements of the Canadian legal-governmental system. Its decisions would be open to legal challenge if it failed to observe these requirements. Thus it must walk a fine line as it seeks to incorporate TK into its processes. Its TK *Guidelines*, however, demonstrate its efforts at accommodating TK, and the holders of TK, into its work, as do the following examples from the Board's *Rules of Procedure*:

- 30 In conducting its proceedings the Review Board is not bound by the strict rules of evidence.
- 31 To the extent consistent with its duty of procedural fairness, the Review Board will emphasize flexibility and informality in the conduct of its proceedings and in the manner in which it receives information or documents.
- 33 The Review Board may make arrangements to secure information from or hear the testimony of an elder or the holder or traditional knowledge at any time during a proceeding.<sup>18</sup>

### How Co-Management Strengthens Review Board Decisions

Because the Review Board is a co-management body, it has certain features that are often absent in other models of EIA decision making. The composition of the Review Board legally includes appointees nominated by Indigenous organizations. This is very different from just having Indigenous people appear before the decision-maker in a public hearing. In Review Board

proceedings, Indigenous people are decision makers. This achieves more than just reducing a power differential - it enables the Board to better comprehend traditional knowledge, to apply diverse sets of values to its decision making, and to consider cultural impacts in a more meaningful way.

The law requires the serious consideration of traditional knowledge in Review Board assessments, but traditional knowledge is sometimes challenging to translate across cultures. It is context-specific, in that its meaning is best relayed in the framework of an Indigenous worldview<sup>19</sup>. As well, it stems from an oral tradition, and that is how it is passed through generations. Traditional knowledge is part of a holistic world view, and is not neatly organized or compartmentalized. Unlike many biophysical subjects dealt with in conventional science, there are no convenient indexes that allow for the ready use of traditional knowledge without involvement of the holders of that knowledge. Indigenous Elders are the main holders of traditional knowledge. They share it through translators, in a manner of their choosing. Even with careful translator training, the substance of what is being said can be difficult to fully communicate.

The full meaning of traditional knowledge information must be translated across cultures. The potential for misunderstandings is a challenging aspect of using traditional knowledge in EIA. For example, the point of an Elder's submission may not be the literal words that are transcribed, but a larger meaning communicated using a story. Within a given cultural context, the meaning of such communication is clear. For example, a Tlicho person listening to a Tlicho Elder will likely know to listen for a deeper meaning beneath the literal story that is shared. However, when such communication happens across cultures, there is a risk that what has been clearly understood by someone in the same culture will be completely lost to someone from another culture.

In order for the Review Board to draw conclusions, it must have a reliable understanding of what it has heard. This gives a large advantage to a co-management board such as the Review Board in its consideration of traditional knowledge. The potential for cross-cultural confusion between parties and decision-makers has been greatly reduced because of its composition. Current Indigenous members of the Review Board include a Gwich'in Elder, a former Akaitcho chief, the granddaughter of a respected Tlicho medicine man, and others who have been raised and live in settings where traditional cultural values play an important role in daily life. Indigenous members of the Review Board are able to help ensure that all Board members appreciate the meaning of the traditional knowledge information received by the Review Board in a given assessment. This helps overcome cross-cultural challenges, improves the information base for decision making and provides the basis for better decisions.

Another benefit of the co-management composition of the Review Board arises in the evaluation of information received in an EIA. Like information based on conventional science, some information based on traditional knowledge may be more applicable than others to the assessment of a particular development. Indigenous Board members have an advantage in assessing how applicable specific traditional knowledge submissions are to the development

being assessed.

Another way that the co-management composition of the Review Board facilitates good decision-making is derived from the different backgrounds of Board members and their inherent diversity of worldviews and values. In assessment activities such as determinations of significance, both traditional knowledge and science together are required for best analysis of predicted effects, but this must be followed by a value-based subjective judgement of the significance of the predicted effects. The composition of the Review Board enables its members to draw upon and balance a broader range of values in decision-making,<sup>20</sup> and consider a wider range of informed perspectives to apply in reaching conclusions about impact significance. In combination with the Board's typical consensus-based approach to decisions, the broader diversity of values contributes to better decision making.

As described earlier, the mandate of the Review Board includes the assessment of social and cultural impacts. When the Board is assessing a cultural impact, such as evaluating the effect of a disturbance to a sacred site on the well-being of Indigenous people, the co-management composition of the Review Board is, once again, an advantage. This is true because the holders of a culture are the people best able to evaluate the importance of an impact to that culture.

## **Case Studies**

### **Diamond Exploration in Drybones Bay near Yellowknife, Northwest Territories**

One of the lessons learned by the Mackenzie Valley Environmental Impact Review Board early on in its short history was that “it is not the scope of the proposed development that is important but the scale of the issues” when assessing the significance of potential impacts<sup>21</sup>. In this instance a ten hole exploratory drilling program was proposed in the waters and on the shore of Drybones Bay located approximately 45 kilometres south east of Yellowknife, NT along the northern shore of Great Slave Lake. Associated with this activity would also be the cutting of access lines through the bush to the inland drill site locations and for geophysical surveys, a camp for workers and the disposal of drill cuttings in a depression nearby. It had been referred to the Review Board for environmental assessment by the Mackenzie Valley Land and Water Board in May 2003 based on public concern for the cultural, spiritual and environmental importance of the area.

Relative to many other developments referred to environmental assessment, this project would be considered very small in terms of its physical footprint on the environment. However, the Review Board's mandate is to consider not just the biophysical impacts of a proposed development but the social, economic and cultural impacts as well. As it turned out, the cumulative nature of the social and cultural impacts were most significant in the determination of the Review Board.

The oral and written evidence gathered by the Board in its EA showed the vital importance of

Drybones Bay to the culture and heritage of the Yellowknives Dene First Nation, the North Slave Metis alliance and to the Lutsel K'e Dene First Nation; Indigenous groups sharing a common history of traditional use of the area. Drybones Bay had long been a site of year round use by Indigenous people of the area; it held many archeological and burial sites; it was heavily used for traditional hunting and trapping; and it was used to provide youth with cultural exposure to traditional activities and the land. The Indigenous traditional knowledge holders spoke at length during the public hearings held by the Board to the high cultural importance of Drybones Bay and the impact that diamond exploration drilling in and around Drybones Bay would have on their people.

The Review Board concluded that the singular cultural impact of the proposed development would have an adverse impact so significant the project could not be justified. As a result the Review Board recommended to the Minister of IAND and other responsible Ministers that this project not proceed.

This was the first time the Review Board had ever recommended rejection of a proposed development since its inception in 1998. The Review Board took extra care to ensure its deliberations were thorough by hiring a cultural anthropologist as an expert consultant to assist in the analysis of the evidence it had received from participants in the EA process regarding heritage resources and traditional knowledge of the area. The Board wanted to be sure that it had properly understood the cultural importance of what it had heard and all of the evidence on the public record when forming its conclusions and recommendation.

The Minister of IAND did respond to the Board and asked for further consideration of the Board's recommendation. After the Board replied with additional elaboration and clarification of the Board's reasons for its recommendation, the Minister, on April 10, 2006, finally accepted the Review Board's Report of Environmental Assessment and the proposed drilling program in and around Drybones Bay was rejected.

The co-management nature of the Review Board together with the broader scope for EA provided by the MVRMA (i.e. being able to consider cultural impacts in addition biophysical, social and economic impacts) were both important to the final recommendation. Certainly without either, the Review Board would not be able to consider and balance the traditional knowledge and other evidence provided by Indigenous people as fairly and objectively as is now possible under the *Mackenzie Valley Resource Management Act*.

### **Construction of the Proposed Mackenzie Gas Pipeline through the Mackenzie Valley**

In December 2003, the Mackenzie Valley Land and Water Board referred a proposed barge landing and staging development at Camsell Bend on the Mackenzie River to the Review Board for environmental assessment, having concluded that it was part of a project that might be a cause of public concern. This barge landing was part of a much larger proposed development that included the construction of a gas gathering system from three anchor fields in the Mackenzie

River delta area, a 1200 kilometre pipeline south through the Mackenzie Valley to a terminus in northern Alberta, a 408 kilometre gas liquids pipeline and associated ancillary facilities. In all, this “mega” project was proposed to pass through three separate EIA jurisdictions; the Inuvialuit Settlement Region to the north, the Mackenzie Valley (under the MVRMA) and northern Alberta.

The Review Board conducted an EA on the full project. To do otherwise would have split the smaller project (the barge landing) out from the larger context in which the development was being proposed (the pipeline).

Public hearings were held in the three largest Mackenzie Valley communities along the route of the proposed pipeline; Inuvik in the Gwich’in Area, Norman Wells in the Sahtu Area and Fort Simpson in the Dehcho Area. The Board heard from many residents and business people inside and outside of the Mackenzie Valley, including Indigenous youth and Elders. The Review Board also received written submissions from local, territorial and federal governments, non-government organizations, aboriginal organizations, business associations, and individual members of the public.

Most impact concerns raised with the Board were social, economic or cultural in nature. The concerns raised were not only of a serious nature but were widespread as well. Of interest is that the relative emphasis on social, economic and cultural concerns varied from one land claimant area to the next; social concerns were highest in the Gwich’in area and economic concerns were highest in the Dehcho area. While there was a lot of oil and gas development activity in the Gwich’in and Sahtu areas, the Dehcho had little experience with the industry and may not have benefited to the same extent. Land ownership was a particularly important issue in the Dehcho where land claims have yet to be settled. Cultural concerns were pervasive.

After considerable public consultation and consideration of the information it had gathered, the Review Board, not surprisingly, concluded that the proposed development was likely to be a cause of significant public concern. This conclusion was in no small part a result of the large participation of Indigenous people from small and large communities along the route of the proposed pipeline. They provided the Board with a considerable wealth of traditional knowledge and community information on which to conduct its environmental assessment. The evidence was so conclusive that the Review Board ordered the proposed development to a higher level environmental impact review without first making any determinations on the likelihood of significant adverse impacts on the environment. It was also recommended that the EIR be carried out jointly with the neighbouring EIA jurisdictions represented by the Inuvialuit Game Council in the Inuvialuit Settlement Region and Environment Canada for northern Alberta.

Again, the co-management nature and broader mandate of the Review Board was able to draw in considerable participation by Indigenous people along the route of the proposed pipeline development. The world class size of this “mega” project, with a current estimated construction cost of 16.2 billion Canadian dollars, demands the attention of all stakeholders. There was only one opportunity to get it right. However without the enabling provisions of the MVRMA many

issues most relevant to Indigenous people of the Mackenzie Valley would be muted.

Indigenous people were able to provide highly relevant information regarding cultural and social impacts of the proposed pipeline development through the Mackenzie Valley. They are the ones most familiar with their own needs, concerns and vulnerability to impacts. In turn, the Review Board by its co-management nature was uniquely qualified to consider the traditional knowledge, scientific information and other relevant information from Indigenous and non-Indigenous perspectives in a fair and objective manner.

As a result, the neighbouring EIA jurisdictions, which are now parties to the joint EIR which is still on-going, would likely not have given socio-economic considerations as much weight if not for the results of the EA conducted by the Review Board. This is a good example of how Indigenous people have shaped the review of a mega project of national interest.

Appropriate and sustainable development in the Mackenzie Valley will continue to benefit from the effective co-management of resource development in the Mackenzie Valley.

## **Successes and Challenges**

### Successes

As it approaches its second decade of operation, the Review Board can look back on a solid record of accomplishment. The Board has established a reputation for conducting thorough, professional environmental assessments. In this regard, it is worth emphasizing that, although the overall legal framework was set by the MVRMA, the Board itself had to develop many of its own procedures for conducting EAs and for dealing with governments (federal, territorial and Indigenous), other land claims-mandated boards, industry and the public.

The Board continues to generate leading-edge innovations in environmental impact assessment. Two key illustrations are the Board's *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*<sup>22</sup> and *Socio-economic Impact Assessment Guidelines*<sup>23</sup> – both developed with broad public involvement – which have established new standards and approaches in these emerging fields. An independent 'Environmental Audit' of the Northwest Territories commended the Board "for taking a leadership role in developing tools to ensure the effectiveness of the [EIA] system".<sup>24</sup>

Also notable has been the Board's success, in partnership with the other Mackenzie Valley resource management boards, in establishing an open and transparent EIA process. Moreover, as discussed above, this process offers extensive and genuine opportunities for significant public influence on important environmental decisions – which very often means Indigenous influence. The comprehensive public consultation requirements of the process and the respect accorded traditional Indigenous knowledge, coupled with the co-management nature of the Board, have achieved a central objective of the MVRMA (and indeed of the land claims themselves):

ensuring strong Indigenous influence in decisions affecting the environment of the Mackenzie Valley.

### Challenges

The major challenges facing the Review Board are not so much ones related to the design of the environmental impact assessment and regulatory regime established by the MVRMA. Rather, the hurdles are ones related to the capacity of the co-management Boards, government, communities and Indigenous organizations to participate in a timely and effective manner.

Capacity can be categorized generally in terms of institutional capacity and human resource capacity. At the root of that of course is a general lack of adequate funding for key process participants. There is an active effort being made by the federal government now to properly rationalize the funding mechanisms for the co-management Boards. It will be critical to ensure long term and stable funding that is responsive to the growing and sometimes variable work loads co-management Boards are facing. Certainly present capacity issues require attention if the environment of the Mackenzie Valley is to be protected for the benefit of Indigenous and non-Indigenous residents of the Mackenzie Valley and all Canadians.

Specific capacity issues include the need for monitoring, reporting and evaluation of the mitigation measures arising from environmental assessments; the need for timely review and response to Reports of Environmental Assessment by officials supporting the responsible Ministers; the need for timely appointments to fill Board member vacancies, the need for internal capacity in the federal government to address its additional obligations to consult Indigenous people if Indigenous rights are potentially infringed by a proposed development; the need for capacity to monitor relevant cumulative effects information; the need for direction and resources to develop land use plans to guide regional resource development; the need for institutional, human and financial resources to document relevant traditional knowledge; and the general need for funding to assist Indigenous and other stakeholders to participate in project specific EIA processes.

The *Act* challenges the Review Board to produce quality EIA in a timely and expeditious manner. It also requires the Review Board “to ensure the concerns of aboriginal (Indigenous) people and the general public are taken into account...” To do that the Review Board requires quality information and that must include relevant and timely traditional knowledge and the process must be able to proceed smoothly without undue delay to avoid frustration by developers, other parties to the process and co-management Boards alike.

### **Conclusion**

The EIA regime in the Mackenzie Valley continues to evolve. It has clearly demonstrated the value of a co-management approach in the short eight years of its existence and the benefit of traditional knowledge in making resource management decisions. Indigenous issues and

concerns related to proposed developments are more effectively and fairly considered than they were prior to the MVRMA. Nevertheless, improvements continue to be needed as we move forward.

## Notes

1. In Canada, the term “Aboriginal” is the commonly used generic term; however, since the term “Indigenous” is encountered more frequently internationally, it will be used in this paper.
2. The Metis are recognized in the Constitution of Canada as a distinct Aboriginal people. The precise distinction between Dene and Metis is too complex to be addressed in this paper; in general, the Metis of the NWT have mixed Dene-European ancestry.
3. For a brief overview, see Review Board, “The History of the Mackenzie Valley Environmental Impact Review Board,”(February 2007)
4. The Inuvialuit of the Mackenzie Delta and Arctic Islands had finalized their claim in 1984; its provisions differ substantially from those of the claims in the Mackenzie Valley and the territory it covers is outside the Review Board’s jurisdiction.
5. For an account of developing the MVRMA, see Review Board, “History”.
6. Under certain circumstances, a range of federal or territorial departments or agencies may perform the screening.
7. MVRMA, section 125.1 (b).
8. SENES Consultants, *Northwest Territories Environmental Audit 2005, Main Report* (Yellowknife, 2005), 5-3.
9. MVRMA, section 128.1 (a).
10. *Ibid*, section 111.
11. *Ibid.*, section 115.
12. John Donihee, “Implementing Co-Management Legislation in the Mackenzie Valley”, Conference Presentation on behalf of the Canadian Institute of Resources Law, April 27-28, 2001
13. MVLWB, “Public Involvement Guidelines for Permit and Licence Applications to the Mackenzie Valley Land and Water Board,” October 2003, 1.
14. Fikret Berkes, *Sacred Ecology: Traditional Ecological Knowledge and Resource Management* (Philadelphia: Taylor and Francis, 1999), 8.
15. P.J. Usher, Traditional Ecological Knowledge in Environmental Assessment and Management, *Arctic* 53, (June 2000), 183-193
16. Review Board, *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment* (Yellowknife, July 2005), 6. Available at [http://www.ReviewBoard.nt.ca/reference\\_lib/guidelines.php](http://www.ReviewBoard.nt.ca/reference_lib/guidelines.php)
17. MVRMA, section 60.1 (b).
18. Review Board, *Rules of Procedure for Environmental Assessment and Environmental Impact Review Proceedings* (Yellowknife: May 1, 2005), available at [http://www.ReviewBoard.nt.ca/reference\\_lib/guidelines.php](http://www.ReviewBoard.nt.ca/reference_lib/guidelines.php).

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- 19 Fikret Berkes, “Nature of traditional ecological knowledge and the Canada-wide experience”, *Terra Borealis* (2000), 1-3.
  - 20 K.Cliffe-Phillips and M. Haefele, “EIA Made in the North”, in *Proceedings of the 24<sup>th</sup> Annual Conference, International Association for Impact Assessment*; Vancouver, British Columbia, 2004.
  - 21 A. Ehrlich, and S. Sian, “Cultural Cumulative Impact Assessment in Canada’s Far North”, in *Proceedings of the 24<sup>th</sup> Annual Conference, International Association for Impact Assessment*; Vancouver, British Columbia, 2004.
  - 22 July, 2005
  23. March, 2007.
  24. SENES Consultants, *Northwest Territories Environmental Audit 2005*, 5-1.