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# DEVELOPING FAIR COMPENSATION STRUCTURES

*Prepared for:*

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*between*  
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*and the*  
Petroleum Industry**

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## I. INTRODUCTION

About two years ago, I met with a lawyer. His aboriginal clients were upset over the impact oil and gas development had on their lands, culture and traditions. They did not have a say in how development occurred and they did not significantly share in the benefits from that development. The lawyer was frustrated by the fact that the only compensation his clients could get was for the 'market value' of the timber fiber destroyed in the development of oil and gas. Clearly, the money they were receiving was not reflecting the true loss of value.

His clients told him that there were many things deeply valued by the affected community that were also being lost. Spiritual values were impacted by the noise. Pollution created threats to the health of wildlife and people. There was the loss of hunting grounds, the loss of wildlife habitat and the loss of privacy. We discussed how these losses could be identified and measured in dollars for the purpose of compensation. There were two key issues:

- ◆ The community had to be comfortable with the process and the final dollar amount; and,
- ◆ The results had to be defensible in a court of law.

I tried to keep things simple. First, there were obvious equity issues related to 'development' actions that would impoverish an already poor aboriginal people through the destruction of the natural resources they depend on culturally (wild lands) by taking away another resource (oil-gas) they could use to achieve self-sufficiency. Second, I assumed from the challenging social and economic situation of the aboriginal group that they would have become preoccupied with the dire need for revenue and jobs. Finally, this project was, after all, about pricing intangible values in dollars, so I assumed that money would be the focus of the meeting I would have with the Council. I was wrong. During the Council meeting we talked almost exclusively about tradition, culture and the forces that were eroding it, including oil and gas development. We also discussed ways that oil and gas could better contribute to community development.

I start with this story as a word a caution. It is common to think about value in simple and crude dollar terms. But values are complex and very different from person to person, from culture to culture. The moral of this story is that to achieve fair compensation, creative alternatives that are value-focused should be pursued. I argue here that fair compensation is the need to get past the discussion of dollars and get into the discussion of values. Values are, after all, what we care about and what is important to us.

As aboriginal communities begin to engage with the culture of capitalism, one way for everyone to better understand intangible aboriginal values is to use the familiar language of business: dollars. While this paper discusses pricing intangible values using dollars, money should be considered only one component of 'fair compensation.' Using a single measure like dollars permits comparisons to be made between 'development values' and 'intangible values'. Yet compensation should also be about avoiding losses in the first place, mitigating adverse impacts, achieving better communication, promoting cultural understanding and, above all, having the patience to do it.

## II. DEVELOPING FAIR COMPENSATION STRUCTURES

What drove the economy prior to the contact with the European culture, the European people? Some of the stories that some of the elders had brought out was that prior to the contact it was spiritual values that drove this country.

Mark Wedge, Whitehorse Yukon

18 November 1992

Report of the Royal Commission on Aboriginal Peoples p. 462

How can you buy or sell the sky, the warmth of the land? The idea is strange to us...The rivers are our brothers....The air is precious...for all things share the same breath... This we know. The earth does not belong to man. Man belongs to the earth. This we know. All things are connected like the blood which unites one family.

Chief Seattle<sup>1</sup>

- 
- ◆ How much a forest really worth? Or only a few hectares of trees that have been cut for a seismic line?
  - ◆ How much is aboriginal culture worth? Or an important cultural site that has been damaged by the development of a transfer station?
  - ◆ What is the dollar equivalent to damage done to spiritual values from the noise of oil and gas development activity?
  - ◆ What is the price for risks to wildlife and human health from oil and gas development?

If you ask many members of the native community, they will simply say that these questions do not make sense, it is impossible to put a price on such intangible things. Furthermore, they may say that to put a price on cultural values, spiritual values and traditional values is degrading and offensive. If you ask some members of the business community they will likely agree that it is impossible to put a price on native culture and tradition. They may argue that only things that can be measured by dollars in the marketplace should be given a price.

For a moment, it may appear that we have reached consensus between industry and aboriginal communities. Unfortunately, not yet. Clearly, many native cultural values are based on their bond with the land and its natural resources. Oil and gas development disturbs the land, and therefore the culture. Achieving fairness through compensation, mitigation and negotiation is the challenge. The questions then become:

- ◆ Can 'intangible' values be addressed through compensation?
- ◆ Should intangible values even be translated into crude dollar terms?

Considering the changing scope of aboriginal title and interests, and the importance of the recent Delgamuukw decision, the concerns of aboriginal communities must now be seriously addressed by the government and the oil and gas industry. By not specifically identifying and incorporating these ‘intangible’ values into the negotiation process, they may be lost without any prior recognition. Although consultation with aboriginal groups may be a long process, taking steps to integrate values into negotiation provides an opportunity for negotiating viable and long lasting solutions. By ignoring these values, there is potential for expensive after the fact compensation and associated litigation.

I believe an effective way to incorporate aboriginal values into the process of developing fair compensation structures is through the direct participation of community members. By working with aboriginal groups in northern Alberta,<sup>2</sup> EcoPlan International developed a simple method that allows for the oral histories and oral evidence of aboriginal groups (particularly the elders) to be combined with contemporary modeling techniques. The goal is to clarify values for the purpose of compensation, mitigation and negotiation.

The process is based on *Value Focused Thinking*,<sup>3</sup> articulated in a 1992 book by Ralph Keeney. It encourages community members to reflect on what is important to them. For losses already incurred, it assists communities with recognizing what they have gained and lost. For future negotiations, it serves as a way to help communities to recognize what they have, what they want, and how to get it. Through this process, the key issues needed for developing fair compensation structures are clarified.

An important step that can be included in the process is pricing ‘intangible’ values using dollar measurements. Underlying the concept of value is not that there exists some economic value for the environment, culture or human health and safety. What are being valued are people’s preferences for changes in the state of the environment, culture, or health and safety. Money is simply one of a number of ways to measure people’s preferences.

## The Context of Changing Values

We have our revenues from the oil n' this n' stuff like that but now the way they log, they just take the roads and trees like that [for oil and gas development]. Everything is goin' be down n' everything 'll be gone. We'll be finished. Where are we going to get our revenue? Are we going to get anything out of these oil wells anymore?...<sup>4</sup>

Metis Elder, 1997

The world is changing, we have to cope with change.<sup>5</sup>

Metis Youth, 1997

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Aboriginal groups face difficult choices. On the one hand, they have greater power through the newly defined scope of aboriginal title and interests, stronger self-government, and more control over limited resources. On the other hand, they face continued dependency on government transfers, a lack of expertise in management and administration, poor health, low self-esteem among the youth and internal conflict. Above all is the pressing need for jobs and revenue. Considering this context, oil and gas development should be eagerly welcome on aboriginal settlements and reserves. This is not always the case.

Aboriginal councils face hard choices. There are many impacts from oil and gas development, and these impacts are disproportionately placed on the rural areas where many aboriginal people live, while the benefits accrue to the cities and places outside the province.<sup>6</sup> Besides the common impacts associated with development, there are also unique issues of tradition and culture when dealing with aboriginal groups. Councils and members of aboriginal communities must make difficult tradeoffs and try to balance the economic benefits with an array of adverse affects. Any approach in the aboriginal context will be challenging. Consider the following:

- ◆ There is a need for a great deal of information that simply does not exist.
- ◆ Many aboriginal people, especially elders, tend to express their values in stories. In the past these stories have not been adequately understood by outsider development interests, and in some cases by the aboriginal members themselves.
- ◆ There is a strong reliance on verbal and visual communication.
- ◆ There are often language, education and conceptual barriers.
- ◆ A dollar to a cash poor aboriginal hunter is quite different than a dollar to a wealthy corporation.

Finding a balance among these tradeoffs should be the focus of developing fair compensation structures. The balance must be consistent with aboriginal people's value preferences. The values that indicate what is important are specific to the experiences and context of each aboriginal group. A participatory approach is required in order to identify what to consider in a fair compensation structure.

## **Compensation and What is Compensable?**

Some legislation and legal contexts allow for compensation to be collected for past damages (e.g., *The Metis Settlements Act*). Compensation may also be the subject of negotiations for future actions that will cause damages or losses to occur. In any event, the legal view of determining compensation is to find the 'right price' for those adversely affected. This price would be the amount necessary to make the affected group indifferent to their losses.<sup>7</sup> To put it another way, it is reasonable in a technical sense to assume that compensation should put the affected group in as good of a position as if no losses were incurred in the first place.<sup>8</sup>

'As good a position' is a relative term that is defined by context and perspective. A fair, pragmatic, and responsible approach to compensation should respect history, experience and the years of debate between aboriginal people, the industry and the different levels of government. For example, the resulting legal framework for identifying compensatory losses on Metis Settlements in Alberta was articulated in Section 118 of *The Metis Settlement Act*. It explicitly recognizes as compensable the economic and production values as well as intangible cultural, social, and environmental values. The Delgamuukw decision confirms that compensation to aboriginal people will ordinarily be required when aboriginal title is infringed.<sup>9</sup>

There are many economic values that are affected by oil and gas development. Some values are market based and readily quantified in monetary terms (e.g., the value of the standing timber and future timber harvests). Other economic values are more difficult to quantify (e.g., the replacement value for the traditional use of wild foods, income from wild fur, or the opportunity cost for alternative land uses on disturbed land). The challenge arises from a need for exact historical records, detailed scientific information, and formal land use plans. This information simply does not exist in most cases, except through oral history and testimony of elders and knowledgeable members of the aboriginal group. Fortunately, these are now considered legitimate sources of information in the Canadian context due to the Delgamuukw decision.

Yet, despite difficulties with determining economic values, they still represent only a portion of the total value attached to land and resources impacted by oil development. Aboriginal people have many strong beliefs and values that are not normally sold through markets. However, these may be (or have been) affected by oil and gas development. These values do not easily lend themselves to monetary quantification but they should be calculated for the purpose of compensation. Examples include, but are not limited to, traditional cultural values (e.g., teaching of traditional skills and knowledge or spiritual values), community values (e.g., health and safety risks), and environmental values (e.g., ecosystem function values, wildlife habitat values). Some of the more important broad issues affecting value are looked at below.

## **Some Broad Issues Affecting Value**

### *Past and Current Practices*

Fear of development resulting from past experiences has a real affect on how aboriginal people value their resources. I have spoken to people in the oil and gas industry and they agree that past practices were often insensitive to the environment and to aboriginal people. They are quick to point out that new technologies and training are eliminating poor practices, mitigating adverse affects and minimizing risks. Yet these issues still exist as community concerns and should not be ignored. Most hunters, elders, members and councils are still not clear about what the state of development is and are not monitoring development activities to relieve anxiety that development is being done appropriately. Aboriginal people I have worked with remember the past and are aware of adverse impacts. Sometime it is due to a conflict of values, sometimes to a lack of information, and sometimes to the very real impacts they must absorb. True-life examples from my work include:

- ◆ When a fisherman sees seismic crews conducting seismic activity in the lake and that winter there is a massive fish kill, they make the connection – even though the kill may be from oxygen depletion.
- ◆ When a hunter kills a moose and it is full of cancer, and they have not seen many moose with cancer in the past, they immediately blame the industry that surrounds them – especially when they see moose licking at oil-well sites where there danger signs are posted.
- ◆ When a hunter sees an oil company truck dumping an unknown liquid into a stream at 3:00am, they naturally suspect that their land is being polluted.

Are these situations acceptable? Regardless, they directly affect how they value both past and future development.

### ***Advancement of the Development Frontier***

One of the most significant impacts of development affecting aboriginal groups is the off-settlement/off-reserve advancement of frontier activities -- including oil and gas development, logging, and hunting. For decades, aboriginal groups have made adjustments to the advancing development frontier, adapting and incorporating various changes and innovations into their culture and way of life. However, many remain deeply concerned over the rapid advance of industry. Although they are trying to cope with the changes, the advancement of the development frontier affects how they value their own resources.

- ◆ Frontier development generates a great deal of anxiety as it pushes up against the their land and increasingly threatens their traditional livelihood activities.
  
- ◆ There is a fear of contamination to traditional wild game food sources. Ironically, what once gave them comfort and security from hunger may now pose a health hazard and undermine the essence of their hunting and fishing heritage.

Clearly, oil and gas companies cannot be held directly accountable for all regional activities. But they need to be sensitive to the concern, uncertainty and lack of information that aboriginal members live with regarding the advancement of industry. The reason the industry should be aware is that the effects of the advancing development frontier have direct implications for how aboriginal people value changes associated with oil and gas development on their limited land bases. Frontier advancement creates greater scarcity of traditional resources, goods and services. The aboriginal sense of stewardship and concern for the wildlife means that they may place great value on the limited supply of wildlife habitat on their lands. The aboriginal land that provides habitat becomes more important as off-Settlement habitat is fragmented, consumed, or contaminated by industrial development

### ***Cumulative Effects***

Frontier advancement can contribute significantly to cumulative effects. Cumulative effects are the changes that occur as a result of the combined impacts from more than one project. When considered alone, a project's impacts (e.g., an oil well site) may be perceived as insignificant. However, when considered together with other projects or activities, the combined significance of these impacts may be unacceptable or devastating. Incremental increases in projects accelerate habitat loss or habitat alteration. This in turn deters wildlife from the area. This situation has obvious implications for aboriginal values as

well. The change may happen so slowly over time or over an area that it is hardly noticeable until the damages of this advancement have occurred. These are concerns of aboriginal people and also affect their perceptions of change and value.

### ***Looking Back and Looking Forward***

When compensation is determined plays an important role. We also know that people value losses much more than they value comparable gains.<sup>10</sup> Therefore, if damages or losses have already taken place the people suffering from the losses would place a higher value on the losses and there is less that can be done in terms of mitigation and avoidance after-the-fact. Here, the goal would be to identify what has been lost, what has been gained, and what the difference is. For past damages, dollar measures are helpful because mitigation is limited and avoidance impossible.

Research also indicates that true compensation is commonly far greater than the payment for losses or damages.<sup>11</sup> If damages or losses are anticipated and the exercise is to support future negotiations, then the process is much more open to creative alternatives. Viable solutions can be reached that benefit everyone. Using dollars in conjunction with mitigation actions can produce compensation packages that help to answer the difficult question: Is it worth it? Once the issues and risks are clarified, and alternatives developed, both oil and gas companies and aboriginal groups can answer this fundamental question with greater certainty. Quantifying changes in all values using dollars as measures is often useful, and some methods are better than others for achieving this objective.

### **Alternative Approaches to Valuation – And Why They Don't Work in the Aboriginal Context**

Many common approaches to compensation fall short of effectively and reliably addressing the basic aboriginal interests, and would therefore be inappropriate to use in the aboriginal context. A brief overview of the shortcomings associated with standard valuation methods helps clarify and support the rationale for a valuation approach using *Value Focused Thinking*.

Once compensable losses have been recognized, it is necessary to identify how the correct level of compensation should be determined. Most approaches to compensation attempt to establish an “objective” compensation value by finding “*the market value*” of the identified loss. However, this is clearly not a meaningful approach when discussing ‘aboriginal interests.’ Certainly some aspects of value can be illuminated by market approaches, providing partial insight into the overall losses. But market

based approaches are incapable of providing an objective approach to determining the loss of many important values such as culture and tradition.

### ***The Income Approach***

A common approach for valuing resources is to estimate the potential income stream from the exploitation of a salable good or service and determine its present value. One challenge to employing this method is that a market for the good or service must exist, essentially excluding non-market considerations. In addition, this approach requires many assumptions regarding future prices, production levels, and risks. Consequently, the values derived by this method may be extremely variable.<sup>12</sup> The limited application and difficulty with valuing marketable goods using the income approach suggests that it is not a complete or viable option for determining a fair compensation structure for aboriginal interests.

### ***The Substitution Approach***

With the discovery of large-scale non-renewable resources in the North, particularly in the 1970's, there was a rush of highly qualified researchers to investigate northern aboriginal communities. One of the primary goals was to understand the value of the subsistence economies. Assigning a monetary value was considered extremely difficult, and in some cases it was not even attempted.<sup>13</sup> Others used methods to discover the 'substitution value' of country foods: How much is a pound of moose meat as compared to a pound of beef? There were many problems. First there was little data on harvesting of country foods. Then there are difficult questions of wildlife population dynamics and true affects of development on wildlife and plants. Some of this data was collected at a great expense. In the end, researchers realized that there were so many intangible aspects to wild food consumption that the final dollar amounts would be wildly inaccurate and dramatically understate the true value of the lifestyle that was associated with gathering and hunting wild foods.<sup>14</sup>

### ***The Price Comparison Approach***

Another market-based approach might be to contrast the price of a comparable piece of pristine land that is equal in size and quality to the land is damaged or going to be damaged by development. First, this approach assumes that there is a comparable land area and viable market for these lands. It would also require the inclusion of additional costs for personal hardship, lost investment and other disturbances.<sup>15</sup> Beside the unwieldy hypothetical conditions required to consider such a comparison, the fact remains that the new land purchased will not have the same value on the open market for many of the intangible aspects (e.g., traditional sites, sacred places). Most importantly, this approach negates the true structure of the compensation question, blatantly ignoring the context: aboriginal title is inalienable, or can't be sold, transferred or surrendered.<sup>16</sup> The price comparison approach is not realistic for Canadian aboriginal

peoples. There are not viable markets or comparable land areas, and there would still be many issues related to valuing intangible losses in determining an appropriate level of compensation.

### ***Willingness to Pay and Willingness to Accept Approach***

Attaching a dollar figure to values that are not exposed to pricing through market systems is typically achieved through ‘contingent valuation’ techniques that ask respondents how much they are ‘willing to pay’ or ‘willing to accept’ for a defined loss. Although these techniques attempt to establish a ‘market’ (albeit hypothetical) and attach a dollar figure to intangible goods, they are not appropriate for determining compensation for aboriginal values. First, numerous potential biases associated with these methods tend to undermine the validity and reliability of the results. Second, they place excessive cognitive (thinking) demands on the respondents. Third, it is difficult to adequately structure compensation questions in order to elicit a well-founded response. Finally, these methods force respondents to directly make a tradeoff between money and losses.<sup>17</sup> **For many aboriginal people, it is not reasonable, and may be horrifying, for a respondent to think of intangible values in monetary terms.**

If the question were framed in terms of willingness to pay, many aboriginal respondents would certainly be limited, even conceptually, by their own ability to pay. Furthermore, if an aboriginal feels they lost something that was already theirs (e.g., traditional hunting grounds) then why should they have to pay for it? An appropriate response would be a refusal to participate in the valuation.<sup>18</sup> If they could be persuaded to participate and responses were collected, evidence from controlled tests suggests that the losses would be understated.<sup>19</sup>

Conversely, if the participant were asked how much they would be willing to accept for the damages from surface disturbances, something they have already lost and cannot get back, why not simply ask for the highest dollar figure imaginable -- effectively overstating the true value?<sup>20</sup> Attempts to avoid this situation by using hypothetical scenarios can lead to a distorted context and jeopardize the basic issues of value.



### III. VALUE FOCUSED THINKING APPROACH

The suggested approach is based on *Value Focused Thinking* (and multiattribute utility theory-decision analysis as applied to contingent valuation).<sup>21</sup>

*Value Focused Thinking* when applied to aboriginal value analysis uses discussion, conversation, mapping and story telling as a way to draw out important values. It takes place in surroundings comfortable to the participants (on the settlement or reserve). It focuses on what is important and looks at both factual and value based concerns. *Perhaps most importantly, it does not force the participants to think about intangible values in dollar terms.*

One of the main advantages of *Value Focused Thinking* over other forms of valuation is that less information is lost in the translation from intangible values to dollars. Like translating from English to Cree, where certain words either do not exist or close terms may mean something different, translating intangible values to dollars means there will be some

information lost. But we all must live together and must try to understand each other as best as possible. Using *Value Focused Thinking* we take smaller steps, spending more time reflecting on what is trying to be said.

#### Benefits of Value Focused Thinking

- |                           |  |
|---------------------------|--|
| <b>Aboriginal Groups</b>  | <ul style="list-style-type: none"> <li>◆ Provides a better understanding of what intangible values are really worth.</li> <li>◆ Can be used to seek fair monetary compensation for losses to aboriginal values.</li> <li>◆ Promotes better planning and decision making.</li> <li>◆ Can be used to support negotiations and achieve better development.</li> </ul> |
| <b>Petroleum Industry</b> | <ul style="list-style-type: none"> <li>◆ Provides a structured way to address aboriginal values to reduce uncertainty.</li> <li>◆ Helps address key aboriginal issues early and avoid costly after-the-fact compensation and litigation.</li> </ul>  |
| <b>Government</b>         | <ul style="list-style-type: none"> <li>◆ Promotes better decision-making and improved governance.</li> <li>◆ Can assist with negotiations, planning and decision making in single stakeholder situations (aboriginal communities) or multi-stakeholder contexts.</li> </ul>  |

In aboriginal communities value systems are rapidly evolving as evident in the conflict between elders and younger generations. Understanding value preferences becomes critical to community harmony. *Value Focused Thinking* allows generational value conflicts to be addressed, and provides an avenue for identifying common values, not just value conflicts, breathing more life into the process of valuation than many conventional approaches.

In any approach, consultation must take place to achieve fair compensation and successful negotiations. However, my discussions with the resource industry regarding aboriginal joint ventures in Northern Alberta confirmed a general frustration and hesitancy in working with aboriginal groups. Negotiations take a long time and do not achieve satisfying results. *Value Focused Thinking* provides a structured approach to consultation that may help to minimize negotiation time by promoting cross-cultural communication.

Finally, this approach has been successfully employed to establish dollar measures for intangible values in many contexts.<sup>22</sup> The simple approach I have already used with aboriginal groups in Canada is as follows:

- Step 1. Conduct background research. This may include interviews, community mapping, workshops and site visits with elders or members. Interviews and document review is also essential.
- Step 2. Establish a framework for assessing compensation by having the participants identify their values and then putting them into a framework where they can be analyzed.
- Step 3. Develop measures for determining the change in values.
- Step 4. Establish the relative importance of each change and quantify using dollars measures.

While the fundamental values are likely to remain consistent, they exist in dynamic systems and changes to them may vary. The price of timber and the quality of the timber stands may influence revenues. The importance of the surface disturbance may depend on the proximity to sacred aboriginal lands, the proximity to human settlements, the importance of the land as a traditional hunting area, or the importance of the land to local ecosystem functions. Values may be sensitive to the size and scale of the disturbance and the incremental nature or cumulative effects of the disturbance in relation to other projects. Furthermore, lack of information, uncertainty and long term impacts to future generations may influence compensation. Essentially, values are affected by oil and gas surface disturbances to varying degrees.

If an aboriginal group is considering developing land with oil and gas, they may first want to understand what the risks, impacts and damages will be. But even more important, they want to know how these affect their values. A good way to better grasp the meaning of values is to break them down into understandable parts. Each component of value can then be looked at in a way that does not overwhelm the participants with information. If they become confused trying to make sense of the complexity, then it is easier (and common) to fall back on ‘jobs and revenue’ vs. ‘protection of the traditions.’ But this win or lose approach is not the best for aboriginal people, government or industry. Having structured discussions with elders, hunters and concerned members can help everybody to gain a better understanding of value through dialogue rather than assuming a specific monetary value already exists for any given loss to value.

Once the community has identified the relevant values the next step is to build a clear definition of the relative importance of each change in value. Through participatory community-based techniques, community members are asked to make informed value judgments about what has been gained and what has been lost, or what is going to be gained and lost under different future scenarios. Numerical weights are used, specifically identifying the relative importance of value attributes and allow the values to be ‘priced out’ in dollar terms.

### **Value Focused Case Study**

Let’s say there is an aboriginal community that has experienced adverse impacts to traditional lands from poor practices of past oil and gas development and they decide to engage in the *Value Focused Thinking* process. After the historical and current context is established through workshops and interviews with elders and members, a hierarchy of impacted values would be developed. A simplified value hierarchy may look similar to the following:

- ◆ Bush Values (e.g., wildlife and habitat)
- ◆ Traditional Cultural Values (e.g., traditional sites)
- ◆ Community Values (e.g., privacy)
- ◆ Economic Values (e.g., direct revenues)

With the situation before development and after development already established, a ‘Best’ and ‘Worst’ summary is articulated. For Bush Values this may mean that the ‘Best’ situation is when wildlife and land habitat is only subject to the forces of nature, including aboriginal use. The ‘Worst’ would be a specific measure for the size and the quality of the habitat that was lost. This could be measured in

hectares or as a percentage of the traditional lands. For Community Values the ‘Best’ would be freedom from unwanted intrusions and crowding. The ‘Worst’ would be the amount of land subject to access from outside people. For Economic Values, the ‘Worst’ would be no income from development and the ‘Best’ would be the actual amount they received from development. This process is completed with participants for each of their values.

Preferably in a group session, participants are then asked to weigh the changes between the ‘Best and the ‘Worst’ as they perceive them. More discussion is likely to take place as they attempt to reach a consensus. Manual and computer-aided exercises are used to provide the participants with a way to understand the relationship between values and weights. Different tests are used to validate their responses and visual-graphics are used to represent each value judgement. The value judgements of the participants are then translated by the analyst into dollar equivalents after the session.<sup>23</sup> The gains as well

<b>Compensatory Dollar Equivalents for Market and Intangible Values</b>			
<i>Values</i>	<i>Rank</i>	<i>Weight</i>	<i>Compensatory Losses or Compensation Benefits in Dollar Equivalents</i>
<b>Bush Values</b>	X	.XX	\$XX
<b>Traditional Cultural Values</b>	X	.XX	\$XX
<b>Economic Values</b>	X	.XX	\$XX
<b>Community Values</b>	X	.XX	\$XX
<b>Total Compensation Shortfall or Surplus</b>			+ - \$XX

as the losses are counted. Any shortfalls or surpluses can then be determined using the single dollar measurement. Through articulated assumptions, issues such as time can be incorporated into the equation based on the participants ‘static’ value preferences. These results can be used to ask for direct monetary compensation or as input into negotiations.

## IV. CONCLUSIONS

### Fair Compensation: Before and After

There are many implications resulting from research indicating that true compensation is commonly far greater than the payment for losses or damages and that people value losses much more than they value comparable gains. For corporations, government and aboriginal communities the clear suggestion is to develop fair compensation packages *before* development takes place. Fair compensation packages should include payment, mitigation actions, avoidance and monitoring. Key issues affecting value include where development should occur, how it will happen, and how the community can get the most benefits. Using the combined approach of *Value Focused Thinking* and community-based participatory analysis described in this paper can help by:

- ◆ Expressing ‘intangible values’ in dollars for negotiation or direct monetary compensation.
- ◆ Structure ‘intangible values’ so they can be included in negotiations to develop long lasting and fair compensation packages.

My work with aboriginal groups supports these findings. At one community, when looking at the impacts of past oil and gas development on an aboriginal land holding, the losses were great. The extent of these losses was reflected in the large dollar equivalents. However, when we conducted preliminary sensitivity assessments, it was clear that inexpensive avoidance, mitigation and monitoring would have tremendous impacts on how community members weighed the changes to their values and associated dollars. For the petroleum industry, this means that there are options for simple and inexpensive actions that will reduce long term conflict and expenses such as avoiding important traditional sites, proving fencing around pump jack sites, testing environmental indicators, and keeping the community informed of oil and gas activities.

### Consultation and Negotiation

To achieve ‘fair compensation,’ consultation and negotiation must take place. This will be challenging even after the Delgamuukw decision. Dangers lie in the fact that there are still power disparities between aboriginal communities and corporations.

The literature on dispute resolution gives us little reason to believe that the stronger nation is going to exert the patience or consideration to “learn” or

“share” without the force of law, the threat of litigation, or the presence of a mutually recognized authority.<sup>24</sup>

Corporations can do more to promote consultation, but so can the government and aboriginal groups themselves. In each case there is a need to be more engaged and have patience when working with aboriginal communities who have finally been given opportunities for self government, who are seeking self-reliance, and who are now struggling with the challenge of bringing together contemporary economic and political systems with traditional lifestyles. Unlike corporations, aboriginal communities do not function as efficient decision making units.<sup>25</sup> Either because of the cultural desire for consensus or internal conflict between members and councils, time is needed to clarify values and come to wise decisions. What economic development looks like is going to be very different to each aboriginal group. Not surprisingly, how each group values its traditions, culture and resources is also unique. My work confirms that there is no ‘one-price’ for the losses to ‘intangible values’ from resource development.

A good example of an aboriginal group facilitating the consultation process by taking the first step are the Metis Settlements of Alberta. They are eager for economic development but they are also concerned about maintaining their culture and their traditions. With the assistance of the Provincial Government, they have engaged in a forward-looking economic development strategy that includes traditional values, traditional land uses and traditional pursuits. As the first step towards clarifying the role of tradition and culture in economic development, I am working with them to facilitate discussions, analyze their traditional values and conduct community mapping. We are also working with settlements to organize elders to assist with the job of identifying appropriate development. These steps will help address issues of culture and tradition before they are lost or damaged.

Both aboriginal communities and oil and gas companies would benefit from having clear and structured process to determine what values are important, what values to protect and what values to promote. There may not be a solution that makes everybody happy, but there may be one that all can live with, and there are certainly many opportunities for achieving better development through better decision making.

## References

- <sup>1</sup> Peter Stekel. Warriors and Chiefs --Did Chief Seattle Really Say, 'The Earth Does Not Belong To Man; Man Belongs To The Earth'. [http://www.aotea.org/work/quotes/chief\\_s.html](http://www.aotea.org/work/quotes/chief_s.html). date unknown.
- <sup>2</sup> The work referred to was with Metis Settlements in Northern Alberta. It has received international recognition by the United Nations for its contribution to addressing the difficult issues of incorporating aboriginal values in local government. It is listed in the UN 'Best Practices Data Base'.
- <sup>3</sup> Keeney, Ralph. 1992. *Value Focused Thinking*. Harvard University Press. Cambridge.
- <sup>4</sup> Elder Workshop Participant, Northern Alberta, 1997.
- <sup>5</sup> Youth Workshop Participant, Northern Alberta, 1997.
- <sup>6</sup> Government of Alberta. Alberta's State of the Environment Comprehensive Report. Alberta Environmental Protection. Edmonton. 1995.
- <sup>7</sup> Schwindt, Richard. 1992. Report of the Commission into Compensation for the Taking of Resource Interests. Queens Printer. Victoria, BC..
- <sup>8</sup> 1996 Update Supplement to: Lipton, D.W., K.F. Wellman. I.C. Sheifer and R.F. Weiher. 1995. *Economic Valuation of Natural Resources: A Handbook for Coastal Resource Policy makers. Including 1996 Update Supplement*. NOAA Coastal Ocean Program Decision Analysis Series No. 5. NOAA Coastal Ocean Office, Silver Spring, MD. 131pp.
- <sup>9</sup> A Newsletter Review of Delgamuukw decision by Ackroyd, Piasta, Roth and Day. Dec. 1997
- <sup>10</sup> Gregory, Robin, Thomas Brown, Jack Knetsch. 1996. Valuing Risks to the Environment. The Annals of the American Academy of Political and Social Science. 545:54-63.
- <sup>11</sup> Knetsch 1990.
- <sup>12</sup> For more detail see: Schwindt, 1992.
- <sup>13</sup> For example see: Inuit Land Use and Occupancy Project. 1976. Milton Freeman, ed. 3 Volumes. Department of Indian Affairs and Northern Development. Ottawa. 1976.
- <sup>14</sup> See Usher, Peter. 1976. Evaluating Country Food in Northern Native economy. *Arctic*. 29:105-120.
- Rushforth, Scott. 1977. Country food. In Mel Watkins ed. Dene Nation – colony within. University of Toronto Press. Toronto.
- Brackel, WD. 1977. Socio-economic importance of marine wildlife utilization. Beaufort Sea Technical Report, No. 32.
- Pavich, Mary. 1984. The estimation of the imputed value of traditional activities, Northwest Territories, Yukon 1976-1974. Department of Indian Affairs and Northern Development. Ottawa.
- <sup>15</sup> For more detailed discussion see Schwindt, Richard. 1992. Report of the Commission into Compensation for the Taking of Resource Interests. Queens Printer. Victoria, BC 1992.
- <sup>16</sup> A Newsletter Review of Delgamuukw decision by Ackroyd, Piasta, Roth and Day. Dec. 1997
- <sup>17</sup> Gregory, R., S. Lichtenstein and P. Slovic. 1993. "Valuing Environmental Resources: A Constructive Approach." Journal of Risk and Uncertainty. Feb.
- <sup>18</sup> Ibid.
- <sup>19</sup> Knetsch, J. 1990. "Environmental Policy Implications of Disparities Between Willingness to Pay and Compensation Demand Measures of Value." Journal of Environmental Economics and Management. May 18:3.
- <sup>20</sup> Gregory, R., S. Lichtenstein and P. Slovic. 1993. "Valuing Environmental Resources: A Constructive Approach." Journal of Risk and Uncertainty. Feb.
- <sup>21</sup> Keeney, R. 1980. *Siting Energy Facilities*. New York. Academic Press.
- von Winterfeldt, D. and W. Edwards. 1986. *Decision Analysis and Behavioral Research*. Cambridge University Press. Cambridge.
- Keeney 1992.
- Gregory, Lichtenstein and Slovic, 1993.
- <sup>22</sup> For example see: McDaniels, T. 1992. Multiple Objective Decision Analysis of Land Use Options For the Tatshenshini-Elsek Area. CORE. Victoria.
- Keeney, R., T. McDaniels and V.L. Ridge-Cooney. 1996. "Using Values In Planning Wastewater Facilities For Metropolitan Seattle." Journal of the American Water Resources Association. April 32:2.

- <sup>23</sup> Keeney, 1992. With value independence established, the combination rule for additive functions is applied. An additive function, given attributes  $x_1, \dots, x_N$ ,  $N \geq 2$ , can be written as:

$$U(x_1, \dots, x_N) = \sum_{i=1}^N k_i u_i(x_i)$$

- <sup>24</sup> Laura Nader, "Civilizations and Its Negotiations," in *Understanding Disputes: the Politics of Argument*, Pat Caplan, 1995 ed. Berg Publishers: Oxford. p. 53. Read in Ginger Gibson, Eric Higgs and Steve Hrudehy. 1998. "Sour Gas, Bitter Relations." *Alternatives Journal* 24:2.
- <sup>25</sup> Ginger Gibson, Eric Higgs and Steve Hrudehy. 1998. "Sour Gas, Bitter Relations." *Alternatives Journal* 24:2.