Mining for Power: Uranium and the Community of Baker Lake, Nunavut

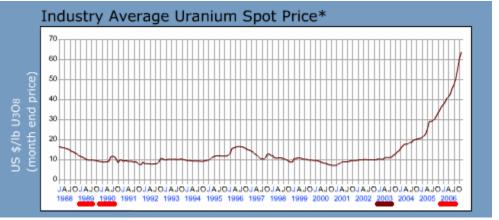
Elaine Wang, University of Vermont (prepared for ENVS 295, Dr. Saleem H. Ali) December 2006



Three representations of the Kivalliq District, Nunavut

Clockwise from upper left: project map released to the media by Titan Uranium; satellite image from Google Maps; caribou ranges mapped by Beverly-Qamanirjuaq Caribou Management Board

"The Kiggavik Project near Baker Lake never went ahead. It is possible that, because of changing market conditions and the superior ore grades in neighboring Saskatchewan, 1989-90 had provided a window of opportunity for its development that was never to be repeated."



-Robert McPherson 2003, New Owners in the Own Land

adapted from Cameco Corporation, 2006; not constant dollars

Introduction

In a plebiscite held on March 26, 1990, residents of the hamlet of Baker Lake (in what was then the District of Keewatin, Northwest Territories, now the District of Kivalliq, Nunavut, Canada), voted overwhelmingly against the development of a uranium mine by Urangesellschaft Canada Ltd. (UG) at a nearby site called Kiggavik, part of what prospectors know as the Thelon Basin. As a result, UG never explored its claims. In August of the same year, Bob Leonard, the president of the Keewatin Chamber of Commerce stated, "We are in an economic crisis. The economy in the Keewatin is in a mess. We are totally dependent on government spending and there's no way that can continue."¹ The opening quote by Robert McPherson, a mining consultant in the Nunavut land claims negotiations, suggests that as recently as 2003, uranium mining near Baker Lake was, for many reasons, considered a non-option.

Fast forward to the year 2006. Uranium prices have been breaking records continuously for over a year and is today at \$64 a pound, as can be seen in the graph above. A widely cited industry analyst is forecasting \$75 per pound by 2008², partly due to rising uranium demand which the two biggest uranium companies, Cameco and Areva, claim cannot be met by production. Not coincidentally, at least six uranium exploration companies have been in the news for their renewed activity in Nunavut as of 2004³, after little to no interest from them for over a decade. What does this mean for the residents of Baker Lake, and for communities like theirs? So-called internal divisions have already been reported in the

¹ Quoted in McPherson (2003), New owners in their own land: Minerals and Inuit land claims.

² Swiss-based bank UBS as reported in the Financial Times, 11/5/2006 and elsewhere.

³ See *Nunatsiaq News*, April 28, 2006, "Uranium rush floods western Nunavut", and *The Northern Miner*, June 30-July 6, 2006, "Forgotten Thelon attracts attention".

news, between indigenous communities, and between the public and various regulatory bodies, over whether or not uranium mining in Nunavut is wanted. In this paper, I use two approaches, conflict assessment and negotiation analysis, to explore the issues and opportunities issues in this unfolding situation. Key areas to be addressed are power differentials, economic development, and environmental health. As I am mining for information, sections of the paper are divided with a nod to the four phases of geological mining:

- **Exploration**: A historic context
- **Development**: The modern context
 - Mining Opportunities
 - Early uranium interest in Nunavut
 - o Caribou
- **Operation**: Central players
 - Mining regulators and regulations
 - Mining companies
- **Closure**: Analysis
 - Conflict assessment analysis and recommendations
 - Negotiation analysis and recommendations
 - Conclusion

EXPLORATION: A historic context

The ancestors of Canada's First Nation peoples populated the Canadian Arctic from 4500 BC to 1000 AD¹. During these millennia they evolved diverse ways to make their living in the far North, building *iglu* in the winters and skin-covered shelters in the summers. Northerners traded items they made from copper for driftwood collected by southerners². Groups of relatives traveled large distances to make their livelihood off the land and sea. Inuit in what is now the Kivalliq District (on Nunavut's western shore of Hudson Bay), by the 20th century had specialized into those who relied primarily on ocean foods and those who relied primarily on land mammals, particularly caribou, supplemented with fresh water fish. Occasionally conflicts would occur out between groups, particularly those with non-Inuit, but for the most part violence was an anomaly².

The preliminary effect of European contact was a not-so-gradual transition away from complete reliance on the land to trading trapped fur for goods. Although hunting in general remained a focal point of Inuit identity, "[m]any Inuit significantly altered their hunting practices and indeed their whole lifestyle, to meet the traders' demands, thereby tying themselves to the vagaries of the international commodity

¹ Dahl & Hicks (eds) 2000, Nunavut: Inuit regain control of their lands and their lives

² Bennet & Rowley, 2004. *Uqalarut: an oral history of Nunavut.* "External Relations" p.126. Compare with trading networks in Ridley, 1995, "The origins of virtue: human instincts and the evolution of cooperation."

market as well as to specific companies.¹" This change in lifestyle meant that strategies and plans of subsistence which the Inuit had developed, tested, and refined over centuries were now changed to ones at the mercy of external forces less manageable to them than the weather, and far less comprehensible. This change in skill set also contributed to a region-wide famine when the fur market declined.

In the 1950's, the Canadian Government suddenly became interested in the plight of its colonized citizens in the north. Hicks and Graham (2000) provide a succinct summary of their motives:

...concern with the distress suffered by Inuit and other northern aboriginal peoples...; recognition of the Canadian state's obligations to aboriginal people, coupled with a strongly assimilationist agenda to eliminate the distinctive elements of aboriginal society; interest in fosteringl large-scale exploitation of the north's mineral and other resources; and desire to solidify Canada's disputed claim to sovereignty over the islands of the Arctic archipelago³.

Among its classically welfare-creating strategies was to coerce Inuit to create permanent settlements so that it would be easier to deliver public services to them. Children were also collected and put in Catholic boarding schools to speed up the assimilation/civilization process. The psychological effect of this high degree of disruptive interference can be easily interpreted from the broadened meaning taken on at the time of the Inuktitut word *ilira*. In his report to the Royal Commission on Aboriginal Peoples, Hugh Brody noted that "…the word *ilira*… is used to refer to the fear of ghosts, the awe a strong father inspires in his children, and fear of the *qadlunaat*." Inuit elders often told him, "…all *qadlunaat* [white men] made Inuit feel *ilira*…in general terms, *iliranatualulautut* ('they were very *ilira*-making').²"

The outcome of all this federal government altruistic outreach was a tragedy even more harrowing than has typified the forced settlement of nomadic peoples around the world. The complete lack of experience of the Canadian federal government in delivering services to such remote and seasonably inaccessible areas, the second-class citizen status of the Inuit, and disrupted traditional networks of adaptation strategies led to famine and death, depopulating a still-productive land, as "popularly" chronicled for the south by Farley Mowat in *The Deer People* and *Walking the Land*.

However, at some point, stabilization did occur. The Inuit who successfully transitioned to living in permanent settlements and the younger Inuit who went through English-speaking schools did not find it

¹ Hicks & Graham, "Nunavut: Inuit self-determination through a land claim and public government?" in Dahl & Hicks (eds) 2000, *Nunavut: Inuit regain control of their lands and their lives*. This foreshadowed times to come. The feelings of the Inuit and Dene people about the animals, fish and birds of the land and sea must be understood. They depended on the land and its resources for their existence from time immemorial, and their relatively short experience with the white man is that his economy is up and down, and not seen as dependable. ' John Parker, commissioner of the NWT, 1982, quoted in McPherson, 2003, p133.

² Quoted in Hicks & Graham, 2000.

so strange or difficult to discover their political voice in reaction to decades of bungled 'management' of their affairs by outside, non-Inuit, actors. More than one observer has noted how Inuit contact with, and subjugation by, EuroCanadian society resulted in a strong cross-regional Inuit identity¹. This unity, along with strong leaders, steadfast focus on an innovative but not revolutionary goal, and a series of focusing events², eventually made for a bumpy but yellow-bricked³ road to the creation of the Nunavut Territory⁴.

One of the significant events which had a dramatic effect on Inuit empowerment and rights also has particular bearing on the current situation: in 1978 the hamlet of Baker Lake, the Baker Lake Hunters and Trappers' Association, and the Inuit Tapirisat of Canada (the now 30 year old national Inuit organization which advocates for Inuit rights at the federal level), took the six uranium mining companies exploring in the region *and* representatives of the federal government to court, arguing for aboriginal title. It was a bold step, and an expensive one, which after hearings for more than a year yielded mixed results for all parties. Judge Mahoney's landmark ruling (a prelude to future events) was that Inuit did have aboriginal title; that is, unextinguished hunting and fishing rights on their traditional land. He also found that as aboriginals hey could hold mining companies accountable if they could prove their rights had been infringed upon, i.e. whether caribou had been adversely affected by mining. However he ruled that they did not have surface rights, and also found that there was insufficient evidence of harm to caribou in the present case to justify an injunction against current exploration, with some exceptions at water crossings⁵.

Because Judge Mahoney did not build into his judgement any method by which rights infringement could be procedurally assessed in the future, in effect he did not clarify whether aboriginal title gave the Inuit any ability to halt mining activity. From the point of view of the industry, although they appeared to have retained their rights to exploration and development, they considered themselves now stymied by the fact that they could no longer obtain clear title, which would be an issue, for example, in accessing financing. Both industry and the federal government were desirous for clarification, but this would not be forthcoming until the settlement of the Land Claims Agreement.

¹ For example, Hicks & Graham 2000, Jull 2001.

² Kusugak, "The tide has shifted: Nunavut works for us, and it offers a lesson to the broader global community." in Dahl & Hicks (eds) 2000, *Nunavut: Inuit regain control of their lands and their lives*.

³ A small joke; concentrated uranium is called "yellow cake".

⁴ Compare to Kingdon's indicators of "an idea whose time has come": *Problems*, "brought to the attention of people in and around government by systematic indicators, [or] by focusing events like crises and disasters"; *Proposals*, which fit the current national mood, and *Policy streams*, to which interest group pressure campaigns contribute.

⁵ McPherson 2003, p.84; *The Globe and Mail* 11/16/1979, "Inuit given [sic] title at Baker Lake, but mining to continue."

The key features of the Nunavut Land Claims Agreement relevant to our story are:

- Inuit surface title to about 20% of Nunavut land, including 2% with subsurface rights (making them "...the largest freehold owners of mineral rights in Canada."¹;
- Priority rights to harvest wildlife;
- Creation of Institutions of Public Government (IPGs), including the: Nunavut Wildlife Management Board (NWMB), Nunavut Impact Review Board (NIRB), Nunavut Planning Commission (NPC);
- Capital transfer payments of \$1.148 billion over 14 years;
- A 5% share of royalties received by the government from oil, gas, and mineral development on Crown lands;
- Rights to negotiate with industry for impact mitigation and benefits from non-renewable resource development on Inuit-title lands;
- Increasing Inuit employment in government to 85%;
- \$13 million for a training trust fund.²

Subsurface mineral rights, negotiation rights, royalties, representative government, *and* a trust fund? Negotiation analysts have hailed this outcome as an indigenous success story for good reason. However, all has not been a bed of roses. Jim Bell, a commentator and reporter for the *Nunatsiaq News* (the most widely read paper in Nunavut; in publication since 1973), referred to it in 2001 as "…the now-tarnished dream of Nunavut³". Lack of community health care⁴, high drop-out rates from school, resultant lack of opportunities for the burgeoning young population⁵, continuing high suicide rates⁴, and loss of traditional ways of life⁶, can be summed up with the Inuktitut phrase: *pijarnirniarniraqtaulaungimmat* ['no one said it was going to be easy']. This is to point out that though Nunavut was indisputably an achievement for these aboriginal people in modern history, there is nothing magically salutary about self-government. But it does provide hope for a government responsive and understanding of aboriginal issues and worldviews.

The main challenge, as framed by its Premier: Paul Okalik: "Inuit are currently in a transition stage from a land-based (traditional hunting) economy to a modern or wage-based economy.⁶" But there are very few jobs, and exacerbating unemployment is the archaic emphasis on English (rather than a dual emphasis including the dominant native tongue of Inuktitut) in schools and workplaces⁷. As permanent settlements inevitably depletes country foods, wage-paying jobs must supplement traditional means of livelihood. ere, the only viable industry is mining.

¹ McPherson 2003, p.xxiv.

² Adapted from Kusugak 2000.

³ In fact, Bell's phrase appeared in his book review of Hicks & Graham 2000, which I have cited several times in this paper (he did approve, however, of Hicks & Graham's article).

⁴ Nunatsiaq News, 5/4/2001 "Nunavut health care needs a cure, mayors say".

⁵ Berger 2006, "Letter to the Minister [of Indian Affairs and Northern Development", *Conciliator's Final Report*.

⁶ Nunatsiaq News, 5/18/2001 "Inuit kids eating less country food."

⁷ Canadian Census, 2001.

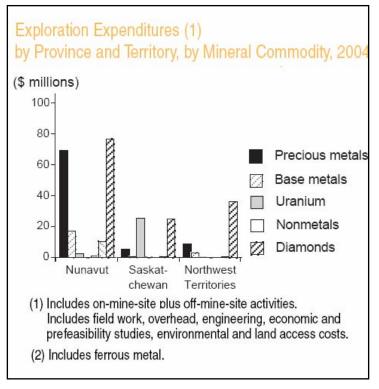
DEVELOPMENT: The modern context

Mining opportunities

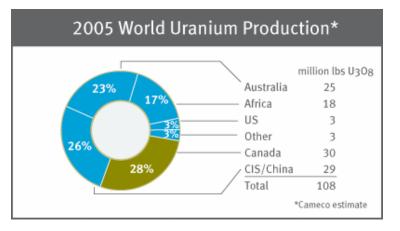
In the last decade, Nunavut was considered by mining companies to have just two worthwhile mineral resources: diamonds and precious metals, particularly gold. From the graph at right, it is clear that uranium was a small blip on industry radar two years ago.

Early Uranium interest in Nunavut

Canada is the world's largest producer of uranium (see graph below right). The bulk of this productivity is currently from the geologically-termed Athabascan Basin in Saskatchewan, which bears high-grade uranium ore. Uranium exploration companies have been mining this deposit for decades, and have the corresponding experience with local communities, federal permitting regulations, and markets. These companies have likewise been long aware of uranium deposits in what is know as the Thelon Basin, a geologic formation which is geologically similar to the Athabascan Basin, but has surveyed to lower grade ore¹. This formation also has the distinction of overlapping most of the Thelon Wildlife Sanctuary (see below for more on the



Source: Indian and Northern Affairs Canada



sanctuary). The area has yet to be geologically mapped with current technologies, as the majority of exploration occurred in the 1970's and 1980's uranium boom^{2,3}. Falling prices, an unclear territorial policy on uranium mining, and a strongly anti-uranium community in Baker Lake all contributed to the pullout of high-profile uranium mining companies from the Thelon Basin after that period. The mining

¹ The Northern Miner, June 30-July 6, 2006.

² Majescor news release, 8/24/2006 "Majescor Spins-out its Baker Lake Uranium Rights in the Thelon Basin for a Major Stake in a New Uranium Company – Airborne geophysical survey to commence"

³ There is another formation attracting, albeit less, attention, in western Nunavut, called the Hornby Basin.

company that experienced direct opposition from Baker Lake, Urangesellschaft Ltd., did not ever develop its claim at Kiggavik; Cogema suspended its explorations in 1997, and, most significantly, the world's largest uranium producer, Canadian-owned Cameco, pulled out of all of its Nunavut activities in 1999¹.

There were numerous reasons that Baker Lake voted in opposition of uranium mining development at Kiggavik. Below is a partial list, arranged in order of locally-generated concerns to externally-suggested concerns:

- Present and future health risks from mine development wastes;
- Poor communication (insufficient information, unavailability in Inuktitut, jargon);
- Conflict between traditional lifestyle and modern wage-labor economy;
- Permit/report system had inadequate Inuit/local involvement;
- Uncertainty about mine size;
- Potential social effects after mine closure;
- Bad history with consequences of other mining projects, e.g. Cominco's Polaris mine;
- Effects on caribou (air pollution, disruption to migration patterns, radioactivity in the food chain);
- Eventual use of uranium not guaranteed to be peaceful; and
- Project's EIS only considered the local site, not surrounding communities.

Previous to April 1999 (when the Land Claims Agreement was signed), mining companies were not inclined to humor the Inuit need to have input. An industry insider, McPherson puts it this way:

Despite current licensing requirements, prospectors – imbued with the free-entry system for generations – feel they have an unconditional right to explore for minerals...It is not surprising, given this feeling of entitlement, their hardiness and sense of adventure, and the sometimes huge rewards for their work, that prospectors have sustained an important presence in the northern landscape, but their legal rights, secretive nature, and tendency to be interested primarily in their task have precluded congenial contact with Native communities.

To their credit, Urangesellschaft did attempt through public relations to address Inuit concerns; they promised hiring preference, reassured residents that caribou would not be disturbed or harmed, reminded them that negative effects of uranium were far outweighed by the greenhouse gas emissions of conventional power sources, and denied that UG sold uranium for weapons. They opened a drop-in informational office in Baker Lake and distributed information – but the lack of trust had solidified and these efforts after the fact of their exploration permit were not enough to reassure the residents. Unfortunately, the lack of trust had some foundation in the attitudes of UG president Werner Sposs. Sposs was quoted in the *Nunatsiaq News* as having said, "Obviously, it was a case of overkill performance on the negative side. Everybody was 100% against uranium mining, without knowing anything about

¹ Nunatsiaq News, 3/15/1999. "Uranium mining giant Cameco Corporation pulls out of Nunavut".

uranium."¹ In light of this, it seems likely that they underestimated the importance of an earlier and more sincere effort to win the trust of residents.

When Cameco ended their exploration activity in 1999, their tone was not much better. The company's exploration manager clearly understood one lesson from 1990 Baker Lake plebiscite: he needed the support of local people. Nunatsiaq News quoted him: "…let's face it, if something is found and it comes time to have a referendum about putting this into production…we have to have those people on side." However, he also exhibited the sense of entitlement and cockiness of which prospectors have often been accused: "Apart from the resource industry I'm not quite sure where Nunavut is going to get any taxes from, other than federal government handouts. So in order to get their house in order, all I'm saying is, the sooner that you guys can make up your minds on the uranium issue, the quicker we can get on with business."²

Ultimately, however, industry representatives indicated that their primary reason for deserting Nunavut had more to do with low uranium prices and the inferior grade of Thelon Basin's ore². Now that uranium prices are exploding, companies have flocked on back, and this time they are singing a different tune³ to the Nunavummiut ("people of Nunavut").

Caribou

Aside from direct health impacts on local communities, there is an additional twist to this particular mining story that comes from the fact that country food is still an important part of the culture and diet of Inuit. The Thelon Basin, where the majority of the new Nunavut uranium mining interest is focused, overlaps the Thelon Wildlife Sanctuary, which itself lies in both the Northwest Territories and Nunavut, affecting both Dene and Inuit peoples. This sanctuary was established in 1927 to conserve muskox populations⁴ but is also the focal calving grounds for the Beverly caribou herd. These caribou migrate far into Nunavut off of sanctuary lands in the summertime (see map on cover), and have been monitored and managed by the Beverly-Qamanirjuat Caribou Management Board (BQCMB) since 1982. The BQCMB now functions as a sub-committee to a Nunavut Institution of Public Government (IPG), the Nunavut Wildlife Management Board (NWMB).

¹As cited in McPherson, 2003.

² Nunatsiaq News, 3/5/1999

³ It may interest some that traditionally, Inuit used song as a peaceful method of conflict resolution, where two individuals in a disagreement would make up songs about each other which were then judged by the group, bearing more than a passing resemblance to modern day rap battles.

⁴ Nunuvat Parks, *Thelon Wildlife Sanctuary*. http://www.nunavutparks.com/on_the_land/thelon_wildlife.cfm

Hunting is not allowed on Sanctuary lands, a strange imposition upon local aboriginals who have hunted these lands and caribou for centuries. For better or worse, the hunting restriction has been abided by, although its status may be somewhat adjusted if current draft management plans are approved.¹

With so much of the caribou herds' ranges corresponding to mining interests, there are short- and longterm issues to consider. In the short term, caribou may be stressed and their migrations altered by mining activity, even in the exploration phase, for example due to the use of helicopters². The status of the caribou herds is in doubt, there being insufficient funds available to update the 1994 herd count³, with many fearing that they have been on the decline for years. No matter the cause, Baker Lake residents have never been keen to condone activity which may affect them further. For example, this was a hot topic during the initial UG attempt to open their Kiggavik project. The government commissioned a study which found no impact by mining, but the people were not convinced. Joan Scottie, a key community organizer during that time, was quoted by the Nunatsiaq News expressing her displeasure over UG's EIS particularly because "[t]here was nobody from the community hired to help develop the study. We thought that some of the local hunters might have had some input⁴ since they are very familiar with the local environment and wildlife. But they weren't."⁵ She also "...felt the consultants plainly displayed a bias: they had come to town and told people that they had nothing to fear because there would be no environmental damage."³ These concerns resurface in the modern conflict.

In the long term, there is concern over radioactive contaminants in caribou and their subsequent impact on human pathology⁶. It is worth mentioning that cancer rates from eating affected caribou have been found at least by some researchers to be far less than the likelihood of getting cancer from other causes⁷.

¹ Nunavut Parks, *Thelon Wildlife Sanctuary, About the Sanctuary*

http://www.nunavutparks.com/on_the_land/thelon_wildlife.cfm

² On a related note, McPherson (2003) comments that by 1928, "[t]he use of bush aircraft for prospecting, now an established practice, introduced an important change in exploration. No longer did prospectors make contact with Native people or trappers as they entered the bush. They could now overleap and pretty much ignore local residents."

³ Beverly Qamanirjuaq Caribou Management Board. http://www.arctic-caribou.com

⁴ Scottie herself is a hunter and guide (McPherson, 2003; CNews, 11/18/2006, "Monday talks to expose Inuit division over boom in Arctic uranium")

⁵ As cited in McPherson, 2003, p.186.

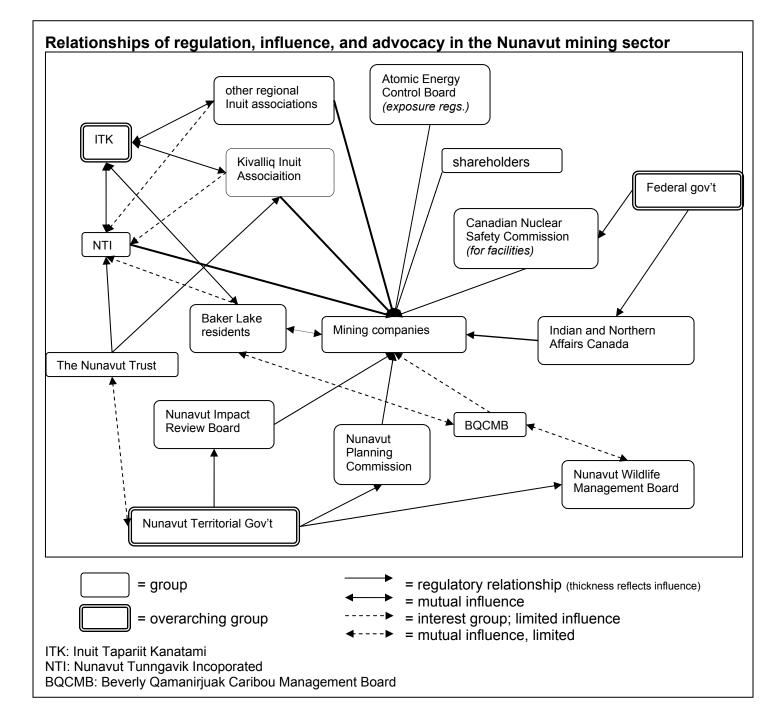
⁶ McPherson 2003.

⁷ For example, see Thomas, P. and T. Gates, 1999. "Radionuclides in the lichen-caribou-human food chain near uranium mining operations in northern Saskatchewan, Canada." *Environmental Health Perspectives* 107(7) p527-537

OPERATION: Central players

Mining regulators and regulations

Several parties can have an effect over uranium exploration and development in the Baker Lake area (see figure below). A few merit further explanation here: Kivalliq Inuit Association (KIA), Nunavut Tunngavik Incorporated (NTI), and Indian and Northern Affairs Canada (INAC, which, tellingly, was formerly called the Department of Indian Affairs and Northern Development - DIAND).



The KIA is a "Designated Inuit Organization", and would-be developers of significant projects in the area around Baker Lake must negotiate with them prior to its planned development activity under the Nunavut Land Claims Agreement¹, and "…no Major Development Project may commence until an IIBA [Inuit Impact and Benefit Agreement] is finalized…"⁵ The official misson of the KIA is "…to represent…Inuit of the Kivalliq Region…; as well as to promote their economic, social, political, and cultural well being through succeeding generations." Its goals in pursuit of this mission:

- To preserve Inuit heritage, culture and language.
- To manage Inuit owned lands in the region and provide information to and consult with land claims beneficiaries on land use
- To protect Arctic Wildlife and the environment, thereby preserving traditional uses for current and future generations.
- To assist Inuit in the Kivalliq region in training and preparation for a Nunavut Territory.

The NTI is also a Designated Inuit Organization and the only such named in the agreement, as it was one of the key architects of it and (along with the national-level ITK), of the main forces which crystallized the project². Although there is now an actual territorial Government of Nunavut, the NTI is tasked with helping implement the provisions of the land claims agreement, administers Inuit-owned lands, and therefore has considerable influence over activity and development across Nunavut. In negotiations, they were successful in gaining subsurface rights with known deposits, including uranium. Unsurprisingly, mining companies are well aware of their deliberations. An example was alluded to earlier, when Cameco placed most of the blame on what they called NTI's "negative uranium philosophy" when they decided to abandon Nunavut in March of 1999³. In view of falling uranium prices and the new Nunavut Land Claim Agreement which would be signed a month later, evidently Cameco decided they didn't need the hassle of dealing with the NTI. Now, they must.

The evolution of NTI's uranium policy is an instructive subplot in issue linkages. During the Baker Lake-UG controversy, its forerunner, the Tungavik Federation of Nunavut, publicly opposed the Kiggavik mine project. Likely issues of self-determination, lack of accountability and trust in companies who were not legally bound at the time to provide jobs to Inuit, and community health impacts all figured in their preland claim agreement stance. Later on, the NTI explicitly banned uranium mining on its lands, a policy which was based on the Inuit Circumpolar Conference declaration of the Arctic as a nuclear-free zone. Nine years after the Baker Lake plebiscite, NTI's vice president in charge of land management, James

¹ See sections 26.4.1 and 26.2.1 of Agreement between the Inuit of the Nunavut settlement area and her majesty the Queen in right of Canada ² The ITC/K helped establish the NTI's forerunner, the Tungavik Federation of Nunavut, whose sole reason for

² The ITC/K helped establish the NTI's forerunner, the Tungavik Federation of Nunavut, whose sole reason for existence was to negotiate a land-claim settlement with the federal government. (McPherson 2003)

³ Nunatsiaq News 3/5/1999.

Eeetoolok, indicated that they were in a slow process of evaluating their policy and were consulting with Nunavut communities, "especially the Baker lake people."² At this time they were a month away from signing the Land Claim Agreement and knew of the potential offered by uranium development in a land which offered little else by way of economic development for its settled Inuit populations. By May 5, 2006, Nunatsiaq News headlines read: "NTI endorses uranium mining on Inuit-owned land: New draft policy embraces nuclear power because it does not release greenhouse gas." Indeed global warming as an issue seems to take second place only to the paucity of economic opportunity in Nunavut. Many Inuit-run and Nunavut-based websites feature climate change prominently.¹ Coupled with the chronic problem of an under-trained Inuit workforce, the prospect of sourcing energy with few climatic effects is attractive indeed. However this pro-uranium policy is yet to be approved by the regional Inuit associations.

Indian and Northern Affairs Canada (INAC) has been a bigger player in developing mines in the north in the past than the present. However it is still the managing authority for Nunavut's mineral resources on Crown lands.Far from providing the appearance of neutrality or sourcing unbiased information, all of its literature shows it to be squarely pro-mining development. True, it advocates Inuit participation and long-term involvement, but from its website to its outreach materials, there is never the question of "whether", but only "if", as if mine exploration and development were an inexorable fact of the present and future.

Mining Companies

Currently there are at least six uranium companies who are planning their exploration activities. These include senior mining companies Cameco (with joint venture partner Uravan Minerals, Inc.), Areva (through Cogema, which acquired 100% of UG in 2002), Titan Uranium, and Western Uranium Corporation (through subsidiary Ruby Hill Exploration). Junior companies include Uranium World Energy Inc. (in agreement with Majescor) and Bayswater Uranium Corp (with joint venture partner Strongbow Exploration Inc).

Of these, Cameco, Western Uranium, Bayswater, and Titan have permits within an area delineated by the BQCMB as the calving grounds of the Beverly caribou herd². Since the dysfunctional Nunavut Planning Commission has yet to release its strategic land use plan and the Government of Nunavut's Minister of mines has not defined its exploration and mining policy, these companies will likely have the opportunity to define their rights as they go on this land. Areva and UWE own claims in the Kiggavik area.

¹ For example, see Nunatsiaq News <u>www.nunatsiaq.com</u>, the ITK <u>http://www.itk.ca/environment</u>, and the Nunavut Department of Environment <u>www.gov.nu.ca/Nunavut/environment</u>.

² Beverly Qamanirjuaq Caribou Management Board, 2006. *Map of companies with mineral rights in the calving grouns of the Beverlyand Qamanirjuaq caribou herds.*

Of the firms, Areva has the most prominent commitment to the communities in which they are operate. Their website features an impressive brag-list. 40-50% of their Saskatchewan workforce are aboriginal Northerners, and they run a scholarship program for Saskatchewan students. The company even opened up a public relations office in Baker Lake¹ with a feast for the community, in hopes of preempting the clash with residents experienced by UG in 1989, whose mining claim it acquired in 1992². Their project manager, Barry McCallum, has been serenading the hamlet, because now 70% of the deposit is on Inuit-owned land, post Land Claims Agreement. McCallum explained to Nunatsiaq News in late October that their selection and training program, in partnership with local colleges, in Saskatchewan, is proof of the significant benefits they will provide Baker Lake. Indeed, the paper reported that "Areva has already sponsored an award of excellence for a local student from Baker lake who achieves the highest grades in math, science and Inuktitut," a perceptive selection of subjects. McCallum also stressed their environment and safety track records, no doubt having in mind the flooding of Cigar Lake, a Cameco mine in development in Saskatchewan, that had occurred just 5 days before³.

For Cameco's part, they've changed their tune since 1999 in Nunavut as well. At the 2006 Nunavut Mining Symposium, Cameco's Director of Sustainable Development Jamie McIntyre gave a talk entitled "Engaging Communities: Mining and Aboriginal Communities, Experience from Saskatchewan's Uranium Industry". The powerpoint slides emphasize over and over again how much Cameco values its Northern Aboriginal relations, in word ("aboriginal people want to be a part of development; [this is a] fair expectation") and in visibility (nearly every one of the numerous people in photographs are visibly Aboriginal⁴).

Much less can be said for certain about the activities and philosophy of the junior companies, although juniors tend to have less experience, resources, and flexibility in implementing local benefits sharing agreements.

¹ Nunatsiaq News 10/27/2006. "Uranium firm opens Baker Lake Office"; CBC News 10/23/06 "Uranium company launches public relations campaign in Baker Lake."

² Areva officials, however, are careful to steer clear of any mention of the buy out or association. A rep is quoted in ibid.: "It's the same deposit. We're a different company."

³ CBC News 1023/2006. "Cameco's Cigar Lake mine inundated; stock falls."

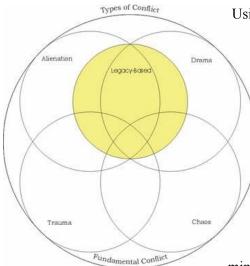
⁴ A compelling tactic employed by others, e.g. Falconbridge's public relations video.

CLOSURE: Analysis and recommendations

Today's conflict is still unfolding in the public eye. Without being able to conduct interviews or to visit local gathering places, I have relied on news stories of current dialogue. Here I disinter these accounts to hopefully reveal motives, identify areas of potential agreement, and assess strategies for achieving fair or individually favorable agreements. I use two tools in my analysis: conflict assessment and negotiation analysis. The former allows the evaluation of resolutions in the light of fairness, and long-term impacts on the public good. The latter approach takes quite a different point of view, and uncovers strategies which will maximize benefits to individual parties. At the outset it seems apparent that Baker Lake is in for a local win-win situation which will, however, have global and long-term negative effects. In the remainder of this paper we will find out whether this preliminary observation is valid.

Conflict Analysis

Despite ongoing arguments over the honeypot vs. shrinking pie theories of violent conflict over resources, it is rarely questioned that non-renewable resources have been the cause of conflicts worldwide¹. However what success stories, such as in Venezuela and Botswana, have revealed, is that even non-renewables in resource disputes hold promise not only for peaceful resolution, but can also be used as part of an intelligent community development plan. In the case of Nunavut, its wealth in mineral resources holds this promise, particularly as there are no other viable means of economic development available to this remote territory.

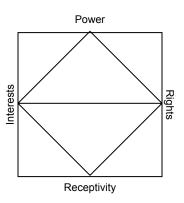


Using the Ridgewood Foundation's conceptualization of types of conflict, the historical relationship between Nunavummiut and EuroCanadian bureaucracy and society would be rightly called legacy-based conflict, where alienation and drama dominate any narrative, and chaos and trauma have also been present (see figure at left.) It is important to acknowledge that this legacy underlies the structure of the modern Nunavut socio-economic landscape, and in particular has implications where trust becomes an issue. However it is not at the core of current dispute over uranium mining. The Inuit have taken back their rights to self-determination

and have federally-guaranteed corresponding powers of negotiation. Therefore a more useful lens in

¹ For example, see Homer-Dixon (1994) *Environmental Scarcities and Violent Conflict: Evidence from Cases* and Khagram and Ali (2006) *Environment and Security*

understanding the current process fermenting in Nunavut is the Ridgewood Foundation's description of interest-based conflict resolution (see figure at right). There is an opportunity for this situation to be handled as a process of negotiated environmental conflict resolution (ECR).



The following table matches O'Leary et al.'s criteria for situations where ECR is most helpful and the conditions that exist in Nunavut currently:

O'Leary criteria for using ECR	Nunavut situation
• Each participant views the outcome as very important	• <i>Nunavummiut</i> : need for economic/livelihood security <i>Uranium mining companies</i> : soaring uranium prices with no ceiling in sight
• Issues are relatively clear	 Jobs, environmental health/protection
• Relevant laws permit negotiated settlement	• Laws <i>require</i> negotiated settlement with at least some local parties (DIOs*)
• ECR is started before public hearings	• The NTI and the KIA will definitely be at the table; it is less certain that Baker Lake representatives, local hunting organizations, and the BQCMB may also be invited, though current media attention is politically promising ¹ .
• The actual decision makers participate in some way	• The implementers (the mining companies) and the authorities (NTI, as owners of the land) are both willing to negotiate. It is not clear that the Government of Nunavut will be a party.
• There is no danger to participants' safety	• Violent negotiations are highly unlikely.

*DIO: designated Inuit organization

The table on the following page summarizes the primary principle-based issues of the interested groups. A key observation from both the following table and previous table is that no stakeholder has a high enough BATNA to create a spoiler effect, and so there is a good chance of a negotiated resolution. The mining companies would not want to walk away from the Thelon Basin again due to inadequate production to capture soaring prices and meet projected demand, and the growing younger population of Nunavut desperately needs jobs. A spoiler role is often that of environmentalists in disputes, but in this case, judging from media stories, no clear position-based anti-mine *group* has emerged into prominence.

¹ For example see, *CBC News* 2/13/2006 "Hunter's concerns can't stop mineral explorations", *Nunatsiaq News* 2/17/2006 "Baker HTO worried about caribou: Caribou board launches survey as prospectors swarm over calving grounds", and *Nunatsiaq News* 5/5/2006 "Caribou left out of uranium talks: NTI policy excludes Beverly and Qamanirjuaq herds".

Summary of Issues and Major Stakeholders in the present-day Kiggavik uranium mining conflict

		Baker Lake residents	Senior mining companies	Junior mining companies	NTI*, Territorial government	BQCMB**	INAC***
Values	Health risk	Risk to workers, radioactive dust, tailings	Stated philosophy of safe practices	Unknown	Uncertain		Perceived to be negligible
	Environment	Threat to caribou health	Stated philosophy of sound practices; helped fund assessment of caribou	Unknown	Global warming	Threat to caribou health, migration disruption, calving	Perceived manageable, or at least points to existing regulations
	Nuclear weapons	Averse to complicity in the production of nuclear weapons	Focus on nuclear energy markets	Unknown	Averse to complicity in the production of nuclear weapons	N/A	N/A
	Self-sufficiency	Jobs scarce, but subsistence hunting threatened by uranium mining	N/A	N/A	Need to promote wage- generating industry	Interest in safe- guarding caribou as country food	Need to promote wage- generating development
	Trust	Distrust of government/In uit org.s truly acting at people's wishes; negative history with mining co.s	Emphasis on building community relationships	Unknown (potentially more interested in short- vs. long-term relationship building		Have felt left out of NTI's new position of pro-uranium	Historically seen to side with mining
	Accountability	Responsibility to future generations	Shareholders, investors; interest in a strong track record	Unknown	Responsibility to Nunavummiut	To more than Nunavummiut; also Dene in NWT and Saskatchewan	

*NTI: Nunavut Tunngavik, Inc. **Beverly-Qamanirjuak Caribou Management Board

*** Indian and Northern Affairs Canada

Joan Scottie, the local Inuit activist who successfully organized residents in 1989, wrote a potent letter to the editor published on June 2nd and has received positive feedback about it from local residents, but as of mid-November still felt that the community had no clear idea of the proposed activity or concerns about it.1 The Nunavut deputy minister of the environment, Simon Awa, was quoted by CBC News on

¹ CBC News, 11/18/2006.

November 18: "(We're) open for exploration on other minerals like diamonds or gold or whatever...I think [uranium] would be least preferred...We haven't really identified conservation and protected areas...Sooner or later, we want to see [calving grounds and migration routes] legally protected or at least placed in land-use planning." The Government of Nunavut is in a weak position given that its resource management bodies have not developed any enforceable land-use plans. Of all the stakeholders it has the most ambivalent position because of its many mandates, for economic development and conservation of culturally-sensitive resources.

Awa's statement highlights in addition that there are also, obviously, issues specific to uranium mining that are not as applicable to other types of mining. Nuclear energy, storage of nuclear waste, radioactivity of mining dust and tailings, and implications for mined uranium to eventually be incorporated into nuclear warheads¹ are all issues that have come up as concerns of Baker Lake residents, in 1989 and recently².

Recommendations based on Conflict Assessment

The ambivalent position of the Government of Nunavut holds promise that a respected leader from the government could serve as a legitimate mediator in the dispute. Although people like Scottie see the GN as "...cash-strapped and too tied to industry and [so] strongly promotes any kind of mining," its broader suite of mandates and authority to enforce decisions³ holds potential for the process to be seen as fair. Also, it seems high time for the elected government to flex its authority. NTI board members are also elected, but for the long-term sustainability of Nunavut as a territory, it is in Nunaviummiut self-interest to realize its government's potential. The GN is the only entity whose interests overlap those of all the stakeholders (see Venn diagram in the next section). Admittedly, the lack of jobs is the most politically salient issue to the government, but of all the stakeholders it is the one most likely to provide some balance with other concerns. Among the stakeholders with any authority, it also is the one most answerable to formulating long-term, intergenerational policy which will not "undervalue costs relative to non-economic impacts.⁴" However, the tendency of modern society to discount intergenerational and global effects in making local decisions, and the political pressure on the government to provide short term opportunities, may dominate these concerns.⁵

¹ Although Canada's export policy prohibits its uranium to be used in nuclear weapons, reporter Sarah Minogue pointed out in her 5/5/2006 Nunatsiag News article that this is unenforcable. Uranium is bought and sold on the commodity market, a process which erases the country of origin.

² See McPherson 2003 pp169-201, Scottie's letter in *Nunatsiag News*, 6/2/2006, and *Nunatsiag News* 5/5/2006.

³ Government involvement has been found in other situations to be key to the success of collaborative decisionmaking, e.g. Getches, D.H. 2001, "Some irreverent questions about watershed-based efforts." ⁴ Keeney, R. "Valuing Billions of Dollars" pp63-80 in *Decision Analysis: Valuation*.

⁵ See Schelling, T. "Global decisions for the very long term: Intergenerational and international discounting".

As in many environmental disputes, the role of science has become less a tool of objective knowledge and one more of biased advocacy. As Ozawa (1996 and 2006) and Martin & Richards (1995) explain, a facilitator or group politics approach to using science is a way to increase the likelihood of its usefulness to these parties. Currently there are two sources of information to Baker Lake residents: the Areva public relations office (hardly unbiased) and the internet (with its perils of the uncertainty of reliability and transparency). The method which is, in turn, more likely to provide a facilitating and power-neutral use of science is joint fact-finding, as described by Burgess and Burgess (1997). In this situation, where lack of trustworthy information about the long term impacts of uranium mining on the health of the community and caribou is the most viable reason that interest groups will be able to rally around to oppose it (as occurred in 1989), fact-finding by mutually agreed upon researchers is the most important activity which the groups can agree to undertake to facilitate resolution. Officials in the government of Nunavut are in a position to access trusted researchers and should undertake to do so if they develop their potential role as mediator.

What would really win favor from members of several stakeholder groups and increase the legitimacy of the process in the eyes of residents is if fact-finding did not focus solely on information gathered via western scientific methods, but also engaged Inuit Qaujimajatuqangit (IQ for short), translated sometimes as traditional Inuit knowledge, but more thoroughly explained as the Inuit way of knowing and doing things and their system of values. The Government of Nunavut has been very interested in finding ways to truly integrate IQ into government activities¹. This situation is an ideal opportunity to deliver this goal.

Negotiation Analysis

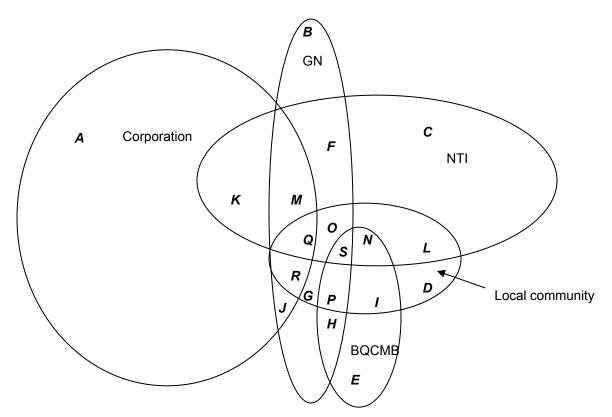
Negotiations are more likely to yield positive outcomes for the more powerful stakeholders. The perspective of a Norman Dale-esque advocate mediator² with the goal of fairness, then, is of interest. I borrow Saleem Ali's Venn diagram method and concepts for assessing domains of interest and power of stakeholders in conflict³. In the figure on the following page, the size of ellipses indicates relative bargaining power, and loci of interest are indicated with letters and explained in the table beneath.

Gwaii." in Susskind et al eds. The Consensus-Building Handbook. Sage Publications.

¹ For example, see the GN's Department of Culture, Language, Elders and Youth press release about the establishment of an external IQ council, *Inuit Qaujimajatuqangit Katimajiit established*, 9/8/2003. ² See Dale, Norman (2000). "Cross-cultural Community-based Planning: Negotiating the Future of the Haida

³ It is worth noting that Ali uses this model for a similar conflict: uranium mining in Saskatchewan in the early 1980's. There are striking differences in how his diagram looks compared to the one above, which is attributable to the legal status of Nunavut's DIO as of April 1999. Citation: Ali, Saleem H. (2000). "Shades of Green: Mining, NGOs and the Pursuit of Negotiating Power." In Jem Bendell ed. *Terms for Endearment: Business, NGOs and Sustainable Development.* Sheffield UK: Greenleaf / Macmillan.

Venn diagram showing relative power and loci of interest for various players.



Region	Explanation within the context of this conflict and the country in which it is being played				
А	Corporate interest only: maximize profits from beyond this region				
В	Government of Nunavut (GN) interest only: policies irrelevant to this dispute				
С	NTI interest only: pay its debt to the Nunavut Trust; maintain authority				
D	Local community interest only: maximize benefits to and health of Baker Lake hamlet and residents				
E	Beverly Qamanirjuaq Caribou Management Board interest only: maintain B-Q herds for peoples of NWT; maintain and increase relevance of org.				
F	Common interests between GN and NTI: maximize benefits to Inuit beyond Baker Lake				
G	Common interests between GN and local community: maximize benefits to Baker Lake to the extent that it does not jeopardize the likelihood of the corporation to similarly engage communities around its other properties in Nunavut				
Н	Common interests between GN and BQCMB: developing land use plans by Nunavut's resource management institutions of public government that protect both caribou herds for sustainable use by Inuit				
Ι	Common interests between local community and BQCMB: protect Beverly herd				
J	Common interests between GN and corporation: maintain properties in Nunavut profitably				
К	Common interests between NTI and corporation: develop NTI lands				
L	Common interests between NTI and local community: maintain Inuit sovereignty in the area				
М	Common interests between corporation, GN and NTI: profitable development of NTI-owned lands (held for the benefit of the Inuit)				
N	Common interests between NTI, local community, and BQCMB: maintain the viability of country food option in Baker Lake				
0	Common interests between NTI, GN, and local community: economic development of Baker Lake				
Р	Common interests between BQCMB, GN, and local community: maintain livelihood security at Baker Lake				
Q	Common interests between local community, GN, and corporation: develop uranium safely				
R	Common interests between local community, BQCMB, GN, and NTI: maintain caribou herds for cultural				
	and livelihood significance to Baker Lake residents				
S	Common interests between corporation, NTI, GN and local community which believes compensation				
	adequately offsets environmental threat: employment and labor benefits				

The content of this table borrows heavily, with respect, from Ali (2000).

A few revelations available in the above map of power and interests should be highlighted:

- There are no current common interests between BQCMB and the corporation. Despite this, Areva, Cameco, and Titan Uranium have all met with the BQCMB to discuss impacts of mining on caribou¹, indicating either a) the compelling value of uranium, b) increased corporate accountability to environmental protection, or both.
- NTI has more negotiating power than the government of Nunavut.
- The BQCMB has the least negotiating power, but has more prominence than the IPG it reports to, the Nunavut Wildlife Management Board.
- Although NTI holds the rights to the land and therefore has penultimate say about what is done with it, ultimate authority resides with the government of Nunavut and Nunavummiut, since NTI is answerable to them. However the body does have a life of its own and therefore acts on some elements of its own agenda.
- Not shown in this diagram, but which could be, is the role if KIA. Its interests can be defined as a translation to the regional level of the local community ellipse.
- Other regional Inuit associations can have an effect on NTI policy but are not shown in the diagram, as they are not technically stakeholders in the local dispute, though what occurs in Baker lake will likely set precedent for what occurs elsewhere, namely in the Hornby Basin.
- The stakeholder who has the most concern about health issues is the local community.
- Also not shown is Indian and Northern Affairs Canada, who, though a powerful agency with federal authority to manage mineral rights on Crown lands, they are not relevant here since Crown lands are not currently under dispute. However they have resources that may be mobilized for linked issues, such as cultural or caribou-related concerns.

Recommendations based on negotiation analysis

With this assessment, it is possible as a consultant to make specific recommendations on strategy to individual parties. I make use of Fisher's sources of bargaining power (1983) as cited in Ali (2000), which includes skill & knowledge; good relationships; and legitimacy. I address the two weakest and two most powerful parties in terms of these bargaining strongholds below.

Mining companies Mining companies are in a strong negotiating position because jobs are desperately needed. Larger mining interests with the financial flexibility for, and strong track record proving their commitment to native employment and training, as well as environmental protection, are the most likely to win favor from the other stakeholders. Of the mining companies looking to develop their claims, Areva fits the bill best. They also have a (recent) history of valuing a good relationship with the community. However they are still subject to local terms. Areva representatives are well advised to continue to negotiate conditions with caribou and native employment interests, and find ways to express their commitment to learning from Inuit Qaujimajatuqangit, as any loss in operational efficiency will likely be more than submerged in their profits.

¹ Caribou News in Brief 10(1): "Finding common ground with mines."

Nunavut Tunngavik Incorporated NTI comes into this from a strong negotiating position by right and by experience. They not only administer title to the majority of the lands in question, but they are the skilled authors who negotiated this title in the Land Claims agreement in the first place. This gives them the strength of legitimacy as well. Although NTI representatives could potentially negotiate a unilateral agreement with the mining companies, individual elected officials would suffer the consequences at the next election (or earlier). At least one other regional Inuit Association, to which they are directly accountable by organizational governance, has already taken public issue with their lack of consultation with them on the new pro-uranium policy¹. NTI's interest in jobs, and revenue to meet their financial obligations to the Nunavut Trust (to which they are in deep debt²), will mean that they have a strong interest in reaching a development agreement, but their future legitimacy would be eroded if they do so at the expense of other community concerns.

Baker Lake community (hamlet government, residents, and hunter-trapper organization)

The community is in a weak bargaining position. For example, in the context of the recently approved Cumberland Meadowbank gold mine project, Baker Lake asked the Nunavut Impact Review Board for several conditions, but, item by item, few of these were incorporated into the final KIA-negotiated agreement. If Baker Lake wants to strengthen its bargaining position, it should maneuver for a stronger relationship with the KIA, its own Inuit association (which has yet to make any public statements about uranium mining), other Inuit associations (particularly the QIA, which has already expressed concerns about uranium mining, and the federal level ITK, which was there with them in 1989, though has decreased relevance now), and the BQCMB. Individually each of these interest groups has little power, but collectively, if they can agree to some conditions, they can improve their legitimacy. One such condition that could generate political attention is demanding that the GN follow through on their commitment to integrating IQ into government activities and include IQ in negotiated joint fact-finding. Not only would the information in and of itself be likely beneficial to their cause, it represents a potent linkage of issues. Baker Lake's experience with successfully rallying to shoot down mining in 1990 should be a source of mobilizing power as well.

Another option is for the residents to actively court gold interests, either as as leverage in their negotiations for conditions from uranium mining companies, or an alternative to uranium mining, or to use them. If the latter is the real goal, they should also seek to alliance with Dene people in the Northwest

¹ Nunatsiaq News 11/20/2006. "QIA [Qikiqtni Inuit Association, representing the Baffin region] delegates question NTI uranium policy."

² Nunatsiaq News reported on 11/17/2006 in the context of its NTI Annual General Meeting report that a recent \$8.4 million payment to the Nunavut Trust brought its debt down to \$100.6 million.

Territories, which the Beverly herd's range crosses into. The Beverly-Qanamirjuaq Caribou Management Board could help build this alliance, since they have Dene and NWT delegates to their board, as well at the ITK.

Beverly-Qanamirjuak Caribou Management Board The BQCMB has an even weaker bargaining position than Baker Lake. Given that none of the planning and management Institutions of Public Government have developed their plans, BQCMB's recommendations are not legally binding and will have to be advocated for at the negotiating table. And since their concerns are not the company's concerns, without some clever issue linking and relationship-building, they will be left out in the cold, despite the promise represented by early meetings and support from the big three. The power of narrative could be employed; in the 1989 uranium debate the issue of nuclear weapons came to be of unexpected prominence. The long-term health of the caribou herds has in comparison much greater local salience. The board has been in the process of assembling more data about the herds with the help of funding from the World Wildlife Fund Canada, the Government of the Northwest Territories, Indian and Northern Affairs Canada, and the senior mining companies, Areva, Cameco, and Titan Uranium. This is an encouraging sign, but is not a guarantee that the three companies will abandon them if their demands are too stringent. The World Wildlife Fund Canada is a frequently employed and evidently effective partner in their planning and communications with mining companies. Given the controversy some of the BQCMB's methods, in particular satellite collars, have caused in among local Inuit elders¹, it would behoove them to employ IQ among their data collection methods, in order to partner more effectively with the local community in obtaining caribou-friendly concessions from the mining companies.

Conclusion

In this paper I assessed the conflict around uranium exploration near the community of Baker Lake and the Beverly caribou herd territory in Nunavut, Canada, and analyzed negotiation power of key stakeholders. My findings are that there exists a strong potential for a negotiated integrative resolution to the conflict and that all players can likely improve the negotiated outcome by greater consideration or incorporation of selected values of other stakeholders. I also found that a positive opportunity exists here for the Government of Nunavut to adopt a more active, mediator's role in the negotiations as a value-integrating authority. There are benefits to be had by most:

- Profits for mining companies willing to guarantee Inuit hire/training and caribou protection;
- Revenue for Nunavut Tunngavik Incorporated;
- Jobs and workforce training for local residents; and
- Improved funding for Beverly Qamanirjuaq Caribou Management Board activities.

¹ Caribou News in Brief, 5(1): "Satellite collars loudly opposed at community meeting."

If negotiators from the weaker stakeholder groups do not effectively forge issue linkages and partnerships, the likely loss will be in capacity building for future economic development in Baker Lake after the mine closes, and long term negative impacts on caribou and therefore self-sufficiency and culture. From a global perspective, greenhouse gas emissions will be avoided through the production of nuclear fuel for energy, but eventually there will be the matching unaddressed issue of where the spent nuclear fuel is to be stored. The Saskatchewan example of production without having to store any of it¹ may be a reassuring precedent to Nunavut, but the moral implications are not lost upon them¹.

¹ Nunatsiaq News, 5/5/2006.

Bibliography

Ali, Saleem H. (2000). "Shades of Green: Mining, NGOs and the Pursuit of Negotiating Power." In Jem Bendell ed. *Terms for Endearment: Business, NGOs and Sustainable Development.* Sheffield UK: Greenleaf / Macmillan.

Bell, J. (2006, February 17). Baker HTO worried about caribou grounds. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/60217/news/nunavut/60217_02.html

Bell, J. (2006, July 1). Impact and benefit agreement not enough for us, Baker Lake says. *Nunaqsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/50701/news/nunavut/50701_09.htmls

Bell, J. (2006, March 3). Kivalliq Inuit strike benefit deal on Meadowbank. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/60303/news/nunavut/60303_01.html

Bell, J. (2006, November 17). NTI aims AGM at the future. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/61117/news/nunavut/61117_01.html

Bennet & Rowley, 2004. *Uqalarut: an oral history of Nunavut.* "External Relations" p.126. Compare with trading networks in Ridley, 1995, "The origins of virtue: human instincts and the evolution of cooperation."

Berger, T. (2006). "Letter to the Minister", *Conciliator's Final Report*. Retrieved December 3, 2006, from http://www.nunatsiaq.com/archives/60331/news/nunavut/berger final report.pdf

Beverly Qamanirjuaq Caribou Management Board. http://www.arctic-caribou.com

Beverly Qamanirjuaq Caribou Management Board. (2006, July). Finding common ground with mines. *Caribou News in Brief*, 10(1). Retrieved December 2006 from http://www.arctic-caribou.com/news_july06.html

Burgess, Guy and Heidi Burgess (1995). "Beyond the Limits: Dispute Resolution of Intractable Environmental Conflicts." in Blackburn, J. Walton. Mediating Environmental Conflicts. London: Quorum Books. http://www.colorado.edu/conflict/full_text_search/AllCRCDocs/97-1.htm

Cameco. (2006). *Markets*. Retrieved December 2, 2006 from http://www.cameco.com/uranium 101/markets/

Cameco. (2006). *Uranium Prices*. Retrieved December 2, 2006 from http://www.cameco.com/investor_relations/ux_history/

Caribou News in Brief, 5(1): "Satellite collars loudly opposed at community meeting."

CBC News (2006, February 13). Hunter's concerns can't stop mineral explorations.

CBC News (2006, May 18). Uranium policy concerns caribou board. Retrieved December 2006 from http://www.cbc.ca/canada/north/story/2006/05/18/nor-uranium-eetoolook.html

CBC News (2006, October 23). Cameco's Cigar Lake mine inundated; stock falls. Retrieved December 2006 from http://www.cbc.ca/money/story/2006/10/23/cameco.html

CBC News (2006, October 23). "Uranium company launches public relations campaign in Baker Lake". Retrieved November 23, 2006 from http://www.cbc.ca/canada/north/story/2006/10/23/uranium-areva.html

CBC news (2006, November 23). Inuit, Dene grapple with renewed uranium interest. Retrieved November 23, 2006 from http://www.cbc.ca/canada/north/story/2006/11/23/uranium-nunavut.html#skip300x250

Cumberland Resources Ltd. (2006, November 20). Press release: Cumberland receives federal approval for development of Meadowbank Gold Project.

Dale, Norman (2000). "Cross-cultural Community-based Planning: Negotiating the Future of the Haida Gwaii." in Susskind et al eds. *The Consensus-Building Handbook*. Sage Publications.

Department of Culture, Language, Elders and Youth. (2003, September 8). Press release: Inuit Qaujimajatuqangit Katimajiit established. Government of Canada. Retrieved December 2006 from http://www.gov.nu.ca/cley/english/news/2003/sept08_03.pdf

Department of Environment. (2006). *Department of Environnment*. Government of Nunavut. Retrieved December 2006 from www.gov.nu.ca/Nunavut/environment

D'Souza, D. (2003, September 5). All that glitters is not gold. *Nunatsiaq News*. Retrieved November 2006 from http://www.nunatsiaq.com/archives/30905/news/nunavut/30905 04.html

George, J. (2005, October 27). Uranium firm opens Baker Lake office. *Nunatsiaq News*. Retrieved November 23, 2006 from http://www.nunatsiaq.com/news/nunavut/61027_02.html

George, J. (2006, October 20). QIA delegates question NTI uranium policy. *Nunatsiaq News*. Retrieved November 23, 2006 from http://www.nunatsiaq.com/archives/61020/news/nunavut/61020_02.html

Getches, D.H. (2001). Some irreverent questions about watershed-based efforts. In ed.s Brick, P., D. Snow, and S. Van de Wetering. *Across the Great Divide: Explorations in collaborative conservation and the American west*. Washington, DC. Island Press.

Government of Canada (1999). Agreement between the Inuit of the Nunavut settlement area and her majesty the Queen in right of Canada Sections 26.4.1 and 26.2.1. Retrieved December 2006 from http://lois.justice.gc.ca/en/N-28.7/text.html

Hicks & Graham, "Nunavut: Inuit self-determination through a land claim and public government?" in Dahl & Hicks (eds) 2000, *Nunavut: Inuit regain control of their lands and their lives*. International Work Group for Inidigenous Affairs. Copenhagen, Denmark.

Homer-Dixon (1994). Environmental Scarcities and Violent Conflict: Evidence from Cases. *International Security*, 19(1), pp 5-40.

Indian and Northern Affairs Canada. (2006). *Mining information kit for aboriginal communities*. Government of Canada. Retrieved November 2006 from http://www.nrcan.gc.ca/mms/abor-auto/kit_e.htm

Indian and Northern Affairs Canada. (2005). Aboriginal Communities/Mineral Companies/Governments Working Together: A Checklist to Assist Mineral Companies Active in Areas Near Aboriginal Communities. Government of Canada.

Indian and Northern Affairs Canada. (2005). *Report on Aboriginal Participation in Mining in Canada: Mechanisms for Aboriginal Community Benefits*. Government of Canada.

ITK. Environment Department. Retrieved December 2006 from http://www.itk.ca/environment

Jull, P. (2001). Nations with whom we are connected. *Australian Indigienous Law Reporter*, 6(2) and 6(3) pp 1-16 and 1-15.

Keating, M. (1979, November 17). Inuit given title at Baker Lake, but mining to continue. *The Globe and Mail*.

Keeney, R. (1996). Valuing Billions of Dollars. In eds. R. Zeckhauser, R. Keeney, and J. Sebenius. *Wise Choices: Decisions, Games, and Negotiations*. Harvard Business School Press Boston. pp63-80.

Khagram, S. and S. Ali (2006). Environment and security. *Annual Review of Environment and Resources*. 31. pp 395-411.

Kingdon, J. (1997). Agendas, Alternatives, and Public Policies. Longman. New York.

Kusugak, "The tide has shifted: Nunavut works for us, and it offers a lesson to the broader global community." in Dahl & Hicks (eds) 2000, *Nunavut: Inuit regain control of their lands and their lives*. International Work Group for Inidigenous Affairs. Copenhagen, Denmark.

Majescor Resources. (2006, August 24). Press release: Majescor spins-out its Baker Lake uranium rights in the Thelon Basin for a major stake in a new uranium company. Retrieved December 2, 2006 from http://www.majescor.com/e/news/2006-08-24.asp

Martin, B. and E. Richards. (1995). Scientific Knowledge, Controversy, and Public Decision-Making. In eds. Jasanoff et al *Handbook of Science and Technology Studies*. Sage. Newbury Park, CA. 1995.

McIntyre, J. (2006). Nunavut mining symposium: Engaging Communities: Mining and Aboriginal Communities, Experience from Saskatchewan's Uranium Industry. Cameco Corporation. Retrieved November 23, 2006 from http://www.nunatsiaq.com/archives/april0199/nvt90401_13.html

McPherson, R. (2003). *New owners in their own land: Minerals and Inuit land claims*. University of Calgary Press. Calgary.

Minogue, S. (2006, April 28). Uranium rush floods western Nunavut. *Nuatsiaq News*. Retrieved November 23, 2006 from http://www.nunatsiaq.com/archives/60428/news/nunavut/60428 05.html

Minogue, S. (2006, May 5). NTI endorses uranium mining on Inuit-owned land. *Nuatsiaq News*. Retrieved November 23, 2006 from http://www.nunatsiaq.com/archives/60505/news/nunavut/60505_06.html

Minogue, S. (2006, May 5). Caribou left out of uranium talks. *Nuatsiaq News*. Retrieved November 24, 2006 from http://www.nunatsiaq.com/archives/60505/news/nunavut/60505_04.html

Morrison, K. (2006, November 5). Uranium prices set for further increases. *Financial Times*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/50701/news/nunavut/50701 09.html

Mowat, F. (2001). Walking on the Land. Steerforth Press. South Royalton, Vermont.

Nunatsiaq News. (2006). Retrieved November 15, 2006 from http://www.nunatsiaq.com

Nunatsiaq News, (2001, May 18) Inuit kids eating less country food. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/nunavut010531/nvt10518 26.html

Nunavut Parks, *Thelon Wildlife Sanctuary, About the Sanctuary*. Retrieved December 2006 from http://www.nunavutparks.com/on_the_land/thelon_wildlife.cfm

O'leary, Nabatchi and Bingham (2004). Environmental Conflict Resolution. In Durant Fiorino and O'leary. *Environmental Governance Reconsidered*. MIT Press.Ozawa 1996

Ozawa, Connie (2006). *Science in Environmental Conflicts*. Retrieved October 2006 from http://web.pdx.edu/~ozawac/CRQ.p

Rideout, D. (2001, May 4). Nunavut health care needs a cure, mayors say. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/50701/news/nunavut/50701_09.html

Ridgewood Foundation, The. (2006). *The web of conflict*. Retrieved December 2006 from http://www.ridgewood.ca/2 Presentations.htm

Schelling, T. (1990) "Global decisions for the very long term: Intergenerational and international discounting" in Schered Donald ed. Upstream/Downstream: Issues in Environmental Ethics. Philadelphia PA: Temple University Press:

Scottie, J. (2006, June 2). Letters: Is NTI irresponsibly endorsing uranium mines? *Nunatsiaq News*. Retrieved November 23, 2006 from http://www.nunatsiaq.com/archives/60630/opinionEditorial/letters.html

Statistics Canada. (2001). *Baker Lake*. Government of Canada. Retrieved December 3, 2006 from http://www12.statcan.ca/english/profil01/CP01/Details/Page.cfm?Lang=E&Geo1=CSD&Code1=620502 3&Geo2=PR&Code2=62&Data=Count&SearchText=baker%20lake&SearchType=Begins&SearchPR=6 2&B1=All&Custom=

Stakiw, S. (2006, June 30-July 6). Forgotten Thelon attracts attention - Planned drill programs could revive underexplored Uranium camp. *The Northern Miner* 92(19).

Superior Diamonds Inc. (2006, November 30). Press release: Superior Forum Uranium Acquire an Additional 34,892 Hectares of Claims in the North Thelon Uranium Joint Venture.

Thomas, P. and T. Gates, 1999. "Radionuclides in the lichen-caribou-human food chain near uranium mining operations in northern Saskatchewan, Canada." *Environmental Health Perspectives* 107(7) p527-537.

Titan Uranium (2006). "Thelon Project Location Map". *Titan Uranium*. Retrieved November 2006, from http://www.titanuranium.com/i/maps/thelonlocation.jpg

Weber, B. (2006, November 18). Monday talks to expose Inuit division over boom in Arctic uranium. *CNews*. Retrieved November 2006 from http://cnews.canoe.ca/CNEWS/World/2006/11/18/2405125-cp.html

Wilkin, D. (1999, March 5). Uranium mining giant Cameco Corporation pulls out of Nunavut. *Nunatsiaq News*. Retrieved December 2006 from http://www.nunatsiaq.com/archives/nunavut990329/nvt90305_03.html

World Wildlife Fund-Canada. (2006). *Companies with mineral rights in the calving grouns of the Beverly and Qamanirjuaq caribou herds*. Beverly Qamanirjuaq Caribou Management Board Retrieved November 2006 from http://www.arctic-caribou.com/PDF/Mineral-rights-on-Bev-Qam-calving-grounds Sep06.pdf