

A Community Economic Development Assessment of the Keeyask Model

A Report for the Clean Environment Commission Hearings

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Researcher Biographies²

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Melanie O’Gorman is an Associate Professor in the Department of Economics at the University of Winnipeg. Her M.A. and Ph.D. are in Economics and her undergraduate degree is in Collaborative International Development Studies. Her research has straddled the areas of macroeconomics and economic development, and the topics she has explored within these sub-disciplines fall into the areas of education and agricultural development. She is currently working on a research project exploring the determinants of high school dropout in Nunavut, and another on the financing of water infrastructure in Manitoba First Nations communities. She has taught courses on Economic Development and Macroeconomics at the first, third and fourth year undergraduate levels.

² The background of the Research Assistants is as follows: Jazmin Alfaro is a senior undergraduate student in Environmental Science and Biology at the University of Winnipeg. Interested in human-environmental interactions, she has primarily focused her efforts on educating herself in studies related to water stewardship and current human relationships with water resources in Manitoba. Heidi Cook is a graduate student in the Master's in Development Practice in Indigenous Development at the University of Winnipeg. She has been a recipient of Duff Roblin Graduate Fellowships, a John and Grace Little Opportunity Fund Bursary, Swaity Opportunity Fund Bursary, and a Saul and Claribel Simkin Bursary. Heidi is from Grand Rapids, Manitoba and is a member of the Mispawistik Cree Nation. She also holds a BA in Environmental Sustainability and Politics and a Masters Certificate in Project Management from the University of Winnipeg. Alain Beaudry is an economist specializing in environmental, resource and development issues. He holds a master's degree from the University of Winnipeg, and has previously assisted with researching matters related to residential rent control, governmental coalition formation, and the international migration of physicians.

Executive Summary

This study applies a community economic development (CED) framework to assess the possible impact of the Keeyask project on the Indigenous communities in the region. It does this by describing and enumerating the community benefits of the project and then, drawing on the literature and interrogatories related to the Clean Environment Commission hearing on the project, it assesses dam projects in general and the Keeyask project in particular in terms of possible costs and risks to the local Indigenous communities, most importantly the Keeyask Cree Nations (KCNs). The purpose of this report is to inform the Clean Environment Commission review of the project with the goal that the report can support sound and thoughtful decision making about the dam.

Section one presents a CED framework that is also informed by the concept of sustainable development. CED as an approach that gained prominence since the 1990s in part because of the rise of globalization and the concerns about the impact of globalization on communities. CED values an integrated approach that considers economic, socio-cultural, and political aspects of community development. We identify five CED principles common to the CED approach that we use to assess the Keeyask project with: holistic project management; small is beautiful; protection of community and environmental interests; participation in decision-making by less powerful members; build dynamic capacity.

Section two describes the benefits flowing to KCN communities and individuals from the Keeyask project. This includes benefits in the pre-construction, construction, and operating phases. Pre-construction benefits include participation in decision-making and training. Construction benefits include employment and business income associated with the project. Benefits during operation of the generating station include employment, investment income and implementation of the Adverse Effects Agreements.

Section three applies the CED framework to assess the Keeyask project and does so in two principle ways. Section 3.1 illustrates the economic benefits flowing to the KCN Partner communities in terms of labour and business income from the construction period of the project, investment income, income from operational jobs and economic spinoffs resulting from new economic activity the project generates. This analysis was limited by the availability of data. The results demonstrate a large variance in expected benefits from the project. Construction phase benefits to all KCNs, in our scenarios, range from \$4.76 million/year to \$11.64 million/year. Benefits to all KCNs during the operational phase of the project range from \$25 million/year to \$28 million/year³. We note that there are limited data in the Keeyask project plan regarding the distribution of these benefits within the KCNs.

Section 3.2 considers the characteristics of the Keeyask model that are, from a CED perspective, positively noteworthy. This includes the establishment of the Manitoba Hydro-Keeyask Cree Nation partnership, the effort to deliberately include the KCNs as economic beneficiaries, Keeyask project training and employment policies that explicitly refer to KCN residents. Section 3.3 considers challenges that the Keeyask project presents for the KCN Partners. The potential challenges include: causing local

³ Potential economic benefits are taken as average annual economic benefits across each phase of the Keeyask project to account for variation in economic benefits within each phase.

harm that is not compensated; disrupting traditional livelihoods; limiting KCN participation in decision-making; failing to foster dynamic capacity building; starting the process with a very large project; and limiting economic arrangements in the project. These challenges are fundamental obstacles to the success of the Keeyask project. For the project to assist the KCNs to build their communities then these challenges must be addressed. Failure to address these issues could lead to greater harm being created in these communities.

Our overall assessment of the Keeyask model is that it is a major improvement over past dam projects, from a CED perspective. The KCNs have been engaged in conversation with Manitoba Hydro for several years, they can become partners in the project, and there are elements of the plan that seek to address potential harms and risks. While data limitations prevent conclusive statements, the aggregate economic benefits that could accrue to KCNs are not trivial. However we believe the major risks to the KCNs from the Keeyask project are not related to economic benefits. The major risks are related to local harm and livelihood disruption, which would affect the Keeyask Cree Nation partner communities in a holistic fashion including socio-culturally, economically, politically, and psychologically. Economic benefits cannot compensate for these harms.

Introduction

Hydroelectric development has entered a new phase over the last decade in Manitoba and around the world. Whereas large-scale dam projects were once viewed as socially and environmentally destructive, they have come back into favor among large development institutions such as the World Bank. This is largely due to global recognition of the need to arrest climate change and the presumption that hydroelectric generation is a relatively clean energy source in terms of greenhouse gas emissions. However the growing interest in hydro-dams is associated with a concomitant recognition and protection of the rights of local and Indigenous people affected by dam development.

Following in the footsteps of the Wuskwatim Hydroelectric project, the Keeyask Hydroelectric project will be the second development in Manitoba involving partnership between First Nations and Manitoba Hydro and which is subject to environmental assessment. In this report we assess the strengths and challenges of the Keeyask project proposal, from a community economic development perspective. The plan is that the Keeyask generating station will support energy exports to southern Manitoba and to Manitoba's neighboring U.S. states. A critical issue examined in this report is whether the Keeyask project will thus serve the direct interests of what Waldram refers to as the 'heartland' (in the case of the Keeyask project, the inhabitants of Southern Manitoba and the U.S.), rather than those of the inhabitants of northern Manitoba (Waldram 1988). Given the sacrifices of local communities inherent in dam construction, it is essential, from a community economic development perspective, that the communities surrounding the proposed dam site benefit significantly from Keeyask, and that the process for Keeyask approval can be deemed to have been transparent and voluntary for the local First Nations communities.

In this report, the criteria of sustainable community development are first described against which the Keeyask project will be assessed. Next, the basic features of the Keeyask model are laid out and potential economic benefits for the KCNs from Keeyask are estimated. The academic and policy literatures and results from the interrogatory process for the Clean Environment Commission hearing is then investigated where we analyze whether the proposed Keeyask project would foster or harm community economic development in northern Manitoba. The focus of the report is on northern Indigenous peoples⁴ and in particular on the Keeyask partner communities.

⁴ The term 'Indigenous' is used herein when referring to First Nations, status or non-status Indian, Metis, and Inuit people. In the Keeyask project documents the term 'aboriginal' is commonly used for these peoples.

1 Community Development Framework

Economic growth is universally seen, among state actors, as a means to development. Whether it is the slower-growing Northern countries such as Canada and the US or faster growing Southern nations such as China and Brazil, economic growth is seen to be a pivotal means to achieving societal improvement. Sometimes economic growth is presented as an end in itself, i.e., by raising income and consumption levels, while other times it is pointed to as an effective means to one or more ends, such as creating jobs and reducing poverty (Sen 1999). However, critics point out that economic growth does not guarantee poverty reduction because income and job creation may be concentrated among better-off portions of the population. Moreover, critics of the economic growth focus argue that it can undermine the environment's sustainability and hurt communities' capacities.

Economics is the discipline that most centrally studies economic growth. Since the 1980s the discipline has been most deeply influenced by the neoclassical school. It is described as a positive and separable science. By positivist it is meant it is concerned with the way the world is, not the way the world should be. Positivism in economics has led to a heavy emphasis on efficient resource allocation and economic growth maximization without working through the complex social costs and benefits of this strong focus on increasing economic growth. Moreover, neoclassical economics sees the economy as separate from the rest of society so that economic decisions can be made without examining the impact on the environment or communities. As a positive and separable science neoclassical economists understand their role to be limited to determining the best means to achieving efficiency and/or growth. It is up to the politicians to choose the goal.

However, other areas of study reject the notion of positivism and the idea that analysis can be compartmentalized. These areas of study include more problem-focused / interdisciplinary areas, such as community and community economic development studies. They take a problem, such as local poverty, as the starting point, and then gather analysis to understand and ultimately address these problems. As we shall see in this report, the literature on hydro dams and local people identify many local challenges. For instance, in the high-level review of dam projects around the world undertaken by the World Commission on Dams (2001), it was concluded that while dams can contribute to economic growth, they often place heavy and involuntary burdens on local, and often indigenous, peoples:

Large dams have had serious impacts on lives, livelihoods, cultures and spiritual existence of indigenous and tribal peoples. Due to neglect and lack of capacity to secure justice because of structural inequities, cultural dissonance, discrimination and economic and political marginalization, indigenous and tribal people have suffered disproportionately from negative impacts of large dams, while often being excluded from sharing in the benefits (p.110).

Given the considerable weighty evidence regarding the challenges for the environment and local people vis-à-vis hydroelectric development, we draw on the sustainable development and

community economic development literature to create a framework which we then use to analyze the Keeyask project. First we review some key features of the sustainable development literature.

1.1 Sustainable Development

Sustainable development thinking has grappled with the relationship between social and economic change, on the one hand, and the physical environment, on the other. For instance British political economist Robert Thomas Malthus in the 18th century argued that human nature would inevitably lead society into a conflict with the environment. Two hundred years later in the 1960s and 1970s, the Club of Rome Report and authors such as Paul Ehrlich were arguing, for different reasons, once again, that human development would ultimately lead to environmental problems. The UN took leadership in examining the issue of environmentally-sustainable development in the 1980s, and put forward the idea of generational equity with regard to environmental sustainability, found in the 1987 Brundtland Report. These analyses are problem-based, in this case the problem being to understand how social-environmental interaction can be symbiotic as opposed to parasitic. These studies were driven by the recognition that there seemed to be a conflict between economic growth and the protection of the environment, evidenced by, for instance, depletion of fisheries and the ozone layer.

Sustainable development analyses are holistic, drawing on a variety of areas to understand the particular problem. These analyses are normative in that they address how the world ought to be. For instance, Brundtland's generational equity concept stated the principle that future generations should not be harmed by destructive environmental behavior today. The 2001 World Commission on Dams report identified a series of social and economic problems that dams created. Based on that analysis and their analysis of downstream effects, Richter et al. (2010), called for three principles to guide future dam planning: stakeholder engagement – including downstream stakeholder communities -- in river basin planning; an explicit statement of purpose of the project with particular reference to mitigation efforts for downstream communities; and deliberate use of monitoring and adaptive management in order to identify and address any potential problems (p.134-137). The problems which Richter et al. (2010) attempted to address were part of the reason why, ten years ago, the World Bank moved away from financing large dams, but this is now changing. World Bank President Jim Yong Kim has argued that hydroelectric development can meet development goals and sustain the environment, and so that the World Bank plans to re-emphasize this type of development (The Guardian 14 May 2013).

This type of principled presentation of sustainable development issues is reflected locally through the Manitoba Sustainable Development Act (Manitoba Round Table for Sustainable Development, undated). This document lists seven principles and six guidelines that are understood to foster environmentally-sustainable development. The principles include the call to integrate economic and environmental decision-making: “1(1) Economic decisions should adequately reflect environmental, human health and social effects.” They call for decision makers to be responsible; to take care, or to steward, the environment. Finally, the principles operationalize ‘caring’ through concepts such as conservation, rehabilitation, and prevention.

Because of the major consequences of dams on local people and the environment, analysts and policy makers have sought principles to guide decision-making (e.g., WCD 2001). The World Commission of Dams called for dam projects to be guided by goals including human development, protecting human rights, sustainable (environmental) development, and critically, fully-informed participation of local people in decision-making (WCD 2001, p.198). Principles identified include equity, efficiency, participatory decision-making, sustainability, and accountability (WCD 2001, p.199).

1.2 Community Development

The community development (CD) and community economic development (CED) literatures share, with the sustainable development literature, a focus on addressing a social problem. In this case the focus is on community marginalization. The CD/CED literature has focused attention on the static and dynamic underdevelopment of communities in rural, urban, Southern and Northern countries. The local development emphasis gained particular impetus through the period of accelerated globalization from the 1990s. During this time, local government, residents, workers, and small businesses felt increased pressure from the international division of labour and global corporations. CD/CED theory examines a variety of ways in which communities can boost their economies through strategies such as export promotion and import substitution.⁵

Also, CD/CED, like sustainable development, is based on a set of principles. In this case the principles highlight the importance of local agency and development. While Loxley (2007) is critical of what he calls the 'cook book' approach to local development, he does identify key principles such as social transformation and meeting local need (Loxley 2007, p.1-12). An example of explicit set of principles is the Neechi Principles of CED, which guides Neechi Commons, a Winnipeg Indigenous worker cooperative. These principles emphasize economic localization, i.e., concentrating on the creation of local skills, jobs and capacities to produce goods and services for the local economy.

The CD literature addresses social aspects of development and builds on dynamic concepts such as social capital and capacity building. Social capital is a concept used to understand how social relations contribute to economic vibrancy. Social capital, referring to the

⁵ The theory of CD/CED is quite varied. Shragge (1997) identifies the need to strengthen community capacity to engage in activities ranging from loan circles through land trusts to community development boards, as key means for communities in order to overcome the negative consequences of globalization. Loxley (2007) examines the economics of community underdevelopment and argues a principal problem is misalignment between what the local economy is producing and what local residents need. He argues for what he calls a convergence approach whereby local economies are geared towards these local needs. As mentioned above, the community development literature spans the ideological spectrum with reform and radical approaches identifiable. More radical approaches border on anarchist and post-development views. For instance Alfred (2009), highlighting what needs to be excluded in order to achieve indigenous development, calls for anarcho-indigenism as a political-philosophy, noting that: "there are important strategic commonalities between indigenous and anarchist ways of seeing and being in the world: a rejection of alliances with legalized systems of oppression, non-participation in the institutions that structure the colonial relationships, and a belief in bringing about change through direct action, physical resistance, and confrontation with state power (p.46)."

depth and breadth of trusting relationships, finds that economies are strengthened when these relationships are more extensive and deeper. When people are more closely inter-connected through trusting relationships, social capital theory finds that economic transactions operate more effectively and the economy is stronger. The CD literature encompasses the concept of individual and collective capacity building. Individual capacity building refers to the individual first identifying and articulating their goals and then planning and implementing the means to achieve them. At the collective level it considers a similar set of skills plus the ability to work within an organization. The community development approach is rooted in the concept, popularized by Schumacher that ‘small is beautiful.’ The small-scale organization allows communities to gain control over their social and economic lives. He argues that large-scale organizations tend to alienate communities. Small size allows small groups to gain the capacity to manage.

1.3 A CED Framework to Assess the Keeyask Model

Based on this brief survey of the sustainable development and CD/CED literatures we have identified five common principles that need to undergird projects that are sustainable and build community capacity.

- 1) *Project management must be holistic given the inter-connectedness of the socio-economy and the environment:* The economy is intimately interconnected with human development including the local and environmental settings. Economic decisions must be made with the understanding of the community’s and environment’s interests and these economic decisions need to be shaped by these interests. The best way to achieve this integrated decision-making is through holistic planning and evaluation. Holistic planning includes all stakeholders in important decision-making including those who are less vocal. It continues through project implementation to include monitoring and evaluating so that project and community deficits can be addressed and project and community assets can be strengthened.
- 2) *Small is beautiful, and once established, scaling up may be appropriate.* For communities to gain control over their lives it is important that organization scale is small, at least to begin with. Once an effective model is established, scaling up may be possible, and be consistent with community ideals.
- 3) *Protection of Environment and Community Interests:* Economic decisions must be guided by the need for environmental and community health. A healthy economy cannot continue if it is achieved at the expense of community vitality and environmental health. Conversely a vibrant community and environment lay the groundwork for a strong economy.
- 4) *Participation in Decision-Making of Less Vocal Stakeholders:* Decision-making must take into account less vocal stakeholders such as community residents and future generations. These stakeholders are critically important to the success of projects and yet their interests are often marginalized.

- 5) *Building a Dynamic and Growing Local Capacity:* A central issue in the CD literature is that development leads to a growth in the capacity of individuals and communities to identify and work toward their goals. This is consistent with the sustainable development literature, particularly as articulated in Manitoba.

2 The Keeyask Generation Project as a Community Development Model

The Keeyask Project consists of two components – the Keeyask Generating Station and the Keeyask Infrastructure Project. It is being proposed as a joint effort of Manitoba Hydro and four Manitoba First Nations (Tataskweyak Cree Nation (TCN), War Lake First Nation (WLFN), York Factory First Nation (YFFN) and Fox Lake Cree Nation (FLCN)). This joint effort is referred to as the Keeyask Hydropower Limited Partnership (KHLP).

The Keeyask Generation Project would be located in the Split Lake Resource Management Area of northern Manitoba, 725 kilometers northeast of Winnipeg on the lower Nelson River. The Generating Station would provide approximately 695 megawatts of capacity, and produce an average of 4,400 gigawatt hours of electricity each year. Construction on the Generating Station is scheduled to begin in 2014 and end in 2021 (<http://keeyask.com/wp/the-project>).

The Keeyask Infrastructure Project has been reviewed and approved by the appropriate federal and provincial authorities. Construction commenced in early 2012 and will be completed by the middle of 2014 (<http://keeyask.com/wp/the-project>). Discussion regarding the Keeyask Generation Project began between TCN First Nation and Manitoba Hydro in 1998. War Lake, Fox Lake and York Factory eventually joined the discussion, and all 5 parties signed an agreement called the Joint Keeyask Development Agreement (JKDA) in 2009. This agreement governs all activities related to the project, including training, employment, financing, business opportunities etc. Manitoba Hydro will provide administrative and management services for the KHLP and will own at least 75% of the equity of the partnership. The four Manitoba First Nations, known collectively as the Keeyask Cree Nations (KCNs), collectively have the right to own up to 25% of the partnership. Proceeding with the Keeyask Generation Project would entail significant impacts on each of the four First Nations partners. For example, approximately 45 square kilometers of land would be flooded by the project. Individual Adverse Effects Agreements (discussed in Section 4.3 below) were established with each of the KCNs. These agreements identify potential negative impacts of the Keeyask Project and outline programs designed to mitigate such effects. These agreements also specify compensation to each First Nation for adverse effects that cannot be mitigated.

Data for this section are compiled from a number of sources including general information from the Keeyask Hydropower Limited Partnership website, the Environmental Impact Statement responses (found on the KHLP website), and the Joint Keeyask Development Agreement (available on the Manitoba Hydro website).

2.1 The Pre-Construction Phase (1998-2014)

2.1.1 Consultation and Referenda

As noted above, discussion between First Nations partners and Manitoba Hydro began in 1998. Since then, consultations have occurred between community members of each KCN, KCN

negotiators, legal advisors and Manitoba Hydro. Information meetings were held in each KCN, Winnipeg, Thompson, Gillam and Churchill.

Referenda were held in each Keeyask Cree Nation to gauge support for the JKDA, and invited participation by all community members of majority age. At the same time a referendum question was posed for ratification of the Adverse Effects Agreement for each community. Residents were asked whether or not they supported their leaders to sign the JKDA and the AEAs⁶. The referenda results were interpreted as supportive of the Keeyask Project given that greater than one third of eligible voters came to vote, and a majority of votes were cast in favour of the JKDA and Adverse Effects Agreement.

Notice of the referenda was posted in three prominent public locations in each community, published in the Winnipeg Free Press and in the Winnipeg Sun. Mail-in ballots were provided to any KCN members not living on reserve at least 45 days prior to the Referendum. The Referendum Question was: “Do you support the Chief and Council of [insert name of KCN] signing the proposed Joint Keeyask Development Agreement (JKDA)?”

2.1.2 Training

Between 2001 and 2010, multiple levels of government carried out a large training initiative called the Hydro Northern Training and Employment Initiative (HNTEI), to ensure skilled labour will be available for both the Keeyask and Wuskwatim Hydroelectric Generation Projects. The main goal of the HNTEI, according to the Government of Manitoba (<http://www.gov.mb.ca/tce/hnti/>) is to “prepare northern Aboriginals with the knowledge and skills needed for employment on the construction projects planned in northern Manitoba and on other major Manitoba construction projects”.

This \$60.3M multi-year initiative had the goal of training over 1,000 First Nations workers for approximately 800 jobs with the Wuskwatim and Keeyask projects. By 2010, 1,876 individuals had successfully completed at least one course within the initiative (WKTC Annual Report 2009/10, page 8). Training was provided for designated trades such as iron-working and plumbing, non-designated trades such as heavy equipment operation, construction support, professional and administrative positions and non-occupational training such as life skills. Funding for the initiative was provided by Manitoba Hydro, the Province of Manitoba, Indian and Northern Affairs Canada (INAC), Western Economic Diversification and Human Resources Skills Development Canada, and in-kind support was provided by Nisichawayasihk Cree Nation, TCN, War Lake First Nation, Fox Lake First Nation, York Factory First Nation, Manitoba Keewatinowi Okimakanak Inc. (MKO) and the Manitoba Metis Federation (MMF).

⁶ For instance, the Cree Nations Partners, Tataskweyak (TCN) and War Lake First Nations (WLFN) voters were asked the following: “Do you support the Chief and Council of [either TCN or WLFN] signing the proposed Joint Keeyask Development Agreement,” and “Do you support the Chief and Council of [either TCN or WLFN] signing the Keeyask Adverse Effects Agreement” (Response to EIS, p.2-23, 2-24).

2.2 The Construction Phase (2014-2021)

2.2.1 Construction Camp

To facilitate construction of the Keeyask Generating Station, a construction camp is being built on the north side of the river. In 2014, the camp will have capacity for 500 workers, and by 2016 its capacity will be for 2000 workers. The construction camp will be equipped with private rooms, an entertainment center, a gym, a movie theatre and a dinner complex.

2.2.2 Business Opportunities & Preferences

The construction phase will entail many business opportunities. Businesses will have the opportunity to bid on contracts, and preferential treatment will be provided according to Manitoba Hydro's Buy Manitoba and Northern Purchasing programs. Many contracts will be awarded based on a competitive bidding process. However there are roughly \$200 million worth of contracts that will be available to qualified KCN businesses or joint venture partnerships.

These include:

- Access road contract
- Security contract
- Camp maintenance contract
- Camp sewer and water contract
- Catering contract
- Construction power clearing contract
- Employee retention and support contract
- First Aid contract
- Site preparation contract

2.2.3 Employment

The Keeyask Infrastructure Project will provide an estimated 184 person-years of employment over an estimated three-year period. This construction began in the summer of 2011. No preferential employment for KCN members was specified for this aspect of the project.

Construction of the Keeyask Generating Station is predicted to create jobs in three categories: designated trades, non-designated trades and support occupations. Designated trades include electricians, plumbers and other licensed skilled trades. Non-designated trades include heavy equipment operators, truck drivers, labourers, etc. Support occupations include clerks, cooks/catering personnel and security.

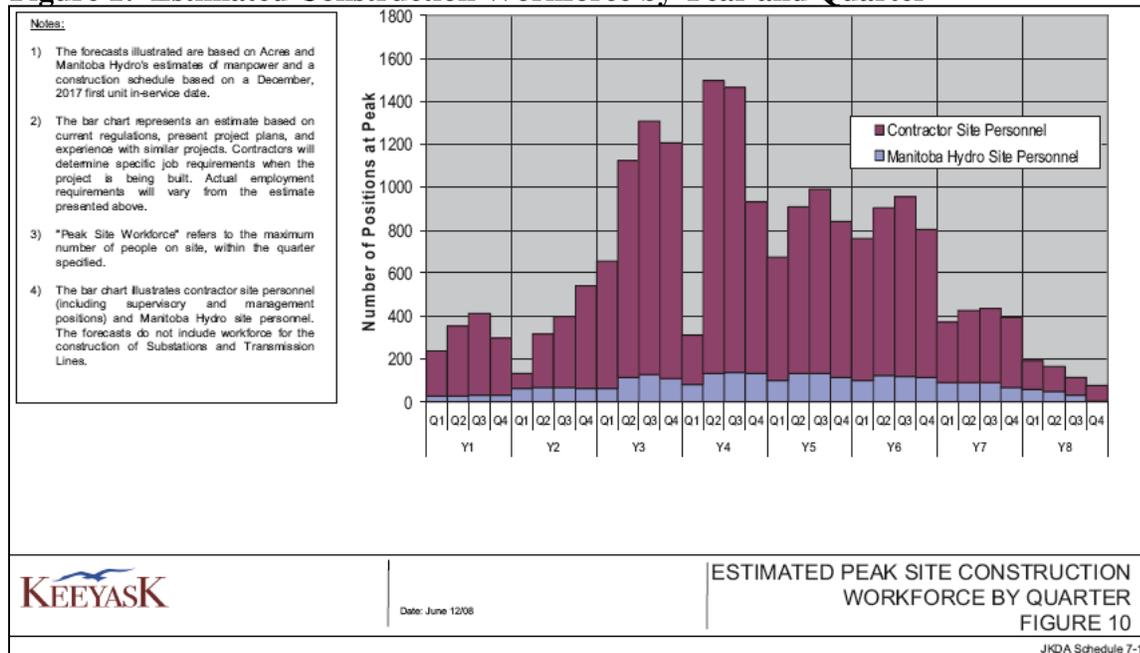
Construction of the Keeyask Generating Station will require a total of 4,225 person-years of employment from 2014-2021. As is evident from Figure 1 below, the peak of employment will occur in 2017. The JKDA identified a target of at least 630 (15%) of these person-years of employment for KCN communities.

The Burntwood Nelson Agreement (BNA) will direct hiring for the Keeyask project. Workers will be hired in the following order:

- “Qualified Northern Aboriginals living within the Churchill/Burntwood/Nelson River (CBNR) region and surrounding areas as defined in the BNA, and members of the Keeyask Cree Nations who live in Manitoba.
- Qualified Northern residents living north of the Manitoba Aboriginal and Northern Affairs boundary who are members of a union involved in the project.
- Qualified Northern Aboriginals living north of the Manitoba Aboriginal and Northern Affairs boundary but not within the CBNR and surrounding areas as defined in the BNA.
- Qualified Northern Manitobans living north of the Manitoba Aboriginal and Northern Affairs boundary.
- Qualified Manitoba union members
- Qualified Manitoba workers

Regardless of the hiring preferences in place, all employment will be conditional on each applicant having the “required qualifications for the job” (<http://keeyask.com/wp/the-project/employment>).

Figure 1: Estimated Construction Workforce by Year and Quarter



Source: JKDA Schedule 7-1.

2.3 The Post-Construction Phase

In this section, the long-term job prospects of the project, the financial structure of the KHLP, and the Adverse Effects Agreements signed by all four KCNs are each considered. These aspects of the Keeyask Project are highlighted as relevant to the Post-Construction phase as they will determine long-term development outcomes stemming from the project.

The target for long-term jobs for the KCN Members is for one hundred TCN Members, ten 10 War Lake Members and thirty-six members for each of York Factory and Fox Lake in Operational positions for the Keeyask project, (KHLP (2009a), page 45).

Throughout the JKDA, the term “Limited Partner” refers to the Keeyask Hydropower Limited Partnership (KHLP). It consists of Manitoba Hydro and all four KCNs. The Keeyask Generating Project requires \$6.2 billion of capital to construct/operate/maintain. One quarter of this capital will be raised through equity, and three quarters through debt financing. Of the equity portion, KCNs may purchase up to 25% of equity ownership shares (\$387.5 million). KCNs must invest \$20 million of their own funds, and may borrow the remaining amount from Manitoba Hydro. The CNPs have the opportunity to purchase 15%, while FLCN and YFFN may purchase up to 5% of equity shares each.

The KCNs have two options for investment:

1. A common equity option, which allows the community to obtain a proportionate share of cash distributions from the Project based on Partnership financial performance, or
2. A preferred equity option. This option involves a guaranteed return and forgiveness of certain Manitoba Hydro loans.

During the period of construction, each KCN Investment Entity is entitled to draw upon the Construction Credit Facility provided to it by Manitoba Hydro in order to meet the cash calls for which it will be liable as the holder of Common Units.

2.4 Adverse Effects Agreements (AEAs)

The off-setting measures for each individual KCN are programs that provide “replacements, substitutions or opportunities to offset unavoidable Keeyask Adverse Effects” (Tataskweyak Cree Nation Adverse Effects Agreement (2009), page 13). Each KCN is responsible for managing, implementing and operating each off-setting program. Each AEA includes annual supporting funds from the partnership, residual compensation, and will compensate licensed trappers for loss of net revenue and for infrastructure damage due to the Keeyask project.

Box 1. Summary of Adverse Effects Agreements for Keeyask Cree Nation Partners

York Factory Adverse Effects Agreement (AEA): York Factory First Nation has negotiated the following programs as part of its AEA:

- Resource Access and Use Program – Provides transport for members to visit off-system lakes and rivers to fish so as to ensure similar access to country food as before the Keeyask project. This program will also provide means for storing, processing and distributing country foods among members.

- Environmental Stewardship Program – Provides funds to allow for the study, monitoring and documentation of environmental changes resulting from the Keeyask project, including support for the participation of Elders.
- Cultural Sustainability Program – Provides funds to support learning and use of the Cree language, values and traditional knowledge, as well as seasonal gatherings and celebrations, healing and reconciliation, and documentation of York Factory history.

Fox Lake AEA: Fox Lake First Nation has negotiated the following programs as part of its AEA:

- Gathering Centre – Funds were provided for construction of a permanent structure for Fox Lake members in Gillam, for the purpose of implementing the Offsetting programs.
- Youth Wilderness Traditions Program – Funds to ensure young adults are able to experience a traditional lifestyle.
- Cree Language Program – Funds to hire instructors and Elders to create Cree Language programs.
- Gravesite Restoration Program – Funds to support the restoration, re-consecration and protection of gravesites in the Gillam area.
- Alternative Justice Program – Support for an alternative method for the resolution of criminal matters, as to be chosen by Fox Lake members.
- Crisis Centre and Wellness Counseling Program – Construction of a facility and funds for training of workers for a crisis center and wellness counseling program.
- Lateral Violence and ‘Where Do We Go From Here’ Program – Supports workshops to assist Fox Lake citizens in dealing with the cultural and social effects resulting from Keeyask.
- Alternative Resource Use Program – Will provide transportation and equipment to assist Fox Lake citizens in replacing resources lost due to the Keeyask Development Project.

War Lake AEA: War Lake First Nation has negotiated the following programs as part of its AEA:

- Distribution Center – Construction of a Center that provides space for fish processing, storage and distribution.
- Community Fish Program – Funds for equipment (satellite phones, freezers, boats and snowmobiles) to support fishing trips to mitigate the loss of fish or replacement of fish avoided due to concern about increased methyl-mercury levels caused by the Keeyask Development Project.
- Improved Access Program – This program will provide War Lake members with “substitute opportunities to fish and to carry out other customs, practices and traditions integral to their distinctive cultural identity in a vital part of their homeland” (War Lake AEA, page 14).
- Traditional Learning/Lifestyle Program – Provides funds for flights for young adult members of War Lake to ensure they experience a traditional lifestyle at Atkinson Lake.
- Cree Language Program – Funds for Elders and other instructors to support Cree Language development for adult members of War Lake.
- Museum and Oral Histories Program – This program will provide “a substitute opportunity for War Lake Members to maintain the historical connection to the land that will be destroyed when the Keeyask project is built” (War Lake AEA, page 15)

Tataskweyak Cree Nation (TCN) AEA: TCN has negotiated the following programs as part of its AEA:

- Construction of the Keeyask Center – The Keeyask Center provides space and facilities related to management and administration of the Offsetting programs.
- Access Program – Provides funds for chartered flights, vehicles leases and labour to maintain trails and portages, so that Members have substitute opportunities to “hunt, fish and trap for food and to carry out associated customs, practices and traditions integral to their distinctive cultural identity within the Split Lake Resource Management Area” (TCN AEA, page 15)
- Land Stewardship Program – Funds for air transport and equipment to ensure land is used within the Split Lake Resource Management Area in a manner consistent with traditional TCN values.
- Healthy Food Fish Program – “The objective of the Healthy Food Fish Program is to provide opportunities for Members to continue to fish and to provide a supply of wholesome food fish to Members in order to replace fish which may no longer be available to Members as a result of increased methyl-mercury levels in fish caused by the Keeyask Project in the reach of the Nelson River between the Kelsey Generating Station dam and the Keeyask Generating Station dam” (TCN AEA, page 17).
- Traditional Lifestyle Experience Program – Provides funds for mentors, clothing and equipment to ensure young adult Members to experience a traditional lifestyle.
- Traditional Knowledge Learning Program – Funds for hiring of instructional staff; creation and implementation of a program to replace opportunities for traditional learning that will be lost due to the Keeyask Project.
- Cree Language Program – Payment to Elders and other instructors, funds for equipment and lodging to support learning of the Cree language for adult Members.
- Traditional Foods Program – Funds to enable opportunities for gathering and sharing traditional foods by resource harvesters, in keeping with the customs and traditions of TCN and Members.
- Museum and Oral Histories Program – Funds for the purchase of display cases to be housed in the Keeyask Centre, development of a cultural resources plan and the training of a cultural manager to maintain TCN Members’ “historical connection to the land that will be destroyed when the Keeyask Project is built.” (TCN AEA, page 20)

3 Analysis of the Keeyask Model

In this section, the potential economic benefits for the KCNs from the Keeyask project are first estimated. The community development achievements of the Keeyask model are then discussed. Insight on the topic of dams and community development from the academic literature, the policy literature, and results from the interrogatory process associated with the Clean Environment Commission are used to evaluate the Keeyask model relative to the five principles of community development identified in Section 2. This academic and policy literatures largely focuses on hydroelectric development in Manitoba, but also considers hydroelectric development in other parts of Canada and the world. Results from the interrogatory process relate specifically to the Keeyask project.

3.1 Economic Benefits for the KCNs from the Keeyask Project

The Keeyask project is expected to bring a wide range of economic benefits for the KCNs. In this section we present scenarios for the construction and operational periods of the Keeyask project, to illustrate the potential magnitude of benefits arising from the Keeyask project for KCN Members (Tables 1-5). We begin by first discussing increased employment and business opportunities during the construction period.⁷

3.1.1 Labour income from Keeyask construction employment

This section summarizes labour income to Keeyask communities flowing from the project and the points are summarized in Box 2. The job target for KCN Members for the construction phase of the Keeyask project is 630 person years of employment. Given an estimated total person years of employment of 4,225, KCN members would hold 15% of total projected construction jobs on the Keeyask project if the target is met.

There is risk that the KHL P will not meet that target. The BNA notes that “regardless of the hiring preferences in place, all employment will be conditional on each applicant having the required qualifications for the job.” (<http://keeyask.com/wp/the-project/employment>) As noted above, 1,876 individuals were trained through the HNTEI, however this statistic includes those that have only taken one course (WKTC (2010)). After taking one course through the HNTEI, a person could still be deemed ‘unqualified’.

KHL P (2012) provides an estimate of the total economic benefit to job creation resulting from the construction phase of the Keeyask project (page 3-105 to 3-106). We include these estimates as our figures for Keeyask construction employment income in Table 1 below. The low estimate corresponds to the total wage bill if the lowest wage within a job category (construction support, non-designated and designated trades) applied, while the high estimate corresponds to the total wage bill if the highest wage within a job category applied. The

⁷ While recognizing the economic flows resulting from the Keeyask project will be reflective of the ebbs and flows of the construction schedule, for the purposes of the illustrative scenarios below we take averages of economic benefits flowing from each phase of the project.

Partnership notes that most of the labour income stemming from the construction phase of the project will come from employment on the DNCs (KHLP (2012), page 3-105).

Box 2. Summary of Construction Labour Income to Keeyask Communities from the Project

- The job target is for 630 person years of employment for KCN members.
- There is a risk that this target is not met if there are not sufficient numbers of qualified applicants or if substantial amount of the work is for short durations. On this latter point, by means of comparison, on average, aboriginal workers involved in the Wuskwatim project worked one-half a year.
- If sufficient jobs are not created then a \$3 million fund will be provided to assist people to find work but it is unclear how this fund can assist in job creation or identification.
- Construction support and service jobs are predicted to account for over one-half construction phase employment and these jobs would be, relative to other trades, lower waged.

The KHLP notes that “construction of the project will require a large, skilled workforce comprised mainly of designated trades (e.g. apprentice and journeymen carpenters and electricians) and non-designated trades (e.g. truck drivers and heavy equipment operators) along with construction support occupations (e.g. caterers and security personnel)” (KHLP (2012), page 3-3). Construction support and service jobs are predicted to account for over half of KCN DNC employment from the construction phase (KHLP (2012), Figure 3-23). These jobs would be lower-paying relative to trades positions, perhaps suggesting that more weight should be placed on the lower estimate of labour income noted in Table 1. The 6 most common jobs created during Wuskwatim construction were Carpenter, Labourer, Caterer, Equipment Operator, Ironworker and Electrician (in that order) (Wuskwatim Power Limited Partnership (2013), page 37). Supervisory positions are explicitly excluded from the BNA preferences (KHLP (2012), page 3-8).

Table 1: An Illustration of the Economic Benefits for the KCNs from the Construction period of the Keeyask Project

Item	Estimated Range of Benefit	
	Low estimate	High estimate
Total and annual labour income from Keeyask construction employment	\$21.6 million (KHLP (2012), page 3-105, Table 3-25) or \$2.7 million/year	\$62.2 million (KHLP (2012), page 3-105, Table 3-25) or \$7.8 million/year
Total and annual business profits during construction period of the project	\$10.16 million (KHLP (2012), pages 3-105 to 3-106) or \$1.27 million/year	\$15.23 million (KHLP (2012), pages 3-105 to 3-106) or \$1.90 million/year
Potential annual income for construction period of the project	\$3.97 million	\$9.7 million

The benefits of KCN construction employment would also be diluted if a large portion of that employment were short-term. In Article 12.6.3 of the JKDA it is noted that very short spells

of employment on the Keeyask project will be counted towards the 630 person-years target. For example, if a person works on the project for 20 days, that employment duration will be counted toward the target as one month. Hence a consistent overestimation is built into the measurement of progress towards the employment target. Further, short spells such as this would barely indicate a gain of any sort for the employee – in terms of income or work experience. Temporary, short-term employment of this sort should be excluded from measurement of progress on job creation.

Comparison with Wuskwatim is helpful, as it too used the BNA hiring preferences and a similar job referral process during its construction phase. Despite that Wuskwatim is a smaller project than Keeyask, 944 person years of employment were generated for Northern Aboriginal people during the construction phase of Wuskwatim (Wuskwatim Power Limited Partnership (2013), page 36). This is encouraging, in that it indicates a large, qualified labour supply for construction of the Keeyask project. However given that in total 2,247 Aboriginal individuals were hired for Wuskwatim construction, and a total of 1,137 person-years of employment was created for Aboriginal individuals on Wuskwatim, each Aboriginal person worked on average only half a year. Further, the turnover rate for Aboriginal workers is high, at 38% (Wuskwatim Power Limited Partnership (2013), page 38).

If the construction jobs target is not met, the JKDA notes that up to \$3 million will be provided for the Working Group on Operational Jobs (WGOJ) (KHL P (2009a), page 109). The fewer construction jobs created by the Keeyask construction phase, the more money the WGOJ is given. In other words, if in the worst case scenario less than 400 person-years of employment are generated during the construction period, the WGOJ will receive the maximum amount of \$3 million. This could lead to a concentration of benefits among fewer KCN Members, and it is not clear how employment would subsequently be increased by the work of the WGOJ. In the JKDA it is simply noted that the WGOJ will “review targets in respect of Operational Jobs set forth in subsection 12.7.1.” (KHL P (2009a), page 110).

3.1.2 Business Opportunities

Construction of the Keeyask project will bring opportunities for businesses owned by KCN individuals through Direct Negotiated Contracts (DNCs) (Box 3). A value of \$203.1 million in DNCs has been reserved for KCN contractors. While this sounds like a significant amount, it accounts for only 9.2% of the overall value of construction (estimated at \$2.2 billion (KHL P (2012), page 3-123)). Assuming that profits account for 10% of business income⁸, business profits would be \$15.23 million if KCN Members owned 75% of businesses undertaking DNCs. We take this as our high estimate of business profits from DNCs in Table 1 above. However if KCN Members owned only 50% of DNCs, then half of the \$20.31 million profit from DNCs would accrue to KCN members (\$10.16 million). We take this as our low estimate of business profits from DNCs in Table 1.

⁸ This rate of profit is used by InterGroup Consultants Inc. on page 3-106 of KHL P (2012).

Box 3. Summary of Business Income to the Keeyask Communities from the Project

- Just over \$200 million, or 9.2% of the construction expenditure, is reserved for KCN contractors.
- For illustration purposes, assuming profits amount to 10% of business income and KCNs own 75% of businesses undertaking DCNs, revenue would amount to just over \$15 million.
- If KCNs owned 50% of businesses undertaking DCNs, then just over \$10 million would accrue to KCN members.

Taking the average of the low and high estimates of income flowing from the construction phase of the Keeyask project in Table 1, the KCNs as a whole could earn approximately \$6.8 million per year during the construction period. Next we consider two types of income the KCNs will receive during the operational period of the Keeyask project – investment income and labour income from Operational jobs with the Keeyask project.

3.1.3 Investment Income

As noted in Section 3c) above, the KCNs have two options for investment in the Keeyask project. The first option is for KCNs to hold their investment in the form of Common Units. As the KCNs would receive investment income proportionate to the Partnership's financial performance with this option, investment income stemming from this option would be highly uncertain. In times of low financial performance, the KCNs could receive no distributions from the project but will still be repaying loans from Manitoba Hydro, which means there is the potential for significant losses with this option. A hypothetical return for this option is very difficult to calculate given that it would depend on many factors whose expected value we are not aware of. As a result we do not include its returns in Table 2 below⁹.

The second option for investment in the Keeyask project is the Preferred Unit option. A KCN Investment Entity that decides to hold its investment in the form of Preferred Units will have its Construction Credit Facility loans forgiven by Manitoba Hydro (Article 5.3.7 (KHLP (2009a), page 64). The return on KCN investment for this option will be the higher of the Preferred Minimum Distribution and the Preferred Participating Distribution.

The Preferred Minimum Distribution is an annual payment equal to a KCN's own cash invested multiplied by the Thirty Year Rate minus 1.5%. Hence as long as the Thirty Year Rate is greater than 1.5%, the KCNs will see a stable stream of investment income with this option¹⁰. To illustrate the magnitude of investment income for the Preferred Unit option, we assume the Thirty Year Rate is equal to 5.73%, the average of the Thirty Year rate using average long-term

⁹ The assumption that the KCNs opt for Preferred Shares is also made in Information Request response CAC/MH 1-022 a) (Manitoba Hydro (2013b)).

¹⁰ The Thirty Year Rate minus 1.5% would also have to remain above the rate of inflation, which is expected to be 2% given the Bank of Canada's 2% inflation target. Hence to maintain a positive real rate of return on the KCN investment, the Thirty Year Rate would have to remain higher than roughly 3.5%.

Government of Canada bond rates as a proxy for the 30 year Government of Canada bond rate, and average long-term Provincial bond rates as a proxy for the Manitoba 30 year bond rate, both for the period 1983-2012¹¹. Then assuming that aggregate KCN own cash invested is \$29,450,000 (in the case of 1.9% equity ownership), the Preferred Minimum Distribution would be \$1.25 million per year. If KCN cash invested were instead \$38,750,000 (in the case of 2.5% equity ownership), the Preferred Minimum Distribution would be \$1.64 million per year¹².

If however revenue of the Keeyask project were high, the Preferred Participating Distribution would be the higher distribution for the Preferred Unit Option. This distribution provides an annual payment equal to the following proportions of Adjusted Gross Revenue (AGR) for each 1% share of KCN equity:

- 0.8% of AGR for AGR < \$250 million
- 1.2% of AGR for \$250 million < AGR < \$1 billion
- 1.6% of AGR for AGR > \$1 billion

In Tables 2 and 3 below, we illustrate investment income for the KCNs if their combined investment in the project were 1.9% (Table 2) and 2.5% (Table 3)¹³. For the low estimate of investment income in each table, we assume the Partnership experiences zero AGR, and the KCNs receive the Preferred Minimum Distribution. For the high estimate in each table, we assume AGR of \$200 million and the KCNs receive the Preferred Participating Distribution¹⁴. This information provided is for illustrative purposes and any distribution will naturally be a function of the magnitude of KCN investment and of the AGR in any particular year.

¹¹ The Thirty Year Rate is “for any particular day, the rate of interest per annum equal to the sum of: (a) the Thirty Year Canada Bond Rate, as at 10:00 a.m. (Winnipeg time), for such day; and (b) the difference between the Thirty Year Canada Bond Rate in effect on that date and the rate of interest, expressed as a percentage rate per annum, for Thirty Year Manitoba Bonds had Thirty Year Manitoba Bonds been issued by Manitoba on that day, at 10:00 a.m. (Winnipeg time), including commission costs, with the rate of interest being determined by Hydro obtaining three (3) rate quotations for Thirty Year Manitoba Bonds and using the median of the three (3) rate quotations obtained.” (KHLP (2009b)). To calculate expected income in the low estimate case in Table 1, we took the Government of Canada thirty year bond rate as the 1983-2012 average long term Government of Canada bond yield (Bank of Canada (2013)), which was 7.09%. We then used the average long-term yield for Provincial bonds from 1983-2012 (which was 8.46%) as a proxy for the Manitoba 30 year bond rate. This gave a difference between the yields of Federal and Provincial bonds as -1.36%. Adding the average long term Government of Canada bond yield to this difference gave an estimate of the Thirty Year Rate of 5.73%.

¹² These illustrations of the potential returns arising from the Preferred Unit equity option assume that the KCNs indeed raise the \$29.45 million (in the case of 1.9% equity ownership) and \$38.75 million (in the case of 2.5% equity ownership) to achieve these returns. We are not aware of how likely these scenarios are.

¹³ This is the range of KCN equity investment assumed by Manitoba Hydro in the response to Information Request MIPUG/MH 1-017a) (Manitoba Hydro (2013b), page 59).

¹⁴ We note that in the response to PUB-1-078 c), Manitoba Hydro estimated preferred distributions declared based upon its ‘most likely’ economic assumptions, capital costs and export/energy prices. Distributions from 2022 through 2039 ranged from \$5 million to \$8 million annually. While the question asked Manitoba Hydro to assume a full equity interest subscribed by the partners, Manitoba Hydro’s response does not identify the assumptions in terms of subscription.

Table 2: An Illustration of the Economic Benefits for the KCNs from the Operational period of the Keeyask Project – 1.9% Preferred Equity Holding

Item	Estimated Range of Benefit	
	Low estimate	High estimate
Estimate of annual investment income (during operational period of the project)	Preferred Units – Assuming AGR of \$0: \$1.25 million/year	Preferred Units – Assuming AGR of \$200 million: \$3.04 million/year
Labour income per year from operational jobs	\$19.7 million (KHL P (2012), page 3-129, Table 3-33, column 3)	\$19.7 million (KHL P (2012), page 3-129, Table 3-33, column 3)
Estimate of annual income during operational period of the project	\$20.95 million	\$22.74 million

Table 3: An Illustration of the Economic Benefits for the KCNs from the Operational period of the Keeyask Project – 2.5% Preferred Equity Holding

Item	Estimated Range of Benefit	
	Low estimate	High estimate
Estimate of annual investment income (during operational period of the project)	Preferred Units: Assuming AGR of \$0: \$1.64 million/year	Preferred Units: Assuming AGR of \$200 million: \$4 million/year
Labour income per year from operational jobs	\$19.7 million/year (KHL P (2012), page 3-129, Table 3-33, column 3)	\$19.7 million/year (KHL P (2012), page 3-129, Table 3-33, column 3)
Estimate of annual income during operational period of the project	\$21.34 million	\$23.7 million

Box 4. Summary of Investment Income Possibilities to KCNs from the Project

- Investment income to communities holding Common Units is uncertain as these returns depend on many variables. Further the Common Units option would entail significant losses for the KCNs if the Partnership were to earn no profits since they would still have to service their debt.
- Preferred Units are less risky but investment income from them is also variable.

3.1.4 Income from Operational Jobs

Regarding long-term job prospects for KCN Members, in the JKDA Benefits Summary (Manitoba Hydro (2013a)), it is noted that “Manitoba Hydro and the KCNs have agreed to a 20 year target for the employment of 182 Members of the KCNs in Manitoba Hydro’s ongoing operations. The funding quantum agreed to in the JKDA for this initiative is \$20 million and the

20-year period is 2009-2029” (page 3)¹⁵. According to Table 3-33 (KHL P (2012, page 3-129), these operational jobs will generate gross annual income of \$19.7 million/year for the KCNs, if we assume that the 20 year target of 182 Members employed is reached.

3.1.5 Multiplier effects

As more KCN Members who have been hired to work on the Keeyask project have incomes to spend, demand for goods and services in other (non-Hydro) sectors will increase in the KCNs. That is, if workers spend their incomes in the KCN communities, they will create increased demand for all goods and services in the KCNs which will lead to further employment in the KCNs, further spending, and so on. We refer to this as the multiplier effect for the Keeyask project. In Table 4 below, we calculate the multiplier effect for income stemming from the construction and operational phases of the Keeyask project.

The within-province total multiplier for Manitoba for 2009 was 1.4 (Statistics Canada (2009)). We decrease this multiplier to 1.2 to account for the fact that a large portion of income stemming from the Keeyask project will be spent in Gillam, Thompson and even Winnipeg. Using this multiplier, if aggregate wages and business income stemming from the Keeyask project were \$55 million, an additional \$11 million of economic activity would be generated through the multiplier effect. The extent to which this happens will depend on how broadly the benefits are spread. If many KCN Members obtain employment, this multiplier effect would be greater. In Table 4 we also account for a multiplier effect for operational income.

Table 4: An Illustration of the Indirect Economic Benefits (Multiplier effects) for the KCNs from the Keeyask Project for the Preferred Unit Equity Option

Annual multiplier effect for:	Estimated Range of Benefit	
	Low estimate	High estimate
Construction period of the project	\$793,875/year	\$1.94 million/year
Operational period of the project – 1.9% equity holding (Preferred Shares)	\$4.19 million/year	\$4.55 million/year
Operational period of the project – 2.5% equity holding (Preferred Shares)	\$4.3 million/year	\$4.7 million/year

Investment income may be used to build housing, local roads or water infrastructure in the KCNs. It is appropriate then to calculate a multiplier effect for infrastructure spending as well. Infrastructure multipliers are used to calculate the increase in output that results from a given increase in infrastructure spending in a given geographic region. Estache (2010) notes that infrastructure multipliers may range from 1.2 – 2.0. Assuming that the infrastructure multiplier equals the lower bound of this range (1.2), the multiplier effect arising from investment income

¹⁵ It is not clear why the quotation above from the JKDA Benefits summary refers to a funding quantum of only \$20 million over 20 years. This would fund only 182 person years of employment at the wage rate of \$108,157 quoted at the bottom of Table 3-33 (KHL P (2012, page 3-129).

from the Preferred Unit option would range from roughly \$4.19 million to \$4.7 million per year for KCN communities.

Funds provided to KCN leadership to spend on the programs listed in the AEAs above could also be re-invested in the community and therefore contribute to economic development. Funds for AEA programs will allow Members to revitalize their Cree language ability, to carry out traditional activities in other areas, to preserve cultural artifacts and oral history or to support wellness and transition programs. We do not provide an estimate of these effects in Table 4 below, but note that all of these programs may have spillover effects on local economies, as individuals' well-being and community infrastructure improve.

Box 5. Summary of Multiplier Benefits to KCNs from the Project

- The Keeyask project will introduce new labour, business, and investment income to the KCNs. As people earn additional money they spend a share of it on locally produced goods and services which is referred to as a multiplier effect.
- For illustrative purposes we estimate a multiplier effect on the KCNs of approximately \$1.4 million per year during the construction period of the project, and a multiplier effect of approximately \$4 million per year during the operational period.

3.1.6 An illustration of total economic benefits

In Table 5 below we tally the illustrative direct and indirect benefits (annually) for the Keeyask project from all tables above. It is evident that there is a great deal of variance in the expected economic benefits resulting from the Keeyask project. However even if the high estimate of Keeyask benefits were realized, total economic benefits per KCN member would depend on how such benefits were distributed between all KCN Members. As we note in Section 4c)vii. below, a uniform distribution of the economic benefits from Keeyask is not assured by the JKDA in its present form. We acknowledge that if the Common Unit option were chosen, results would be significantly different.

Table 5: Illustrative Total Annual Economic Benefits (Direct and Indirect Benefits) for KCNs from the Keeyask Project, Assuming Preferred Unit Equity Option

Period	Estimated Range of Benefit	
	Low estimate	High estimate
During construction phase	\$4.76 million/year	\$11.64 million/year
After construction phase – 1.9% equity ownership	\$25.14 million/year	\$27.29 million/year
After construction phase – 2.5% equity ownership	\$25.64 million/year	\$28.4 million/year

3.2 Achievements of the Keeyask Model

The Keeyask project imbeds certain community development features within it and for this reason is an improvement, from a community economic development (CED) perspective, over

past hydroelectric projects. These features are reflected in the partnership between Manitoba Hydro and the local First Nations peoples. Other positive features include improved financial arrangements and training/employment initiatives.

3.2.1 The Partnership

Drawing on an innovation associated with the Wuskwatim hydroelectric project, the Keeyask project involves a partnership between Manitoba Hydro and the local First Nations. This partnership gives the First Nations communities a substantial stake in the ownership of the project. This point relates to the CED principle number four, relating to participatory decision-making, and principle number five, relating to dynamic capacity building.

The literature has identified the mutuality of interests between the hydroelectric industry and local people. Fortin (2001) argues that the hydroelectric industry and indigenous people have, with the northern rivers and landscapes, an important common interest. What is needed is an effective process that allows these groups to engage in equitable agreements, plans, implementation, and monitoring/evaluation for revised implementation. Fortin, coming from the hydroelectric industry perspective, concludes that these building blocks are currently in place with the Keeyask partnership. Wojczynski et al. (2010) agree that Keeyask represents a new direction for hydroelectric development in Manitoba, which involves an equity partnership between Manitoba Hydro and the First Nations communities surrounding the proposed dam and reservoir.

Moreover, the Keeyask model has involved community members from local First Nations participating in a range of processes ranging from joint management of environmental assessment processes to negotiation over the AEAs and representation on the project Board of Directors. Communities were consulted regarding project design – for example, design modifications to minimize flooding and forebay levels, with fluctuations limited to 1m, were chosen based on community consultations.

Note however that relating to CED principle number 5, community development is not a static act but a dynamic process that requires expanding capacity among Indigenous individuals and communities. This point will be addressed below.

3.2.2 More Equitable Sharing of Benefits

By providing greater benefits to local communities from the start, the Keeyask project improves on many community economic development aspects of early hydroelectric dams in Manitoba. This relates to CED principle number three, concerning protection of the community interests.

Proponents view the Keeyask project as an opportunity to improve economic conditions in relatively economically-depressed northern communities. For example, in the news release announcing the signing of the JKDA (http://www.hydro.mb.ca/projects/keeyask/news_release_090529.pdf), Tataskweyak Chief Duke Beardy said, “Keeyask provides an opportunity for us to join the mainstream Manitoba economy to build a future of hope that will sustain and provide for all citizens of Tataskweyak Cree

Nation.” In the same release, War Lake Chief Betsy Kennedy said “we are very optimistic that the JKDA will provide significant benefits now and for future generations of War Lake Members. It paves the way for economic development through business, employment and income opportunities—leading, we trust, to self-sufficiency.”

In the case of the Wuskwatim project, Nisichawayasihk Cree Nation (NCN) shares both gains and losses with Manitoba Hydro. Hence NCN faces financial risk, and will be left with a large debt load if Manitoba Hydro revenues do not materialize (Kulchyski 2008). The Keeyask agreement improves on this aspect of the Wuskwatim agreement in that it allows the KCNs to purchase preferred shares which offer a guaranteed financial return to participation in the project.

Finally, Manitoba Hydro and each of the four partner First Nations signed adverse effect agreements, as discussed above, to potentially mitigate and compensate for negative impacts of the project. This aspect of the JKDA entails that revenue from the Keeyask project will flow to community-level initiatives that should benefit individuals in each community and the community at large (for example, through Cree language support programs, resource access programs and oral history programs).

For the benefits to be equitably distributed it is essential that the project earn a profit and that these returns are fairly distributed among the community.

3.2.3 Training and Employment Creation

The Hydro Northern Training & Employment Initiative (HNTEI) was the first large-scale training initiative designed and managed by, for, and in Northern Manitoba First Nations. This is a significant achievement not only to the Keeyask Partnership’s (KHL P’s) credit but also to that of the Provincial and Federal government agencies and the First Nations communities that supported it. As noted in Section 2ii) above, the HNTEI surpassed its goal of training 1,000 First Nations workers. Such training will prepare more KCN members for positions with the Keeyask project, but also for other northern Manitoba employment opportunities. This may bring significant wage increases to KCN members after Keeyask construction has ceased.¹⁶

The presence of employment targets is also a significant improvement over the Wuskwatim project. Short- and medium-term employment targets are specified in the JKDA which entails that the KHL P may be held accountable if such targets are not met.

3.3 Challenges Facing the Keeyask Model

The Keeyask model is an improvement over past hydroelectric developments from a CED perspective, in that a partnership is established and there is scope for more certain, if small, benefits to local communities. However, this study finds that the CED success of the Keeyask project is open to question based on the troubled history of hydroelectric development and the risks associated with the Keeyask hydroelectric dam. The risks are associated with the large size of the project, and the asymmetry of size and power between Manitoba Hydro and local

¹⁶ Reviews of the literature on the impact of training programs indicate that there are large wage returns to training, especially to apprenticeships (for example Lalonde (1995) and Cohn and Addison (1998)).

Indigenous people. For the Keeyask project to be successful from a CED perspective it is essential that Manitoba Hydro address certain challenges imbedded in the model and commit resources in the medium and long-term.

3.3.1 Local Harm and Inadequate Compensation

Despite the improvements of the Keeyask model over past models, all of the literature that was identified relating to dams and local community impact focused on the harm that dam projects have historically caused to local people and communities. These studies document the variety of ways in which indigenous communities have been negatively affected by dam projects, internationally and in Canada, including in northern Manitoba, British Columbia, and Québec. Negative impacts in the social, economic, and environmental realms are documented, and it is noted that negative consequences tend to persist for generations. This relates to a number of CED principles but most specifically CED principle number three, which concerns the protection of the environment and community interests. There is a substantial amount of literature on this topic, and the pertinent issues which it identifies are discussed herein.

From a global perspective, Colchester (2000) examines how local communities have been harmed by dams. From his review, Colchester notes, “[d]ue to structural inequalities, cultural dissonance, pervasive and institutional racism and discrimination, and political marginalization, Indigenous People and ethnic minorities have suffered disproportionately from the negative impacts of large dams, while often being the ones excluded from sharing the benefits (Colchester 2000, p.63).”¹⁷ Further, Adams (2006) notes that “defining equity from the point of view of the communities affected by large dams requires an understanding of both positive and negative impacts that goes beyond an economic framework (Adams 2006, p. 24).”

Literature on Canadian dams and indigenous people document a series of harms perpetrated on indigenous people. Windsor and McVey (2005) examined the impact of a dam on the Cheslatta T’En community in the interior of British Columbia. The indigenous community was relocated to make space for the reservoir, and this had major consequences for the people by leading to a loss of a ‘sense of place.’ Relocation led to a loss of identity and community collapse. The authors conclude, “We do not consider it unfair to conclude that the benefits of most large dams – especially hydroelectric dams – have been achieved at the expense of the displacement and impoverishment of others, generally low-income, rural peoples and, all too frequently, native peoples (p.159).”

Rosenberg, Bodaly and Usher (1995) review the impact of dams on indigenous people in northern Manitoba and Québec, and conclude that indigenous residents experience substantial harm through relocation, territorial encroachment, disruption of livelihoods, and insufficient

¹⁷ Colchester identified a number of common problems associated with hydro projects that led to local communities being harmed including, “Failure to identify the distinctive characteristics of affected peoples in project planning; failure to recognise customary rights; denial of the land for land provision; inadequate compensation and ill-planned resettlement; no prior and informed consent; no negotiation; failure to appreciate the wider impacts of projects or carry out watershed wide planning; inadequate or absent environmental and social impact assessments; tardy and inadequate reparations (Colchester 2000, p.63).”

compensation. Whiteman (2004) notes that a troublesome consequence of hydroelectric development in northern Québec is that decision-making about natural resources shifted from traditional land managers, Cree Tallymen, to Chiefs. Because the Chief, generally speaking, had less knowledge about the land as compared with the Tallyman, natural resource management has deteriorated.

Waldram (1988) undertook an early study on dams in northern Manitoba Indigenous people and concluded that they generally have not adequately benefited from these projects. Kulchyski (2008) examined the impact of Manitoba Hydro development on South Indian Lake, a First Nations community in northern Manitoba. The study found that Indigenous people, who relied on traditional livelihoods such as hunting, trapping, and fishing, were displaced from these resources and their livelihoods. With no alternative employment many Indigenous people of South Indian Lake became dependent on social assistance. The community tried to rectify the damage by pursuing legal avenues but this added further costs and did not overcome the harm. The study documents how the Northern Flood Agreement was an outcome of pressures to address this harm but it does not ensure a positive outcome for South Indian Lake residents.

From the viewpoint of the dam-builders, relocation, the dismantling of a land-based economy and the subordination of Aboriginal lifestyles were not unfortunate realities occasioned by the necessities of progress... Any suggestion that even a semblance of traditional life could be maintained, except perhaps as a nostalgic display in some sort of ecological theme park, was treated as being, at best, naïve and misguided. At worst, resistance to either relocation or economic transformation was seen as denying Aboriginal communities the opportunity to gain a foothold in modern society (Hoffman (2008), p19).

Loney (1995), examining the impact of dam projects in northern Manitoba, describes Manitoba Hydro's approach to dealing with Indigenous communities as 'forced modernization'. Loney documented the negative outcomes of dam projects on local people including declining incomes, rising rates of substance abuse, and declining food security. While some short-term low-waged employment was created in the construction phase, medium to long-term employment did not arise. Loney notes, "in some cases it may be possible to argue that a new development has had an almost immediate traumatic effect, sending a community into a spiral of decline from which there seems no prospect of recovery (p.235)."

The academic and policy literatures raises many fundamental concerns regarding the CED potential for Indigenous peoples from hydro dams, generally from an historical perspective. The nature of the Keeyask project raise risks associated with it. For instance, in the interrogatory process leading up to the Clean Environment Commission Hearings, responses from the Keeyask Partnership to a number of the information requests might be interpreted to suggest a lack of concern with regard to First Nation benefits from the Keeyask project. For example, in response to the question of the partnership providing funds for housing or post-secondary education (CEC Rd 1 CAC-0081a and CEC Rd 1 CAC-0091a respectively in KHLP (2013)), the Keeyask Partnership responded that these sectors are not their responsibility. Yet the partner First Nations communities are currently facing housing and education challenges and addressing these

challenges is critical for the success of the Keeyask Model.¹⁸ Could the project be considered successful if electricity is efficiently generated and supplied at low prices to southern Manitoba consumers, while living standards in the adjacent First Nations communities remain depressed? Clearly the answer to this question is no. Proper housing and education are essential to long-term health and skill development in the Keeyask partner communities. The Keeyask partnership therefore must address, head-on, ways that the Keeyask project could support long-term economic development in the Keeyask Cree Nations.

3.3.2 Disruptions to Traditional Livelihoods

A major concern raised in the literature has to do with disruption of traditional livelihoods. This point relates most closely to CED principle number three, relating to the protection of environmental and community interests, and to CED principle number one, regarding the need for a holistic approach to the community-environment.

Traditional livelihoods of Indigenous people in northern Manitoba provide residents a holistic set of services including physically and intellectually demanding work, income (in-kind, for trade, and for sale), and cultural and spiritual identity. This is because a traditional livelihood, as distinct from a modern one, involves greater integration of material and cultural activities. There is less demarcation between activities such as a ‘nine-to-five’ job and activities outside of that time. Within traditional livelihoods, work, recreation, spiritual and cultural activities are more interconnected than in a modern setting. Thus the flooding of lands traditionally used for hunting, gathering, trapping and fishing will have economic, socio-cultural, and spiritual effects. The literature on the subject of dams and Indigenous communities has identified a number of important ways in which dams have disrupted Indigenous livelihoods.

Several studies present an assessment of impact of past dams on Indigenous and local people. For instance Niezen (1993) examined the impact of hydroelectric development on the Indigenous people of James Bay, Québec. His analysis focused on the social effects and he compared communities that were more directly affected against communities that were less affected by hydroelectric projects. He found that communities more affected by hydroelectric development experienced negative social outcomes such as suicide, violence, substance abuse, and child neglect. Communities that were less affected and who were able to follow their traditional livelihoods such as hunting, trapping, and fishing, evidenced fewer social problems. Moreover, Niezen argued that compensatory efforts in the areas of health, education, infrastructure and employment programs, put in place in hydro-affected communities did not adequately counter the negative social effects of hydroelectric projects. Niezen’s results support the view that traditional livelihoods are more than a ‘job’ and that their loss has wide ranging consequences. Replacing this loss with social services and ‘nine-to-five’ jobs is thus not an adequate substitute. This raises concerns about the Keeyask model and its associated adverse effects agreements imply.

¹⁸ Indeed, in a survey of 535 individuals in Tataskweyak Cree Nation in May 1999 “very high rankings were given to the need to improve training programs and having more young people attend university and college. High rankings were given to having more businesses owned by Tataskweyak, jobs and economic development in the resource sector, having more Tataskweyak professionals, and having Tataskweyak work for businesses in a range of economic sectors” (CEC Rd 1 CAC-0093b (KHLPL (2013))).

Hoffman (2008) examined the Northern Flood Agreement –the 1977 agreement to compensate First Nation communities affected by early hydroelectric development– and found that it does not support traditional livelihoods, but rather leads to the erosion of these livelihoods. He describes the efforts as an example of a modern development project thought to involve a mutually beneficial arrangement where southern consumers could gain cheap power and northern First Nations could be compensated. He argues that the approach was flawed because of underlying assumptions regarding the nature of First Nations economies. First Nations livelihoods are interwoven with their socio-cultural and religious activities and so substituting livelihoods with separate services and modern jobs —as the Keeyask model does— was insufficient.

Closer to home, Loney (1987) finds that the impact of hydroelectric development on Indigenous communities in northern Manitoba - Chemawawin and Moose Lake – can be characterized as impoverishing and dependency-creating. He noted that before the dam the local community was active in a number of traditional livelihoods which provided “highly nutritional food supplies and afforded a lifestyle which provided significant physical, as well as spiritual rewards” (Loney (1987), p.61). While the community might have been, relative to urban standards, materially poor, it had a strong and resilient economy (Loney (1987), p.62). The hydroelectric project damaged traditional livelihoods and led to higher rates of reliance on welfare assistance.

In 1995 Loney again studied Grand Rapids, finding that the dam caused long-term trauma to the community. This was the result of a loss of livelihoods, among other factors. Once again, it was found that compensation in the form of services and modern sector jobs does not substitute for traditional livelihoods. This is in part because separate components –social services, jobs, welfare– were being offered to compensate for a more holistic traditional livelihood system.

Even in the more recent Wuskwatim agreement, Kulchyski (2008) notes that Manitoba Hydro continues to present a view that is critical of traditional livelihoods. He notes that this indicates a modern-bias and references the fact that in traditional systems, such as hunting, people are relatively wealthy considering the availability of leisure time to them (Kulchyski (2008), p.9). Thus the concern that past projects have harmed local communities because of a neglect of traditional livelihoods might be a risk associated with the Keeyask project. These studies demonstrate that even in the best scenario, where First Nations communities receive strong social services and modern employment, the consequences could be harmful because the separateness of these components is fundamentally different from the traditional livelihoods of First Nations people. Hence, if benefits promised to First Nations members through the Joint Keeyask Development Agreement do not materialize, as is addressed below, these individuals will be doubly harmed.

The Adverse Effects Agreements associated with the Keeyask project include reference to related offset programs. Rather than resettling the community, the plan calls for moving individuals to new hunting or fishing grounds for short time periods. In some cases hunters, fishers and other traditional livelihood practitioners will be provided with alternative ways to pursue their livelihoods after their harvest regions are flooded. For instance, camps will be

established at remote locations and infrastructure will be put in place to transport the hunters and fishers to these remote locations. This is an interesting, if untested, idea.

Through the interrogatory process the Keeyask partnership (KHLP) was asked to provide evidence that this type of system has worked elsewhere, but they did not provide data. There are several assumptions which must hold for this type of offset program to be effective, including:

- Individual and groups of hunters, trappers, fishers and gatherers value their activities so greatly that they will plan their travels and activities to conform to the offset program's system. Presumably for the support system to be effective it will require individuals and groups to plan, register, and conform to agreed upon timing of trips. This might require a different approach to traditional livelihoods than at present. This is not to say that individuals and groups will not continue to hunt and trap; rather, without evidence that this system has worked elsewhere there is a risk that it might not function effectively.
- A system will need to be established that supports hunting and fishing in a remote location that includes transportation, food processing, and emergency support. This system will need to be supported on a continuing basis by the community and so it will involve management, staffing and financial resources.
- Given that the support system for these offset programs is a new idea that, in order to be effective, will likely involve a period of trial and error which will be facilitated by deliberate monitoring and evaluating, there must be resources available to undertake the monitoring, evaluating, and then integrating the learning back into the system.

3.3.3 KCN Participation

CED principle number four draws attention to the importance of local participation in decision-making on development projects. The literature on Indigenous peoples and hydroelectric development identifies power asymmetry as an important challenge regarding Indigenous people's participation in hydro projects when these hydroelectric projects are driven by large state or corporate bureaucracies (Fisher (1999)). This power and resource asymmetry creates an obstacle for Indigenous stakeholders to participate freely and fairly in decision-making on projects that are planned for 'their backyard.' A power asymmetry indeed exists between the four First Nations involved in this project and Manitoba Hydro.

At the international level, considerable work has been done under the auspices of the World Commission on Dams. For instance Colchester (2000) has argued that much harm has been caused in the past, even with more progressive policies in place, due to the large asymmetry of power between the dam project proponents and the Indigenous communities. Historically, Indigenous and local voices were often not heard in hydro development projects. But is this a risk for the Keeyask project? Substantial efforts have been made in the Keeyask project to involve Indigenous and non-Indigenous peoples in planning¹⁹. Moreover, the project includes a

¹⁹ In Shauna Pachal's October 21st, 2013 to the Clean Environment Commission, she noted that between 1998 to 2009, nearly 2100 public consultations were carried out by Manitoba Hydro and the KCNs through the Public Involvement program of Keeyask.

plan for participation of individuals from each of the four First Nations in the Keeyask Partnership (the KHLP) in the implementation and monitoring of the project, and in mitigation efforts for the project.

Regarding participation with respect to the decision about whether to proceed with the Keeyask project, referendums were held in each Keeyask community. The high proportion of members in each Keeyask Cree Nation that voted in favour of the project may be viewed as representing widespread support for the project. However given the power asymmetry between Manitoba Hydro and these small First Nations, members may not have felt that they had a genuine choice in the matter. It is plausible that some First Nations residents voted in favour of proceeding with the dam because they believed that the dam would proceed with or without their support. If the communities had not consented, they might have thought, the dam would be built with fewer benefits and more harmful consequences for them. Representatives of the Fox Lake Concerned Citizens Group (FLCCG) note that this is the case, and suggest that very few members actually attended information sessions on Keeyask. This raises some doubt about how engaged community members were in the decision-making.²⁰

Another concern regarding participation in the project relates to how the project was framed to the Indigenous communities. Considerable work has been undertaken in the field of behavioural economics to demonstrate that people do not necessarily behave in their own self-interest and that particular framing of options can skew people's decisions towards harmful decisions (Thaler and Sunstein 2009).²¹ Also, how a hydroelectric project is presented or framed to a community could influence their decisions about it. For instance, the short-term benefits in terms of cash pay-outs might be highlighted and not the long-term costs such as loss of lands presently used to undertake traditional livelihoods. Neckoway (2005) provides an important example. She argues that, in the case of the Wuskwatim hydroelectric project, members of Nisichawayasihk Cree Nation First Nation were attracted to the project by short-term benefits. In this case the communities supported the project because the project was framed such that the short-term benefits were highlighted while the long-term costs were understated. Foth (2011) highlights what he describes as the coercive nature of the Wuskwatim consultative process and argues that dissent against Wuskwatim was highly controlled. Thus Neckoway (2005) and Foth (2011) present evidence suggesting that a deliberate type of framing led to local Indigenous people support for the Wuskwatim project.

At the heart of equitable and participatory decision-making between partners is a trusting relationship. Sadly, many Indigenous people in northern Manitoba have a negative view of Manitoba Hydro. Kulchyski (2008) states that many northern Indigenous people see Manitoba Hydro as 'dirty words.' The lack of trust about Manitoba Hydro is the result of harmful

²⁰ Others may not have participated in discussions surrounding the Keeyask project as a form of resistance to the project. This was noted in the Gillam Public Hearing for the Keeyask EIS (2013) – a participant noted “A lot of people are not here, they are hurt, they are boycotting this” (page 53).

²¹ For instance payday loans fees are generally presented in the form of a lump sum, e.g., \$17 per \$100 borrowed, and not in a way that allows the consumer to compare its cost to the cost of other credit products (in the form of an annual percentage rate). The payday lender presents the fee as a price rather than an interest rate and this framing of the fee affects consumer behavior. In this case the consumer is likely to over-consume payday loans.

outcomes of the past, regardless of their original intentions. Throughout the Keeyask project, Manitoba Hydro has gone to considerable lengths to establish a progressive partnership with local First Nations, but Manitoba Hydro's poor track record with fulfilling promises of past agreements means the Keeyask project involves considerable risk for the Indigenous partners. For instance, a commentator from York Factory First Nation noted that,

[W]hen our members talk about Keeyask, we don't see this project as any different from the changes brought by the overall Churchill/Nelson/Burntwood hydro-electric program. We see Keeyask as a continuation of a larger development project. We are not confident that the exact effects of a new development can be predicted, but we expect Keeyask to add to the changes that we have already experienced – to further destabilize our increasingly compromised environment (KHLP (2013), CEC Rd 1 CEC-0035, page 338).

Taking into account the large power asymmetry inherent in the KHLP, there is a need for deliberate and ongoing conversations that ensure the relatively powerless partners have a voice. The First Nations partners' voice and participation must be supported to ensure it is not lost within the context of a stronger voice and participation by Manitoba Hydro. Can referenda conducted among a subset of community members at one point in time be interpreted as permission for a multi-year Manitoba Hydro project that will significantly alter each community?

3.3.4 Dynamic Capacity Building

CED principle five relates to individual and collective capacity-building. The establishment of the Keeyask partnership is an achievement in this direction, and elements of this were discussed above. However, in order for the partnership to 'bear fruit,' for the Indigenous communities individual members and the communities must be empowered on an ongoing basis. Much of this will come through training and education at an individual and group level.

As discussed above, CED is a dynamic process that requires participants, including Indigenous communities and individuals, to build their capacity. Note, however, that in order for the partnership to function in a truly participatory way it is important that the First Nations representatives are equipped with the capacity to address the challenges that are posed by a large project like the Keeyask project. Moreover, these representatives must be enabled to work with their communities in order to effectively represent their communities' interests. Whereas Manitoba Hydro is in the business of building and operating hydroelectric dams, the Keeyask communities are not. The communities do not have experience in developing and running a mega-project like the Keeyask dam. Thus their capabilities must be developed, maintained, and change to meet new demands. The need for enhanced capacity is the same for any community or organization –indigenous or non-indigenous– that is setting out on a new direction. How the community builds its capacity is an internal decision. One common means to achieving enhanced capacity is through advanced education and training for leaders and community members on the workings of a large-scale project such as Keeyask.

While the Keeyask project documents present evidence of training local residents for employment in construction and trades, there is little evidence of training and education of

current and future leadership to address these challenges. This raises the risk that dynamic capacity building might not be achieved in the Keeyask project. First, much of the education needed to engage in this level of organization would be at a post-secondary level. Yet post-secondary education is not locally available and so would involve heavy costs on the community. And if community members leave the region for post-secondary education, there exists a risk that they might not return to the community. Moreover, most post-secondary education does not effectively include the Indigenous worldview within its programs of study. If an essential goal of the Keeyask project is to uphold Indigenous worldviews, then post-secondary education could work against this goal. Finally, the most fundamental challenge is that this particular educational need has not been recognized in the Keeyask project.

Capacity-building is needed at the collective level and at the individual level. Enhancing the capacity of just a few individuals for leadership could lead to a skewed outcome where fewer people benefit. What is needed is a growing capacity among the community for some to lead and for the remaining community members to support the leadership. Supporting leadership requires that local citizens participate in meetings to assert their interests, ask tough questions, listen to their peers and their leaders, and ultimately make their choices about the project's development.

From the Keeyask documents, evidence of the sort of planning described above is not particularly apparent. Further, through the interrogatory process leading up to the Clean Environment Commission hearings, evidence of the Keeyask partnership taking ownership of this issue was not apparent. Instead, the partnership seems to view this local capacity-building issue as local, and outside of its purview (see for example the response to CEC Rd 1 CAC-0084b (KHLP (2013))). While it is true that First Nations must ultimately decide on these types of core socio-cultural issues, it seems disingenuous for the KHLP to say that it has no role here. Without identifying and planning for this issue, the partnership is not being comprehensive in its planning. Without strong local capacity building, there is a risk that the KCN beneficiaries are not fully protected.

3.3.5 Small is Beautiful, and Meeting Local Needs is Essential

At a cost of approximately six billion dollars, the Keeyask project will take about seven years to complete. It will have a net capacity of just under 700 megawatts and will flood approximately 45 square kilometers. Compared with big dams around the world –such as Three Gorges in China and Itaipu in South America— the Keeyask dam is not large. But compared to the First Nations communities in the region and their small economies, it is immense. Moreover the dam is designed to provide electricity to southern Manitoba and northern US consumers. These two features of the Keeyask project make it particularly risky from a community economic development perspective. This point relates to CED principle number two, relating to the idea that, at least in the beginning, ‘small is beautiful,’ and number three, relating to the protection of environment and community interests.

With respect to the former, the risks associated with the large scale of the Keeyask project have already been touched on above, specifically that there exists a risk of causing local

harm, disrupting local livelihoods, and the capitalization of First Nations' partners' relatively weaker participation in decision-making.

With respect to the latter, the CED literature is somewhat mixed regarding the market orientation of community production. Whereas Loxley (2007) has argued that to be truly CED-oriented, production must primarily meet local need, others such as Blakely and Green Leigh (2010) identify a number of approaches to local development including export promotion. In the latter case, the community produces –in the broadest sense including growing food and fibre, manufacturing, providing tourist and other services such as electricity– for external markets. Loxley (2007) has criticized this approach because it does not directly align production with local need, and argues that this may lead to unmet local need. Proponents of export promotion argue that this misalignment is useful as it allows a locale to specialize in the production of a particular good or service, and through greater efficiencies, trade will actually raise community wealth. Critics of export promotion argue that trade efficiencies are fine in theory but when it comes to distributing the resulting gains, they often go to the more powerful groups, whether they are consumers or producers. A key component of this debate relates to the ability of the local community to negotiate a fair share of the gains from trade. That Manitoba Hydro established a partnership with the local First Nations is a good step in that direction. But the continuing asymmetry of power between Manitoba Hydro and First Nations is a cause of concern.

Arguably a far more troubling aspect of the Keeyask project is its large size. As noted in Section 2, a key feature of CED is that a project starts at a small scale. The reason for this is that a small-scale allows for the community to engage in planning and evaluating to test and implement a project that is aligned with their interests. But Keeyask is very large as compared to other economic activities in the KCNs. While the CED literature is quite consistent on starting small, there is more debate about whether local production must remain small or, out of necessity, grow larger. For instance one CED slogan is 'small is beautiful but big is necessary,' is premised on the growing capacity of local people to manage projects. But the Keeyask project is not aligned with either of these approaches because Keeyask starts large. The problem is compounded by the challenging relationships between some Indigenous people and Manitoba Hydro due to harm, disruption, and lack of fair participation in past.

From a CED perspective it would have been preferable if Manitoba Hydro worked with local communities with smaller-scale projects in order to develop a trusting relationship and build capacity.²² Once an effective partnership model and trust was established, then better

²² For instance Manitoba Hydro might have developed partnerships with the local Indigenous communities to undertake a planning process that might have included a local needs assessment and/or a local appreciative inquiry process. Based on the results of these processes a partnership might have been created to implement a project to address the identified need and to build on local capacity. For instance, if the needs assessment found that the communities wanted access to locally generated electricity then a plan might have been to build micro dams that would be co-managed and supply the communities with hydroelectricity. With a smaller project there would be less risk of local environmental and social harm so that there would be greater scope for developing a trusting relationship. Moreover an effective co-management arrangement could be established. From a CED perspective this could form the foundation of a scaled-up hydroelectric project.

conditions would exist to scale up the hydroelectric project to the order of the Keeyask dam. This intermediary step was not taken so Indigenous people in the area have limited working experience with Manitoba Hydro with which to place their trust in. First Nations are therefore required to ‘take a leap of faith’ to agree to partner with Manitoba Hydro through Keeyask.

3.3.6 Economic Development and Compensation

A final challenge of the Keeyask project, relating to CED principle number three, relates to the protection of the environment and community interests. Given the scarcity of economic opportunities in many of the communities surrounding the proposed Keeyask generating station, hydroelectric development is seen by some as a rare economic opportunity that these communities should take advantage of. Below a number of risks relating to economic development and compensation are noted

First, most employment resulting from the Keeyask project will be short-term. Employment generation will be associated largely with the labour-intensive construction phase. Longer term and more highly remunerative activities will not accrue to the First Nations communities to the same extent as these relatively lower-waged construction jobs. Meanwhile, as discussed above, whatever social and economic problems that arise will be long-term given the disruption of traditional livelihoods. The boom-bust nature of this employment is known to be damaging for individuals and communities: Individuals abandon traditional livelihoods to take up short-term jobs requiring specific skills, only to find that those skills are not rewarded in other areas of the local economy. When the dam construction is completed where will KCN workers obtain employment? Waldram refers to the “severe social disintegration” resulting from the Grand Rapids hydroelectric development, noting that “...this disintegration was caused by the declining economic potential of the region, the subsequent unemployment, and a general community-wide depression, all of which were the result of the hydroelectric project and relocation (Waldram, 1988, page 109).”

Even the short-term employment benefits of Keeyask should be viewed with caution. Treatment of labour is governed by the Burntwood/Nelson Agreement (BNA), as noted above. This agreement prevents collective action of any kind (BNA, page 17) taking away a key form of recourse against poor labour practices, should they arise. Northern Indigenous peoples and residents are to be provided with preference for Keeyask jobs, however according to the BNA, Manitoba Advanced Education and Training (M.A.E.T) has only 48 hours to refer Northern Indigenous peoples and other residents to the Contractor (BNA, page 27). For immediate vacancies, a worker must arrive at the project site within 72 hours, or else the Contractor will proceed to the next candidate on its referral list (Article 12.1.1.4). The benefit of hiring preferences is thus diluted by strict requirements of (and the KHLP’s agreement to) the BNA. Further, while the HNTEI is thought to have played a crucial role in skill development for employment on upcoming hydroelectric developments (as noted above), Keeyask is predicted to be in construction for roughly 10 more years beyond the March 31, 2010 end of the HNTEI.

First Nations band councils are to administer all funds received for offsetting programs and from profit-sharing with Manitoba Hydro. This places all chance that First Nations members benefit from this aspect of the Keeyask project on the strength of local governance. First Nations

councils are required to provide their members with an Annual Report on revenue vs. spending, and any concerns may be referred to an arbiter (IR Response CEC Rd 1 CAC-0079c (KHLP (2013)). However, grievances such as these are costly, both in terms of time and money, and this makes the opportunity to grieve an imperfect substitute for equitable financial distributions in the first place. The Hydropower Sustainability Assessment also noted this omission in the Keeyask project. At the time of the Assessment, there were no plans for members to receive audited financial reports on how the KCNs managed profits/dividends paid by the KHLP (Rydgren et al. (2012).

Fulfillment of spending commitments arising from Keeyask is also dependent on the availability of information for First Nations members of each community. That is, if First Nations members are to hold their leaders accountable, they must have information on resource flows to those leaders. Representatives of the Fox Lake Concerned Citizens Group (FLCCG) noted that they have not personally observed the impact from money that has already started to flow from Manitoba Hydro to Fox Lake Cree Nation which amounts to just under eight million dollars (meeting with FLCCG, September 27, 2013). The cause of this disconnect –between Manitoba Hydro’s spending and the impact on the community– is unclear. For the Keeyask project to be a success it is important Manitoba Hydro and the Keeyask partner communities showcase the outcomes of this spending. Representatives from the FLCCG note that the signing of Confidentiality Agreements by FLCN Members entails even less flow of information about the Keeyask development across the community²³.

²³ The representatives noted that many residents are concerned about the negative social effects of the Keeyask project, especially about the abuse of women by construction workers, entry of drugs into the community and increased racism. According to the representatives, in a previous Hydro project, a woman that was raped by a project worker was discouraged from telling her story to prevent a negative impression of the construction project. At the same time members feel there is nothing they can do about these things – the Keeyask project will be approved, they think, regardless of their views on it.

4 Conclusion

Despite a long and traumatic history of hydroelectric development in northern Manitoba, the Keeyask project may represent a turning point in the relationship between First Nations and Manitoba Hydro. As is documented in this report, the Keeyask partnership has gone to great lengths to improve on many of the flawed features of hydroelectric development in the past in Manitoba. For over 10 years now, Manitoba Hydro and First Nations surrounding the proposed Keeyask site have discussed and negotiated features of the Joint Keeyask Development Agreement. It is clear that time and money was explicitly set aside for building partnerships, a crucial element of any development aimed at having an impact on community welfare and development. It is also clear that the Keeyask project could bring significant amounts of money that could stimulate the KCN economies and create jobs.

Regardless of this progress, this study has unearthed substantial evidence regarding the harm caused by past hydroelectric projects on Indigenous and local communities. This confirms many of the concerns raised by KCN Members through the Keeyask Public Involvement Program (PIP). For example, Eric Saunders notes in York Factory First Nation (2012):

“Our traditional way of life has been altered by past hydro power developments. Our relationship with the land, water, and wildlife has been drastically eroded by these hydro power developments. The proposed development of Keeyask and Conawapa, and any other future developments will continue to erode our traditional way of life into the future. Our ancestors have always been conservationists and keepers of the land. Destruction of land and its resources is not a part of our tradition and this is what concerns me most. We have to respect and uphold what our Elders taught us in terms of how we use the land and how to take care of it. It is important for our younger generations to be taught and learn the traditional ways of life, so that these teachings can be passed on to future generations.” (York Factory First Nation (2012), page 3)

Moreover, the study has identified risks associated with characteristics of the Keeyask model including how implementation will compare with the project’s plans on paper. Manitoba Hydro’s track record in fostering sustainable development in the North is not strong. Hoping that Keeyask will be different will therefore involve a ‘leap of faith’ in Manitoba Hydro’s new intentions and the efficacy of an untested model, the Keeyask partnership.

Large projects such as Keeyask will inevitably have a dramatic effect on local Indigenous communities. This is because, as documented throughout the reports filed through the PIP, Indigenous communities have a more holistic form of life, as compared with a modern form, that interconnects faith, culture, community and economy to the resource base. A flooded landscape has a ripple effect into livelihoods, society, and the individual psyche. Further, “what has happened to many communities must be understood as more than simply the sum of a series of discrete impacts. The cumulative effects of hydroelectric regulation strike at the very core of a community's sense of self-confidence and well-being (Loney (1987), p.248).” Evidence has not been presented to allow one to view the Adverse Effects Agreements as close substitutes for traditional livelihoods that Northern communities around the Keeyask site rely on for their well-

being. They might succeed, but there is also a significant chance of failure, which cannot be ignored.

In order to maximize the chances of the Keeyask project succeeding, the Keeyask partnership should carefully consider ways to:

- further reduce local harm and improve compensation for harm done. Indigenous people's worldview is different than the modern worldview. It is intertwined with traditional livelihoods. Harming livelihoods will harm the worldview. Both are adaptable but adaptation takes time and resources. The Keeyask partnership must provide that time and the necessary resources.
- develop a convincing model to minimize disruption of local livelihoods. Start this immediately and ensure that the process is transparent, documented, and evaluated. Delaying the Keeyask project would allow for Manitoba Hydro to partner with the First Nations in smaller projects such as micro dams in order to develop successful partnerships and building trust.
- address the suggestion that support for the Partnership was skewed by a sense of inevitability. KCN Members must understand that they truly have a veto over the Keeyask project.
- invest in programs deemed by community members to be important for building long-term economic opportunities. This may involve support for high schools or post-secondary education in the North so that First Nations members may be able to obtain higher-wage employment for the long term.
- put into place safeguards to ensure increased transparency regarding flows of Keeyask funds into each KCN.
- extend the HNTEI (Hydro Northern Training and Employment Initiative) to ensure more individuals in the KCNs are qualified to work on the Keeyask project and gain skills in other sectors.

References

- Adams, W. (2000). The social impact of large dams: Equity and distribution issues. Thematic Review I. Prepared as an input to the World Commission on Dams, Cape Town.
- Alfred, T. (2009). Colonialism and state dependency. *Journal de la santé autochtone*, 42-60.
- Bank of Canada, Data and Statistics Office (2013). Selected Government of Canada Benchmark Bond Yields – Long-term. Retrieved November 2, 2013 from http://www.bankofcanada.ca/wp-content/uploads/2010/09/selected_historical_page14.pdf
- Blakely, E.J. and Green Leigh, N. (2010). *Planning Local Economic Development: Theory And Practice*. Sage Publications, Inc.
- Burntwood/Nelson Agreement (BNA). (2005). Retrieved July 12, 2013 from http://www.hydro.mb.ca/projects/bna_agreement.pdf
- Cohn, E. and Addison, J.T. (1998). The Economic Returns to Lifelong Learning in OECD Countries. *Education Economics*, 6(3): 253-307.
- Colchester, M. (1999). Dams, indigenous peoples and ethnic minorities. *Indigenous affairs*, (3-4), 4-55.
- Estache, A. (2010). Infrastructure policy for shared growth post-2008: More and better, or simply more complex?, Université Libre de Bruxelles Working Paper CBVO 2010-02.
- Fisher, W. F. (1999). Going under: indigenous peoples and the struggle against large dams. *Cultural Survival*, 23, 29-32.
- Fortin, P. (2001). The hydro industry and the Aboriginal people of Canada. *International journal on hydropower and dams*, 8, 47-50.
- Foth, M. (2011). Barriers to aboriginal participation in environmental assessment: a case study of the Wuskwatim generating station, Manitoba (Doctoral dissertation, University of Manitoba).
- Fox Lake Cree Nation. (2009). Adverse Effects Agreement with Manitoba Hydro. Retrieved August 2, 2013 from http://www.hydro.mb.ca/projects/keeyask/fox_lake_aea.pdf
- Hoffman, S.M. (2008). Engineering Poverty: Colonialism and Hydroelectric Development in Northern Manitoba. Thibault, Martin and Steven M. Hoffman (eds.) *Power Struggles: Hydro development and First Nations in Manitoba and Québec*. Winnipeg: University of Manitoba Press.
- International Hydropower Association. (2011). Hydropower Sustainability Assessment Protocol. Retrieved September 25, 2013 from <http://keeyask.com/wp/wp-content/uploads/Keeyask-Official-Assessment-FINAL-18July2013.pdf>.

- Keeyask Hydropower Limited Partnership (2009a). Joint Keeyask Development Agreement. Retrieved July 13, 2013 from (http://www.hydro.mb.ca/projects/keeyask/jkd_agreement.shtml).
- Keeyask Hydropower Limited Partnership (2009b). Joint Keeyask Development Agreement – Schedule 1-3: Purchasing Power Agreement. Retrieved September 25, 2013 from (http://www.hydro.mb.ca/projects/keeyask/pdf/Schedule_1_3_090529.pdf).
- Keeyask Hydropower Limited Partnership. (2012). Environmental Impact Statement, Supporting Volume: Socio-Economic Environment, Resource Use and Heritage Resources.
- Keeyask Hydropower Limited Partnership (2013). Keeyask Generation Project – Environmental Impact Statement, Responses to Information Requests, Clean Environment Commission, Rounds 1 and 2.
- Keeyask Environmental Impact Statement (EIS). (2013). Gillam Public Hearing, September 24, 2013.
- Kulchyski, P. (2008). A step back: The Nisichawayasihk Cree Nation and the Wuskwatim project. Thibault, Martin and Steven M. Hoffman (eds.) *Power Struggles: Hydro development and First Nations in Manitoba and Québec*. Winnipeg: University of Manitoba Press.
- Kulchyski, P. & Neckoway, R. (2006). The town that lost its name: The impact of hydroelectric development on Grand Rapids, Manitoba. Canadian Centre for Policy Alternatives.
- Lalonde, R.J. (1995). The Promise of Public Sector-Sponsored Training Programs. *The Journal of Economic Perspectives*, 9(2): 149-168.
- Loney, M. (1995). Social problems, community trauma and hydro project impacts. *Canadian Journal of Native Studies*, 15(2), 231-254.
- Loney, M. (1987). The construction of dependency: The case of the Grand Rapids hydro project. *Canadian Journal of Native Studies*, 7(1), 57-78.
- Loxley, J. (Ed.). (2007). *Transforming or reforming capitalism: Towards a theory of community economic development*. Fernwood.
- Manitoba Hydro (2013a). Needs For and Alternatives To (NFAAT) - Appendix 2.2 - Joint Keeyask Development Agreement – Benefits Summary. Retrieved October 27, 2013 from http://www.hydro.mb.ca/projects/development_plan/bc_documents/appendix_02_2_jkda_benefits_summary.pdf

- Manitoba Hydro (2013b). Needs For and Alternatives To (NFAAT) – Information Request Responses. Retrieved November 12, 2013 from http://www.hydro.mb.ca/projects/development_plan/nfat_information_requests.shtml
- Neckoway, R. (2005). Electric beads and our dam future: hydroelectric development on Cree territory. *E-misferica*, 2.1. Retrieved August 25, 2013 from http://hemi.nyu.edu/journal/2_1/necaway.html
- Niezen, R. (1993). Power and dignity: The social consequences of hydro-electric development for the James Bay Cree. *Canadian Review of Sociology and Anthropology* 30(4): 510-529.
- Richter, B. D., S. Postel, C. Revenga, T. Scudder, B. Lehner, A. Churchill, and M. Chow. (2010). Lost in development's shadow: The downstream human consequences of dams. *Water Alternatives*, 3(2), 14-42.
- Rosenberg, D. M., Bodaly, R. A. & Usher, P. J. (1995). Environmental and social impacts of large scale hydroelectric development: who is listening? *Global Environmental Change*, 5(2), 127-148.
- Rydgren, B., Khalil, A., Smith, D. & Hartmann, J. (2012). Hydropower Sustainability Assessment Protocol for the Keeyask Hydropower Limited Partnership.
- Scotia Capital Inc. (2013). Other Bonds: Average Weighted Yield (Scotia Capital Inc.) – Provincials, Long-term. Retrieved November 2, 2013 from http://www.bankofcanada.ca/wp-content/uploads/2010/09/selected_historical_page30.pdf
- Shragge, E. (1997). *Community Economic Development: In Search of Empowerment*. Black Rose Books Publications.
- Statistics Canada (2009). Industry Accounts Division, Macroeconomic Accounts Branch, Provincial Input-Output Multipliers, Catalogue no. 15F0046XDB.
- Tataskweyak Cree Nation (2009). Adverse Effects Agreement with Manitoba Hydro. Retrieved August 2, 2013 from http://www.hydro.mb.ca/projects/keeyask/tataskweyak_aea.pdf
- Thaler, R. and Sunstein, C. (2011). *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven US: Yale University Press.
- Quinn, F. (1991). As long as the rivers run: the impacts of corporate water development on native communities in Canada. *Canadian Journal of Native Studies*, 11(1), 137-154.
- Waldram, J. B. (1988). *As long as the rivers run: hydroelectric development and native communities in Western Canada*. University of Manitoba Press.

- War Lake First Nation. (2009). Adverse Effects Agreement with Manitoba Hydro. Retrieved August 2, 2013 from <http://www.hydro.mb.ca/projects/keeyask/war_lake_aea.pdf>
- Whiteman, G. (2004). The Impact of Economic Development in James Bay, Canada The Cree Tallymen Speak Out. *Organization & Environment*, 17(4), 425-448.
- Windsor, J. E., & McVey, J. A. (2005). Annihilation of both place and sense of place: The experience of the Cheslatta T'En Canadian First Nation within the context of large scale environmental projects. *The Geographical Journal*, 171(2), 146-165.
- Wojczynski, E., Cole, V., Pachal, S., and Goulet, R. (2010). Mission: Partnerships. A Socially Responsible Approach for New Hydro-electric Developments. Retrieved July 13, 2013 from <<http://www.worldenergy.org/documents/congresspapers/391.pdf>>
- World Commission on Dams (Ed.). (2000). Dams and Development: A New Framework for Decision-making: the Report of the World Commission on Dams, November 2000. Earthscan. Publications Ltd, London and Sterling, VA, p. 1-356.
- Wuskwatim and Keeyask Training Consortium Inc. (WKTC) (2010), Annual Report for the year ending March 31, 2010.
- Wuskwatim Power Limited Partnership. (2013). Monitoring Overview for the period ending March 31, 2013, http://www.wuskwatim.ca/documents/2012-13_WuskMonitorOverviewWEB.pdf.
- York Factory First Nation. (2009). Adverse Effects Agreement with Manitoba Hydro. Retrieved August 2, 2013 from <http://www.hydro.mb.ca/projects/keeyask/york_aea.pdf>
- York Factory First Nation. (2012). Kipekiskwaywinan: Our Voices. June 2012.