Evaluation of criteria for meaningful Aboriginal consultation in Canada during environmental assessment

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Abstract

Developments on traditional Aboriginal territory in Canada often require environmental assessments (EAs) to predict potential environmental and social impacts. Impacts considered during the Canadian government's (Crown) consultation process (between the Crown, Aboriginals and proponents), is known as the Duty to Consult (DtC). The DtC is a legal requirement under the *Constitution Act*, 1982 and case law, which provides opportunities for Aboriginal rights and interests to be protected by identifying and mitigating impacts. Scope of consultation depends on the strength of Aboriginal claim and level of adverse impacts. However, in Canada, there is a lack of DtC guidelines. Whilst a lack of guidelines offers flexibility, it also presents many implementation challenges. Current DtC practices often result in proponent withdrawal, delays, protests, conflict and creates risks to project development. This paper assesses application of DtC criteria (established in EA literature), and compares them against three recent case studies across Canada. Although results show some inadequate practices, there are examples of effective DtC criteria which help reduce impacts to Aboriginal rights and land. Recommendations to improve the DtC process that benefit all stakeholders includes: increased Crown guidance to proponents; acknowledging benefits of Free, Prior, Informed Consent; increased utilization of measures outlined in EA legislation including extensions and suspensions; and stronger, earlier consultation legislation in federal and provincial EA guidelines. The above recommendations seek to reveal that more effective consultations are those which prioritize relationship building, consensus seeking and are responsive to each First Nations circumstances. Although qualitative, this study provides evidence based criteria for effective Aboriginal consultation approaches within the Canadian EA process.

Keywords: Duty to consult; Aboriginal consultation; First Nations; Environmental assessment.

1. Introduction

In Canada, federal and provincial environmental assessment (EA) processes are designed to promote sustainable development through detailed planning to predict proposed project environmental and social impacts (Ma et al., 2018; MacKinnon et al., 2018). The federal

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Canadian Environmental Assessment Act (CEAA 2012) sets out explicit requirements to assess environmental impacts affecting Aboriginal people, and requires the Crown (Canadian government) to consult Aboriginals about potential impacts of decisions associated with federal conduct on their rights (CEAA, 2012a). However, EAs increasingly affect Aboriginal (First Nations [FNs], Metis and Inuit) territory in Canada (Kirchhoff et al., 2013). Impacts affecting Aboriginals include health and environmental conditions, cultural and physical heritage, use of lands for traditional purposes, and archaeological or paleontological artifacts (Walls, 2012). Although projects in Canada seek a more sustainable development paradigm emphasizing economic, environmental and social objectives, many often negate socio-economic and environmental impacts on Aboriginal territory (Assembly of First Nations, 2011). Identifying and mitigating impacts builds strong and meaningful relationships between the Crown and FNs. This opportunity is offered through the Duty to Consult (DtC) process.

The DtC is triggered when the Crown has knowledge of real or asserted Aboriginal rights and is making a decision that may adversely impact these rights (The Duty to Consult, 2014). Although EA consultation can provide opportunities for Aboriginals to influence project developments, the lack of guidelines or effective criteria, often leads to unsatisfactory project outcomes in Canada such as, court action, project blockades, strained relationships and conflict (Baker and McLelland, 2003). Conversely, DtC following effective criteria can result in reconciliation between the Crown and FNs, project investments in Canada and avoidance of impacts to Aboriginal rights and title. For proponents, there is a growing realization that fulfilling the DtC is not a *nicety*, but a *necessity*. However Aboriginal consultation approaches within the EA process is lacking in the peer-reviewed academic literature (e.g., Baker and McLelland, 2003; Booth and Skelton, 2011). Therefore, this study aims to address this by: (i) outlining how the DtC process emerged through relevant legislation and case law; (ii) describing consultation best practices to identify effective criteria; and (iii) assessing effective criteria against three recent case studies to provide recommendations for the DtC process.

2. Background and Case Law

The DtC applies to treaty rights, Aboriginal rights and title. Treaty rights were used for resolving land ownership during colonization (The Duty to Consult, 2014). Aboriginal rights

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include rights to the land itself (rights to fish, hunt and gather). The Crown's DtC is based on the *Royal Proclamation of 1763*, signing of specific FNs treaties, *the Constitution Act*, 1982, and case law. The *Royal Proclamation of 1763* (defines the relationship between Aboriginals and the Crown), and presents the Crown's first recognition of Aboriginal rights and title, serving as a foundation for the DtC (The Duty to Consult, 2014). This established Aboriginal rights and title, meaning the Canadian government could not grant lands not previously ceded. Consequently, only the Canadian government can purchase surrendered land, which is the main cause for the Crown's fiduciary duty towards Aboriginals. The *Constitution Act*, 1982 guarantees the rights in the *Charter of Rights and Freedoms* do not adversely impact existing Aboriginal rights.

Canadian courts have been reluctant to define the nature and scope of the DtC, as consultation depends on the strength of Aboriginal claim and level of adverse impacts (Ross and Smith, 2003). Aboriginal rights have evolved out of case law, including social, political, cultural and economic rights including rights to land, fish, hunt and practice one's culture. Terms like 'consultation' and 'accommodation' have evolved out of common law through landmark court cases, such as *Haida Nation v. British Columbia* [Minister of Forests] (2004), *Taku River Tlingit FN v. British Columbia* [Project Assessment Director] (2004), and *Mikisew Cree FN v. Canada* [Minister of Canadian Heritage] (2005). This ambiguity means that each EA requires a specific approaches to consultation and accommodation, depending on potential infringement on Aboriginal rights. Meaningful consultation has come to include the consideration of accommodation, when the Crown or proponents identify potential adverse impacts, and engage with the affected Aboriginal group to identify avoidance, mitigation or offset measures (AANDC, 2015). Landmark case law decisions have helped define the rights of Aboriginals in Canada, by allowing specifics of consultation to evolve incrementally (The Duty to Consult, 2014; Gill, 2015). Cases like the *Calder v. British Columbia* (1973) decision which set important legal precedents regarding the existence of Aboriginal title, essentially initiated the field of *Aboriginal Law* in Canada (and elsewhere). Additionally, cases like *R. v. Sparrow* (1990) interpreted the *Constitution Act* and determined that the right to fish for food or ceremonial purposes cannot be infringed. A landmark 1997 Supreme Court of Canada (SCC) case, known as *Delgamuukw v. British Columbia* (1997), confirmed Aboriginal title exists in British Columbia. *R. v. Marshall* (1999) and *R v. Sparrow* (1990), further define Aboriginal rights and conditions

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under which it is reasonable to infringe on these rights. A leading explanation on the DtC comes from *Haida Nation v. British Columbia* (Minister of Forests), where one major issue before the SCC was whether the Crown was required to consult Aboriginals before their rights or title to the land had been proven (The Duty to Consult, 2014). The Haida Nation had a strong, although unproven, land claim and the Crown had knowledge of activities that would infringe on this claim. Thus, the Crown had a DtC, but failed to do so (Thomson, 2015). The SCC ruled that the scope of the duty is "proportionate to a preliminary assessment of the strength of the case supporting the existence of the right or title" (*Haida Nation v. British Columbia* (Minister of Forests) [2004] 3 S.C.R. 511, 2004 SCC 73), meaning that the amount of consultation required depends on severity of potential adverse impacts of an Aboriginal right. This case, also emphasized the need for good faith on both sides of the consultation table (The Duty to Consult, 2014).

During the *Taku River Tlingit FN v. British Columbia* case of 2004, the SCC highlighted that the DtC was critical to maintain the Crown's honour in situations and cases where uncertainty and honour were at stake. The SCC emphasized that the "ultimate goal of reconciliation favours consultation given past treatment of Aboriginals" (The Duty to Consult, 2014). The SCC also held that while meaningful consultation was required by the Crown's DtC, an agreement upon the accommodation terms between FNs and the Crown was unnecessary (Thomson, 2015). Similar to consultation, accommodation is an additional term arising out of case law, which can be similarly ambiguous. Accommodation measures throughout EA have come to mean identifying avoidance, mitigation and offset measures when an adverse impact is identified. Aboriginal groups are in advantageous situations to provide in-depth, local information about how proposed activities can impact lands and resources, and the Crown is able to use this information to inform decision making.

The diversity of cases serve as the foundation for the *Tsilhqot'in Nation v. British Columbia* (2014) decision, where the SCC granted 1750 km^2 of land to the Tsilhqot'in, representing the SCC's first ever judicial declaration of Aboriginal title to a specific land area (McLeod, 2015). In British Columbia (BC) where nearly all of the land is under claim of FNs, existing economic development projects risk being terminated or suspended (Bain, 2014). When title is recognized and a project exists on Aboriginal land without their support, the government "may be required to cancel the project… if continuation of the project would be unjustifiably

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infringing" (*Tsilhqot'in Nation v. British Columbia,* 2014 SCC 44). The Tsilhqot'in decision served to raise the stakes in Aboriginal consultations (Stueck, 2014).

The most recent example of case law is *Gitxaala Nation et al v. Canada* (2016) where the Federal Court of Appeal overturned the previous approval of the Enbridge Northern Gateway project due to a lack of consultation taking place. The decision stated that Canada offered a "brief, hurried and inadequate" opportunity for consultation that left "entire subjects of central interest to the affected First Nations, sometime subjects affecting their subsistence and well-being, entirely ignored" (SCC 325). In addition, the decision requires the federal government to consult with potentially affected FNs again before it issues a new decision on Enbridge. This case is expected to provide a lot of guidance for the Crown moving forward with the DtC.

3. Methodology

A systematic review of scholarly articles, federal and provincial government EA websites (e.g., https://www.ceaa-acee.gc.ca/; https://www.novascotia.ca/nse/ea/), and best practices guidelines for consultation produced by government agencies and FN's related Crown–First Nations interactions during project developments in Canada were conducted. Search terms, such as "Aboriginal consultation", "duty to consult," "environmental assessment", "FNs participation in environmental assessment" were used. Terms were grouped in various combinations and examined for their contributions to the meaning and procedure of the DtC. EA policy and legislation were analyzed to outline the regulatory framework of the DtC. Similarly, case law decisions relating to Aboriginal consultation and project developments from the past decade were reviewed for references to Aboriginal and treaty rights, and how the decisions advanced and developed the DtC. Articles most useful to this study were related to the intersection of project developments, EA and Aboriginal consultation, as the analysis focused on the DtC during EA. Although Aboriginal consultation guidance within the EA process is lacking in the peer-reviewed academic literature (e.g., Baker and McLelland, 2003; Booth and Skelton, 2011), this review was designed to take a lessons learned approach to help develop a list of effective criteria for the DtC. Three large projects (including one energy and two mining projects) were selected as case studies based on the following criteria: (i) representative of Canada's resource based economy; (ii) project information was publicly available; and (iii) strong public interest. A five-

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point Likert scale, with an assigned numerical value was used to evaluate projects against DtC criteria (Very Poor = 1; Poor = 2; Average = 3; Good = 4; Very Good = 5). Significant statistical differences between summed project scores were determined using one-way analysis of variance (ANOVA) followed by Tukey's test using Minitab. Criteria for the DtC process were described and compared against the case studies to develop more effective DtC criteria to help reduce impacts to Aboriginal rights and land.

4. Criteria for effective consultation

4.1 Theoretical components of the DtC

Newman (2009) outlines several fundamental criteria of the DtC, evolved out of the relevant case law. DtC can arise before proof of an Aboriginal title claim, or with uncertainty regarding infringement on a treaty right. DtC can be triggered with the slightest hint of an adverse impact on Aboriginal rights, withe scope determined by scale of potential impacts on Aboriginal or treaty rights and strength of Aboriginal claim (Aboriginal Consultation in Federal EA, 2014). DtC may lead to accommodation of Aboriginal interest if negative impacts cannot be mitigated. If the Crown fails to meet the DtC, project delays can arise (e.g., litigation or further consultation) (Newman, 2009). The *Haida* case established the "sliding scale" test, where stronger claims and higher potential for adverse impacts receive deeper consultation and accommodation, with weaker claims requiring less extensive consultation (Thomson, 2015). If impacts are unavoidable, consultation shifts to whether accommodation can address impacts. Accommodation can include: modifying plans to avoid impacts, halting of plans, mitigation of impacts, compensating for impacts, profit-sharing or economic participation (Griffith, 2006).

Consultation continues to evolve via policy frameworks (McLeod et al., 2015). Federal procedures outlined by AANDC (2011), aim to assist federal officials in matters affecting Aboriginal rights and title. Provincial guidelines cite that provincial staff should consult with their own legal staff for further guidance (McLeod et al., 2015). Provincial agencies often develop their own DtC guidelines within provincial legislation (Newman, 2009). To further complicate, Aboriginal organizations and proponents may develop their own DtC policies and guidelines (McLeod et al., 2015). For example, DtC guidelines developed by the Gitxaala FN are targeted to federal and provincial government to describe what meaningful consultation is *not* (e.g., consultations will not be conducted via telephone, access to council and Elders will be

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guaranteed only one day per month and there will be no consultation with parties other than the Crown) (Hipwell et al., 2002). The New Relationship Trust of BC created guidelines outlining best practice for consultation and accommodation based on input of FNs in BC (Thomson, 2015). These guidelines recommend being clear about FNs needs, appointing appropriate FN representation and to participate throughout to allow FNs to have more control over the entire consultation processes (Plate et al., 2009).

4.2 Practical components of the DtC

Three factors are required to trigger the DtC: a proposed Crown conduct; potential Aboriginal or treaty rights in the area of said Crown conduct; and the proposed Crown conduct potentially adversely impacting established Aboriginal or treaty rights (Fig. 1). In addition, three major roles and responsibilities exist in the DtC: Crown-Aboriginal group; Crown-proponent; and proponent-Aboriginal group (Fig. 2). For federal EAs, CEAA is the responsible authority, and acts as Crown Consultation Coordinator for the federal government to integrate consultation to the greatest extent (Aboriginal Consultation in Federal EA, 2014). The CEAA allows opportunities for potentially affected Aboriginal groups to comment at four stages: potential environmental effects of the project, potential impacts on Aboriginal or treaty rights, mitigation measures and follow up programs. Provincial EA agencies regularly coordinate with other federal and provincial agencies via consultation coordinators, to ensure that consultation is consistent, efficient and respectful of FNs' and proponents time and capacity to foster seamless consultation throughout the whole process (BCEAO, 2013).

The Crown has many roles throughout the DtC. A crucial initial step is to review ethno-historical data and assess potential project impacts to Aboriginal interests, using this information to determine the appropriate level of consultation (BCEAO, 2013). In some jurisdictions, the next step is to inform the potentially affected Aboriginal group of the strength of claim analysis, including reasoning on the level of consultation expected. Informing the FN of this strength of claim information helps the nation to understand the basis for the level of consultation. Next, the Crown provides specific direction to proponents regarding consultation, including relevant agreements between the Crown and affected Aboriginal groups that may impact the DtC. This direction informs which Aboriginal groups must be engaged (including appropriate depth of

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engagement). The Crown provides advice regarding appropriateness of studies requested by FNs (e.g. Traditional Use Studies). Where appropriate, the Crown meets with potentially affected Aboriginal groups to address issues that cannot be resolved by proponents. The Crown also assesses adequacy of consultation and any proposed accommodation measures based on the strength of any asserted rights and title (BCEAO, 2013).

Although the DtC is the Crown's responsibility, procedural aspects are often delegated to proponents, which may not reflect Crown standards (Lambrecht, 2013). This was highlighted in the *Haida Nation v. British Columbia* (2004) case, where the SCC stated that although project proponents were responsible for procedural aspects of consultation; legal duty and responsibility rests solely with the Crown (The Duty to Consult, 2014). Procedural delegation to proponents during consultation involve: discussions about Aboriginal interests that may be impacted; considering modifications to plans to avoid or mitigate impacts to Aboriginal interests; documenting engagement (including specific Aboriginal interests that may be impacted); and providing records to the Crown (BCEAO, 2013). Procedural delegation does not include authority to make decisions to the Crown's DtC, strength of FNs claimed rights and title, or whether Crown decisions represents potential infringements of treaty rights (BCEAO, 2013). Additionally, proponents should incorporate traditional knowledge into baseline studies, and involve Aboriginals in relevant studies (e.g., archaeological work or ecological land classification) (Walker, 2012). This involvement is also important to ensure the proponent is aware of any potential impacts early on in the process.

Delegation of the DtC can result in more effective and efficient consultation because proponents are generally better suited to discuss project specifics, especially when it comes to accommodating First Nations interests, for example, altering a pipeline route to avoid a site of cultural significance. However, effectiveness of delegation is not always guaranteed, as it can sometimes result in confusion related to roles and responsibilities, a reduction in the scope of consultation and at times, a deterioration of the nation-to-nation relationship between the Crown and Aboriginal peoples (Ritchie, 2013). Although delegating consultation to proponents can offer some accommodation (e.g., wetland compensation), other forms of accommodation often require government intervention (Bankes, 2015). Occasionally, Crown employees delegate the

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entire consultation process to proponents, resulting in a lack of information, confusion and unnecessary time constraints – all lessening the quality of the DtC (Griffith, 2006).

Some proponents recognize the benefits of working with Aboriginals beyond consultation, through measures like impact benefit agreements (IBAs) (Fidler and Hitch, 2007). IBAs are confidential bilateral agreements negotiated between Aboriginal groups and proponents to address issues, such as training, employment, environmental protection, monitoring, social housing programs and protection of archaeological resources. IBAs are typically negotiated during proponent-First Nations consultation discussions, and act as a tool to increase Aboriginal participation, reduce negative impacts on Aboriginal interests, achieve reconciliation of Aboriginal concerns and project development and typically include consultation guidelines, funding for education, training and employment (Matiation, 2002; Lambrecht, 2013). For example, Cenovus, signed five long term IBAs with Aboriginal communities near oil sands projects since 2009 (Stueck, 2014).

4.3 Meaningful consultation

Meaningful consultation must exhibit both procedural and substantial elements has been difficult to define, because it has never been prescribed through case law (Hipwell et al., 2002; Griffith, 2006; Booth and Skelton, 2011). Procedural elements are required to ensure the process is reasonable. Substantive elements are required to engage in good-faith bargaining. The concept of balance is also inherent in consultation guidelines. For example, the *Haida Nation v. British Columbia* (2004) decision states the "Crown must balance Aboriginal concerns reasonably with the potential impact of the decision on the asserted right or title and with other societal interests"; and outlines how the Crown is not "under a duty to reach an agreement; rather, the commitment is to a meaningful process of consultation in good faith", and also states that the guiding DtC activities are required to maintain the Crown's honour, and to effect reconciliation between the Crown and Aboriginal people.

Griffith (2006) outlines four critical components of meaningful consultation: timely provision of information is crucial; provide reasonable opportunities for FNs to express their concerns; concerns must be seriously considered by decision makers; and concerns must be integrated into decisions in demonstrable ways. An inherent difficulty in assessing meaningful consultation is that scope of consultation varies case by case. Therefore, what is meaningful in

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one case will differ in another, and the process must be project and FN specific. The Crown must provide adequate notice and full information of project and impacts on rights, provide feedback (and rationale) during decisions, listen in good faith, and be willing to revise proposals before final decisions are reached. Refusal of the Crown to alter position during the process may provide evidence of an unreasonable approach.

4.4 Consent and Conflict

Fulfilling the DtC does not require consent from the Aboriginal group, as the Crown is only required to consult in good faith (Newman, 2009). The DtC does not provide Aboriginals with a veto power, but is meant to attain reconciliation of conflicting interests. If Aboriginal title is involved, consent of the Aboriginal titleholder is necessary (*Tsilhqot'in Nation v. British Columbia*, 2014). Although outlined in case law, consultation does not mean veto power, at the very least, the process has the potential to stop a project in its tracks whilst legal proceedings are taken. Sometimes stalling may postpone or stop developments completely (Joseph, 2012). It is also important to note the role that conflict plays in the DtC, which may not necessarily be negative. EA provides an avenue for FNs to voice project concerns and ensure these concerns are accommodated into various mitigation measures. These consultation discussions are likely to be fraught with disagreement, but the outcome is intended to reconcile various perspectives, as EA is now the "front lines of conflict and reconciliation between aboriginal peoples, government and resource developers" (Noble, 2016).

4.5 Aboriginal Deterrents to Participation

Newman (2014) suggests the DtC can be wielded by Aboriginal peoples opposed to developments in order to consistently deter and stall progress, but not all FNs use the DtC to stop project developments. Although Aboriginal groups are open to development, there are many deterrents for participation in the DtC, including: lack of community resources, narrow project scoping, and complex project terminology (Baker and McLelland, 2003). For example, in Spectra Energy's 2014 EA application for the Westcoast Connector Gas Transmission Project, 17 out of 24 FNs potentially affected by the project stated they lacked technical, organizational or financial resources required to effectively participate (Noble, 2015a).

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Lack of capacity for Aboriginal participation during EA may include scarcity of financial and technical resources to review technical EA documentation, which is amplified in remote, fly-in, Aboriginal communities (Booth and Skelton, 2011; Kirchhoff et al., 2013). To alleviate financial burden to participate, several jurisdictions have begun to offer capacity funding (e.g., Canada, Alberta, BC and Nova Scotia). These policies are consistent with recent case law which stressed the importance of adequate funding opportunities to provide a level playing field and to assist meaningful consultation and accommodation (Morellato, 2009).

Time commitments are also a common deterrent to Aboriginal participation. Case law developments have dramatically increased the number of referrals of pending Crown decisions that FNs receive (Griffith, 2006). Referrals are often time-sensitive, further impeding the ability to respond. A perception of consultation being a wasted effort sometimes pervades Aboriginal communities (United Nations, 2011) as FNs increasingly feel they are participating in a shallow process that fails to result in meaningful consultation (Booth and Skelton, 2011). However, Aboriginals have a reciprocal duty to participate in consultation, outlined in the *Haida* decision, where the SCC emphasized the need for good faith on both sides of the consultation table. Aboriginals must engage actively in consultation, and should delineate their claim(s) and the potential for project impacts that makes sense to the Crown to help contextualize claims to ensure consideration (Griffith, 2006).

Although many challenges exist in the DtC process, a sense of empowerment among Aboriginals is growing, highlighted through examples of Aboriginal opposition to recent Canadian projects, including anti-fracking protests in New Brunswick, legal confrontations related to the Ring of Fire in Ontario and protests against Northern Gateway pipeline in BC (Newman, 2014). Canadian courts have articulated a series of enforceable legal principles aimed to protect and actualize Aboriginal rights (Morellato, 2008). Since the Tsilhqot'in decision, many high powered Aboriginal leaders have spoken about reinvigoration and power when it comes to resource development (Smyth, 2015). In addition, some FNs are taking EA into their own hands, for example, Woodfibre LNG in Squamish, where Squamish FN operated their own EA process that ran parallel to BC's and CEAAs. The end result was a set of 25 conditions designed by Squamish FN, 13 applied to the proponent and the rest to the Crown. To ensure these conditions were legally binding, the FN required the proponent to sign a legally binding Squamish Nation

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EA certificate (Squamish Nation, 2015). Woodfibre LNG serves as an example of an empowered FN taking the consultation and EA process and ensuring it works for them.

5. Case study criteria evaluation

5.1 Energy East pipeline

Energy East pipeline proposed by TransCanada Corporation is a 4,600 km pipeline project ($12 billion) designed to carry ~1.1 million barrels of crude, from Alberta and Saskatchewan to Saint John, NB, crossing 155 FN communities (Barrera, 2015). Pending review and approval by the National Energy Board (NEB), who were delegated to perform the DtC by the Crown, construction would begin in 2020 (Curtis, 2015; McCarthy, 2015). TransCanada and the Crown consulted with 155 affected FNs groups (comprising 1700 meetings with 260 Aboriginal communities) to inform them of the project and seek support. TransCanada hired the former Chief of the Assembly of FNs to represent it in meetings (McCarthy, 2014). According to TransCanada, it spent over $66.5 million on Aboriginal goods, services and businesses for its construction projects in 2013. Since 2013, TransCanada signed 32 capacity funding agreements with FNs, to assist in their participation in the EA process. Despite certain confidentiality clauses, capacity funding agreements do not prevent FNs from opposing projects, although they are rare for many potentially affected Aboriginal groups (Curtis, 2015).

The Ontario Regional Chief claimed these consultation efforts were insufficient, because the pipeline had the potential to threaten their waterways or land and called for delays in NEB approvals to allow for more appropriate consultation and accommodation, including in person sessions by NEB and TransCanada for communities along the route (McCarthy, 2015). Treaty 3 Grand Chief stated similar concerns about the lack of consultation, speaking for over 25 Anishinaabe FNs in northwestern Ontario. This was also corroborated by the Ontario Energy Minister who stated that affected FNs were not adequately consulted. The Woodstock, Madawaska and Tobique FNs in NB called for a halt in review hearings, because participant funding was cut (Patterson, 2015). The Federation of Saskatchewan Indian Nations also stated their support for the project was contingent on a more robust consultation process with affected FNs (Barrera, 2015). Despite the controversy surrounding the consultation process, TransCanada maintained they conducted adequate consultation (McCarthy, 2015). Evidence suggests that consultation was lacking, resulting in poor criteria scores for this project, this was also

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compounded by the lack of funding allowing FNs communities to participate in consultations (Table 1).

5.2 Donkin coal mine

Donkin coal mine is a proposed underground coking and thermal coal development project by Xstrata Coal Donkin Management Limited in Donkin Peninsula in Cape Breton, NS. The project underwent a joint CEAA and NSE coordinated comprehensive study, which was reviewed extensively by multiple federal departments and received approval in 2013 (CEAA, 2013). The CEA Agency was the responsible authority, and acted as Crown Consultation Coordinator for the federal government in order to integrate consultation activities (Aboriginal Consultation in Federal EA, 2014). Mi'kmaq FN of NS asserts land claims to the whole province, and consultation was organized through the Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO). From the onset, KMKNO viewed the Mi'kmaq as co-owners, rather than stakeholders.

EIS guidelines outlined Xstrata's consultation with the Mi'kmaq, including consideration of any rights (asserted or established), potential adverse impacts to the Mi'kmaq, and any concerns raised by KMKNO through the consultation process. EIS guidelines also considered traditional land uses as well as valued ecosystem components (VECs) (e.g., archaeological or heritage resources). In addition, Xstrata followed NS's provincial EA guidelines for consulting the Mi'kmaq (CEAA, 2013). KMKNO was consulted during the three stages: project onset, the final EIS and during the comprehensive study. The CEA Agency also engaged the KMKNO through letters, meetings, emails and calls (CEAA, 2013). During consultation, major issues raised included developing training, employment procurement opportunities for the Mi'kmaq, as well as requirements for a Mi'kmaq Ecological Knowledge Study (MEKS). The MEKS was conducted, and it outlined all traditional uses of the project site, including lobster fishing and potential for nearby archaeological sites. The KMKNO also received participant funding from the CEA Agency. Xstrata also conducted engagement activities with the KMKNO and this information was used to inform the CEA Agency of potential impacts of the project on the Mi'kmaq.

The CEA Agency, NSE and Xstrata conducted consultation and engagement activities with the KMKNO. Xstrata's consultation activities were used to inform the CEA Agency of

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potential impacts of the project on the Mi'kmaq, and how these impacts would be mitigated (CEAA, 2013). The CEA Agency comprehensive study concluded that Mi'kmaq interests and concerns would be accommodated throughout the project's implementation. This accommodation included the avoidance of certain wetlands, wetland compensation, fish habitat compensation and the protection of archaeological resources (Thomson, 2015). In addition, a memorandum of understanding was signed ensuring economic opportunities and benefits for Mi'kmaq when the mine is operational (CEAA, 2013). The Donkin mine was recently purchased by the Cline Group (Thomson, 2015). High criteria scores were assigned for this project based on overall level of engagement, ability for Mi'kmaq communities to participate in consultations and the level to which the proponent was involved in positive benefits for the Mi'kmaq (Table 1).

5.3 Detour Lake gold mine

Detour Lake Gold Mine proposed by Detour Gold Corporation is an open pit mine 185 km northwest of Cochrane, Ontario (CEAA, 2011b). A comprehensive study (coordinated by the CEA Agency) was approved in 2011 (CEAA, 2011b). The CEA Agency acted as consultation coordinator. During consultation, six Aboriginal groups were consulted (Wahgoshig FN, Métis Nation of Ontario, Timmins Métis, Northern Lights Métis Community Councils, Moose Cree FN and Taykwa Tagamou Nation). All six FN's had land claims or treaty rights potentially impacted by the project. The CEA Agency also provided funding through the Participant Funding Program to four affected Aboriginal groups (CEAA, 2011b).

Consultation was held in three stages, and the CEA Agency sought comments from Aboriginal groups at the start of the process, at the environmental effects stage during the comprehensive study, and at the end on the findings and recommendations of the draft report. The CEA Agency also addressed Aboriginal concerns by contacting participating communities and organizations to clarify concerns through various means of communication. Furthermore, the proponent conducted their own consultation and provided funding for traditional use and knowledge studies (CEAA, 2011b). The comprehensive study listed the concerns raised by Aboriginal groups throughout the consultation process. One of these was that the comprehensive study report would be included without incorporating the interests of the Moose Cree FN. However, the proponent made a presentation to the Moose Cree FN and these concerns were

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incorporated into the EA (CEAA, 2011b). An additional concern stated that construction began prior to EA completion, but according to CEAA this component of the project did not require federal permits (CEAA, 2011b).

Detour Gold Corporation negotiated IBAs with three FN communities, as well with Métis Nation of Ontario (CEAA, 2011b). The proponent also stated it would hire cultural monitors from the Aboriginal groups to monitor and protect any archaeologically or culturally significant sites encountered during the project. The IBA signed with the Métis Nation of Ontario is slated to provide employment and training opportunities, including an educational and scholarship program with Northern College and College Boreal (Métis National Council, 2012). This agreement was finalized after the comprehensive study report was released in 2011, demonstrating that the proponent continues to be involved with Aboriginal communities, post approval. High criteria scores were also assigned for this project (Table 1).

6. Results and recommendations

Results illustrate positive outcomes when the DtC is undertaken in a meaningful manner (Donkin and Detour Lake mines), in contrast to Energy East (Table 1; Fig. 3). One-way ANOVA followed by Tukey's test revealed that both Donkin and Detour Lake mine DtC criteria scores were significantly different at the $P<0.01$ level when compared to Energy East, but were not significantly different when Donkin and Detour Lake mines were compared against each other. The magnitude and extent of proposed projects (i.e., those with very complex EAs with the potential to impact more FNs) may influence the DtC, compared to smaller less complex projects. Although Donkin and Detour Lake are mines, they highlight positive consultation outcomes (e.g., by incorporating IBAs). These agreements help to ensure benefits for affected Aboriginal groups (Janes and Walker, submitted.). In the Donkin mine, Mi'kmaq concerns were accommodated through wetland compensation, protection of archaeological resources and fish habitat compensation. Similarly, in the Detour Lake mine, Aboriginal groups were promised employment and training opportunities. The potential for jobs and training also plays a major role in the DtC process.

Although the Energy East pipeline had strong support from the Crown (the energy sector was a priority under the previous government administration), the Crown should aim to remain

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neutral throughout the consultation process, to minimize biases. For example, Lett (2015) argued that the NEB favoured resource companies, approving all pipeline proposals in recent years (Curtis, 2015).

Many issues can arise regarding timing of consultation. Generally, if FNs are consulted early in the process, it can avoid unnecessary delays and conflict (Noble, 2015a) and ensure Aboriginal concerns are acknowledged and incorporated into project design early. Projects like the Mackenzie Valley Pipeline illustrate that delays may stretch beyond the economic timeframes required for the project to remain viable (Newman, 2014). Positive examples also serve to highlight attractive investment climates. When Aboriginal concerns are accommodated, proponents have more certainty in terms of their investments in the province and operating environment. Strong FNs support is generally required for projects to be successful (Guttsman, 2015). Although proponents may be able to rely on government to acquire necessary rights to develop, the best starting point is consent rather than reliance on government's expropriation powers (Bankes, 2015). In response to this need for consent, many proponents have looked towards negotiating IBAs as a way to assist and alleviate Aboriginal concerns (Fidler, 2010).

It may be difficult for the DtC process to go smoothly if the tenets of the project do not align with the interests and worldviews of affected Aboriginal groups. For example, with the Energy East project, the former Chief of the Assembly of FNs (employed by TransCanada), stated the right to say no, also includes the right to say yes and that these decisions must be based on facts (McCarthy, 2014). It is sometimes challenging to align reasons behind opposition with facts, when sometimes the reasons are so intrinsic for the FNs opposed. It remains unclear whether consultation can ever be meaningful if the two parties' interests can never be reconciled.

6.1 Crown guidance to proponents

Since proponents conduct many procedural aspects of the DtC, it is crucial they have a full understanding of Aboriginal rights and title before entering a community. At the onset of the DtC, the Crown decides the scope of consultation required based on ethno-historical data and various studies and informs the proponent of this information. However, it seems this is often done inadequately and some proponents lack understanding when they go to the initial meeting with the affected Aboriginal group.

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Consultation involves intangibles; it can be very challenging to work in an environment where there are no checklists to follow or permits to approve in order to satisfy the affected Aboriginal group (Berkow, 2015). Even more challenging than sorting out the consultation issues surrounding NR development is understanding the holistic, inter-dependent relationship wherein most FNs are "'of' their environmental-ecological context and this context is every bit as much 'of' them" (Prosper et al., 2011). It can be challenging for proponents to understand the *pros* and *cons* of consultation, especially when many executives come from backgrounds in science, engineering and accounting. Facing issues like social license can pose many challenges, especially when most of the project approval process involves checklists and permits.

Further to additional guidance offered by the Crown, it would be beneficial for the Crown to be directly involved in proponent's early consultation activities. This involvement would ensure that all involved understand roles and expectations of the DtC, and contribute to greater awareness of the nature of projects and potential for infringement (Gardner et al., 2015). If the Crown and proponents work together to begin initial discussions with potentially affected Aboriginal groups, it could ensure that the DtC process begins in a meaningful manner (Fig. 4).

6.2 Free, Prior, Informed, Consent (FPIC)

A movement towards Free, Prior and Informed Consent (FPIC) may be in order to facilitate partnerships during the DtC. FPIC is a standard contained in the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) and acknowledges the right of Aboriginals to provide informed consent prior to the approval of a project. FPIC could alleviate FNs concerns of not being treated as full partners (McCarthy, 2015) and to challenge their perceived role as 'stakeholders' to instead be viewed as planning partners (McLeod et al., 2015). Although the UNDRIP was endorsed in 2010, it was endorsed with a caveat that the declaration was "aspirational". The Tsilhqot'in decision may work to spur greater change with regards to FPIC as consent has now been elevated to the forefront of discourse since the Crown is now required to seek consent from an affected FN when title is involved (McLeod, 2015). However, it is important to note that FPIC is not intended to confer a FN veto power, but is instead meant to encourage more than the DtC, but a movement towards collaboration.

FPIC involves a balancing of interests spurring from a genuine effort by both the Crown and proponents to consult and seek consent. FPIC has been described as the power to say yes to

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mutually beneficial initiatives that can promote healthy Aboriginal nations for the benefit of current and future generations (Union of BC Indian Chiefs, 2015). Compared to the previous federal government, the new administration has taken a different stance on the UNDRIP. The new Prime Minister announced to new Ministers in their mandate letters that: "no relationship is more important to [him] and to Canada than the one with Indigenous Peoples" (Smith, 2015), furthering this by stating that "it is time for Canada to have a renewed, nation-to-nation relationship with Indigenous Peoples, based on recognition, rights, respect, co-operation, and partnership" (Patterson, 2015). The new Indigenous and Northern Affairs (INAC) Minister has agreed to implement UNDRIP, however the specifics are unclear given the novelty of the administration. Although the concept of FPIC is new, and may be challenging for projects, it has strong potential in the EA process (Fig. 4).

6.3 Utilization of Measures Offered in EA Legislation

As previously discussed in section 3.5, one of the major limitations of FN participation in the DtC process is lack of capacity, both in human and financial capital. Aboriginal groups often struggle to respond to technical EA reports in a timely manner, especially in areas rich in natural resources. Numerous referrals and requests for consultation, often sent from various provincial and federal EA departments can create significant resourcing difficulties for FNs in Canada. Increased understanding amongst FN deterrents to participation in consultation, especially those rich in resources, may help avoid what Morellatto (2009) terms the "death of a thousand cuts"; where lands and resources are repeatedly developed without meaningful Aboriginal consultation taking place, simply due to lack of FN capacity to participate in the DtC.

EA acts exhibit a myriad of tools the Crown holds that would assist in cases where the DtC is not adequate. For example, tools such as the suspension or extension of EA processes. A common complaint amongst FNs is that EAs move too rapidly, lacking time for the potentially affected FN to understand and explain project concerns. The suspension of EA processes is often enabled in federal or provincial legislation, for instance, in BC, the Executive Director has the power to suspend the time limit prescribed for subsection (1)(b) if more information is required from the proponent (*Environmental Assessment Act,* 2002). Similarly, CEAA 2012 has similar powers, in that the regulatory clock can be stopped until the proponent submits requested information to the satisfaction of CEAA. It is usually the case that these suspensions are not

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given a specific timeline, which may allow suspensions to be a suitable tool to ensure the DtC is fulfilled. If it becomes evident throughout the EA process that the proponent has failed to adequately consult with potentially affected FNs, then the Crown should be able to apply a measure like suspension or an extension to ensure consultation is undertaken.

The opportunity for an EA extension is highlighted in the recent *Gitxaala Nation et al v. Canada* decision in which the Governor in Council was subject to a decision under Section 54(3) of the *National Energy Board Act*, this subsection allowed for a an extension of the deadline. The decision found that the importance of the DtC provides "ample reason for the Governor in Council, in appropriate circumstances, to extend the deadline" (251) and that there was no evidence the Govenor in Council gave any thought to this extension. Perhaps the utilization of an extension could have avoided costly litigation. As it is sometimes the case that proponents see FN participation in the EA process as merely another obstacle to gain project approval (Plate et al., 2009). Although the DtC poses an additional expense to the proponent, there is no avoiding the process if a project is to be planned and scoped properly (Cundari and Langlois, 2012). What this misconception misses is the increasing necessity of FN acceptance and understanding of project proposals that may impact their land. In addition, it has been shown that a meaningful consultation process will assist in avoiding costly and lengthy litigation. Delays in the EA process do not necessarily indicate a bad process, but could in fact mean a more thorough DtC.

6.4 Stronger front-end consultation legislation

Aboriginal communities are often consulted too late in the EA process, when project design and planning are complete. This belatedness leaves the Aboriginal group to feel their input will not be integrated into the project design plans, and that their participation is a waste of time. Late consultation creates conflict and unnecessary delay (Noble, 2015a). The Crown and industry stakeholders find that early engagement with affected Aboriginal groups creates trust and builds strong relationships that help contribute to better outcomes for all (Newman, 2014). Proponents engaging in development are wise to consider issues early and be proactive about developing Aboriginal consultation strategies (Cundari and Langlois, 2012). Conflict at early stages of an EA where FNs have the opportunity to let concerns be known while the proponent still has time to alter project design will help to ensure the rest of the EA process is effective. EA

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587 legislation should require better suited, culturally specific engagement, at a point where initial
588 decisions are made about rational and design of a project (Noble, 2015a).
589 Meaningful change to the DtC will likely not be sustained without amendments to higher
590 guiding policies (McLeod et al., 2015). It seems change is imminent, as the current Liberal
591 government began reviewing the EA process in June 2016 with a deadline of January 2017, with
592 one of the aims to create collaboration and partnership among FNs. One way the process can be
593 improved is through stronger front end legislation regarding the timing of Aboriginal
594 consultation. Front end consultation should include a stipulation in the *Canadian Environmental*
595 *Assessment Act*, 2012 for the Crown and proponent to consult at the project description stage
596 (Fig. 4). If it were to be enshrined to consult at the project description stage, it would allow for
597 FNs concerns to be integrated from the very onset. As the INAC Minister stated, "achieving
598 mutually beneficial results begins by having a conversation, and having it right away" (Smith,
599 2015) which aligned well with the resolution to adopt FPIC.
600

601 **7. Conclusions**

602 Natural resource development has significant consequences for Aboriginal groups in
603 Canada, particularly those choosing to maintain a traditional relationship with the land.
604 Aboriginal groups are required by law to have a clear and divisive voice in Crown decisions that
605 may impact their rights and interests. However, this voice is heard to varying degrees during the
606 DtC process. Meaningful consultation during EA is unlikely to add much additional strain or
607 expense to the EA process, however, it is becoming increasingly clear that the absence of it will
608 threaten the viability of projects. The DtC has emerged to provide an opportunity for key
609 Aboriginal interests to be protected and the process, ideally, allows for the Crown, proponents
610 and Aboriginals to come together in agreement over projects that benefit all parties. Still, the
611 current practice of the DtC can often bring results that do not work for any stakeholders
612 involved. These results include proponent withdrawal, project delays, protest, conflict and a
613 movement away from the real opportunity inherent in the DtC process: reconciliation.
614 With the surge in EAs on or near Aboriginal land, the increase in EA related First
615 Nations led case law, and the rise of proponent project delays has come an increased realization
616 of the capacity amongst Aboriginal groups to influence decision-making during development. It

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is hoped that proponents realize the opportunity inherent in building meaningful partnerships with Aboriginal groups their projects affect. With increased Crown guidance to proponents during the onset of consultation, a movement towards FPIC, an increase in utilization of various measures offered in EA legislation including extensions and suspensions and stronger front-end consultation at the project description stage, it is hoped that this process can work to build mutually beneficial relationships as well as prosperous developments in Canada. It has become clear that consultation which seeks consensus, building partnerships, and are responsive and sensitive to each specific FNs concerns and potential impacts will be most effective and meaningful in Canada's evolving EA reality.

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References

AANDC (Aboriginal Affairs and Northern Development Canada). (2011). Aboriginal consultation and accommodation: Updated guidelines for federal officials to fulfill the duty to consult. Retrieved from: http://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675

AANDC (2015). Public Statement – Canada's Approach to Consultation and Accommodation. Retrieved from: http://www.aadnc-aandc.gc.ca/eng/1430509387485/1430509551622

Assembly of First Nations. (2011). Environmental Assessments and Major Projects Policy Considerations. Retrieved from: http://www.afn.ca/uploads/files/environmental_assessments_&_major_projects_policy_considerations.pdf

Baker, D.C., McLelland, J.N. (2003). Evaluating the effectiveness of British Columbia's environmental assessment process for FNs' participation in mining development. Environ. Impact Assess. Rev. 23, 581-603.

Bankes, N. (2015). The implications of the Tsilhqot'in (William) and Grassy Narrows (Keewatin) decisions of the Supreme Court of Canada for the natural resources industries. Energy and Natural Resources Law, 33, 188-217.

Barrera, J. (2015). Trudeau dodges question on Energy East and FN consultation. APTN. Retrieved from: http://aptn.ca/news/2015/11/24/trudeau-dodges-question-on-energy-east-and-first-nation-consultation/

Berkow, J. (2015). The Lax Kw'alaams-Pacific NorthWest talks suggest the LNG race is not over. Alberta Oil. Retrieved from: http://www.albertaoilmagazine.com/2015/06/crude-report-lax-kwalaams-pacific-northwest-lng-race/

Booth, A.L., Skelton, N.W. (2011). Improving FNs' participation in environmental assessment processes: Recommendations from the field. Impact Assessment and Project Appraisal, 29, 49-58.

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

BCEAO (British Columbia Environmental Assessment Office). (2013). Guide to Involving Proponents when Consulting FNs in the Environmental Assessment Process. Retrieved from: http://www.eao.gov.bc.ca/pdf/EAO_Proponent_Guide_Dec2013.pdf

CEAA (Canadian Environmental Assessment Agency). (2011a). Archived – Environmental Assessment Decision Statement: Detour Lake Gold Mine Project, Ontario. Canadian Environmental Assessment Agency. Retrieved from: http://www.ceaaacee.gc.ca/052/document-html-eng.cfm?did=53638

CEAA. (2011b). Comprehensive Study Report: Detour Lake Gold Mine. Retrieved from: http://www.ceaaacee.gc.ca/050/documents/52984/52984E.pdf

CEAA. (2012). Environmental Impact Statement Guidelines for the Donkin Export Coking Coal Project. Retrieved from http://www.ceaa-acee.gc.ca/050/documents/54224/54224E.pdf

CEAA. (2013). Comprehensive Study Report: Donkin Export Coking Coal Project. Retrieved from: http://www.ceaaacee.gc.ca/050/documents/p63924/87857E.pdf

CEAA. (2014). Aboriginal Consultation in Federal Environmental Assessment. Retrieved from: http://www.ceaa.gc.ca/default.asp?lang=en&n=ED06FC83-1

The Constitution Act, 1982, Schedule B to the Canada Act 1982 (UK), 1982, c 11.

Cundari, L., Langlois, J. (2012). The Duty to Consult with FNs during Resource Extraction Projects. Retrieved from: http://www.landman.ca/publications/Negotiator/2012/dec/december12_layout.pdf

Curtis, C. (2015). In the pipeline's path: Canada's FNs lead resistance. Montreal Gazette. Retrieved from: http://montrealgazette.com/business/energy/pipeline-resistance

The Duty to Consult and Accommodate Aboriginal Groups in Canada. (2014). Ivey Business School: Energy Policy and Management Centre. Retrieved from: http://sites.ivey.ca/energy/files/2014/10/Ivey_EnergyCentre_Brief_Aboriginal_v2.pdf

Fidler, C. (2010). Increasing the sustainability of a resource development: Aboriginal engagement and negotiated agreements. Environment, Development and Sustainability, 12, 233-244.

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

683 Gardner, H.L., Kirchhoff, D., Tsuji, L.J. (2015). The Streamlining of the Kabinakagami River
684 Hydroelectric Project Environmental Assessment: What is the" Duty to Consult" with
685 Other Impacted Aboriginal Communities When the Co-Proponent of the Project is an
686 Aboriginal Community? The International Indigenous Policy Journal, 6, 1-27.

687 Gill, I. (2015). BC's Hard Hat Premier Builds Faulty FN Bridges. The Tyee. Retrieved from:
688 http://thetyee.ca/Opinion/2015/09/12/Premier-Builds-Faulty-First-Nation-Bridges/

689 Gitxaala Nation et al v. Canada. [2016] 2016 FCA 187

690 Griffith, J. (2015). Meaningful consultation: reconciliation through an honourable process.
691 Continuing Legal Education Society. Retrieved from:
692 https://cle.bc.ca/PracticePoints/ABOR/Meaningful%20consultation.pdf

693 Guttsman, J. (2015). Uncertainties in Canada's Resource Sector. Canadian Lawyer Magazine.
694 Retrieved from: http://www.canadianlawyermag.com/5635/Uncertainties-in-Canadas-
695 resource-sector.html

696 Haida Nation v. British Columbia (Minister of Forests) [2004] 3 S.C.R. 511, 2004 SCC 73

697 Hipwell, W., Mamen, K., Weitzner, V., Whiteman, G. (2002). Aboriginal peoples and mining in
698 Canada: Consultation, participation and prospects for change. Ottawa: North-South
699 Institute, 1-57.

700 Hitch, M., Fidler, C.R. (2007). Impact and benefit agreements: A contentious issue for
701 environmental and aboriginal justice. Environments Journal, 35, 45-69.

702 Janes, J., Walker, T.R. (in prep). Bridging a Gap: Incorporating Social Impact Assessment into
703 Local Contact Strategies for Resource Projects. Environmental Impact Assessment
704 Review.

705 Joseph, B. (2012). Does the Duty to Consult Aboriginal Peoples include a veto? Retrieved from:
706 http://www.ictinc.ca/does-the-duty-to-consult-aboriginal-peoples-include-a-veto

707 Kane, L. (2016). Carr Promises First Nations Collaboration on Energy Development. *CityNews.*
708 Retrieved from: http://www.citynews.ca/2016/02/10/carr-promises-first-nations-
709 collaboration-on-energy-development/

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

710 Kirchhoff, D., Gardner, H.L., Tsuji, L.J. (2013). The Canadian Environmental Assessment Act,
711 2012 and associated policy: implications for Aboriginal peoples. The International
712 Indigenous Policy Journal, 4, 1-11.

713 Lambrecht, K.N. (2013). Aboriginal consultation, environmental assessment, and regulatory
714 review in Canada. Regina: University of Regina Press.

715 Lett, D. (2015). Trudeau government put to test over pipeline. Winnipeg Free Press. Retrieved
716 from: http://www.winnipegfreepress.com/opinion/analysis/

717 Ma, J., Duinker, P.N., Walker, T.R. (2018). Scholar and practitioner views on science in
718 environmental assessment. Impact Assessment and Project Appraisal, 36(6), 516-528.

719 MacLeod, A. (2015). Christy Clark Fields Tough Questions on LNG Promises. The Tyee.
720 Retrieved from: http://thetyee.ca/News/2015/12/14/Christy-Clark-LNG-Promises/

721 MacKinnon, A.J., Duinker, P.N., Walker, T.R. (2018). The Application of Science in
722 Environmental Impact Assessment. Routledge. pp. 140.

723 Matiation, S. (2002). Impact Benefits Agreements between Mining Companies and Aboriginal
724 Communities in Canada: A Model for Natural Resource Developments Affecting
725 Indigenous Groups in Latin America. Great Plains Nat. Resources J., 7, 2-20.

726 McCarthy, S. (2014). FNs prepare for fight against Energy East pipeline. The Globe and Mail.
727 Retrieved from: http://www.theglobeandmail.com/

728 McCarthy, S. (2015). Resources firms endorse call for aboriginal veto rights to projects. The
729 Globe and Mail. Retrieved from: http://www.theglobeandmail.com/

730 McLeod, F., Viswanathan, L., Whitelaw, G.S., Macbeth, J., King, C., McCarthy, D.D., Alexiuk,
731 E. (2015). Finding Common Ground: A Critical Review of Land Use and Resource
732 Management Policies in Ontario, Canada and their Intersection with FNs. The
733 International Indigenous Policy Journal, 6, 1-17.

734 Morellato, M. (2008). The Crown's Constitutional Duty to consult and Accommodate Aboriginal
735 and Treaty Rights. Retrieved from:
736 http://www.fngovernance.org/...docs/Crown_Duty_to_Consult__Accommodate.pdf

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

Morellato, M. (2009). Crown Consultation Policies and Practices Across Canada. Retrieved from: http://www.fngovernance.org/...docs/NCFNG_Crown_Consultation_Practices.pdf

Newman, D. (2009). The duty to consult: New relationships with Aboriginal peoples. Saskatoon: Purich Publishing. 1-129.

Newman, D. (2014). The Rule and Role of Law: The Duty to Consult, Aboriginal Communities, and the Canadian Natural Resource Sector. Aboriginal Canada and the Natural Resource Economy Series. Retrieved from: http://www.macdonaldlaurier.ca/files/pdf/DutyToConsult-Final.pdf

Noble, B. (2016). Learning to Listen: Snapshots of Aboriginal Participation in Environmental Assessment. Macdonald Laurier Institute. Retrieved from: http://www.macdonaldlaurier.ca/files/pdf/Noble_StewardshipCaseStudies_F_web.pdf

Noble, B. (2015a). Aboriginals Need To Be Full Participants In Environmental Assessment Process: Bram Noble. Macdonald Laurier Institute. Retrieved from: http://www.macdonaldlaurier.ca/aboriginals-need-to-be-full-participants-in-environmental-assessments-bram-noble/

Noble, B. (2015b). Canada's current environmental assessment system not working. Troy Media. Retrieved from: http://www.troymedia.com/2015/10/29/canadas-current-environmental-assessment-system-not-working/

NSE (Nova Scotia Environment). (2009a). A Citizen's Guide to Environmental Assessment. Retrieved from: http://www.gov.ns.ca/nse/ea/docs/EA.Guide-Citizens.pdf

NSE (Nova Scotia Environment). (2009b). A Proponent's Guide to Environmental Assessment. Retrieved from: http://www.gov.ns.ca/nse/ea/docs/EA.Guide-Proponents.pdf

Patterson, B. (2015). Council backs Lax Kw'alaams Hereditary Chief's letter to prime minister opposing LNG project. Council of Canadians. Retrieved from: http://canadians.org/blog/council-backs-lax-kwalaams-hereditary-chiefs-letter-prime-minister-opposing-lng-project

Plate, E., Foy, M., Krehbiel, R. (2009). Best Practices For FN Involvement in Environmental Assessment Reviews of Development Projects in British Columbia. The New

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

765 Relationship Trust. Retrieved from:
766 http://www.newrelationshiptrust.ca/downloads/environmental-assessments-report.pdf

767 Prosper, K., McMillan, L.J., Davis, A.A., Moffitt, M. (2011). Returning to Netukulimk:
768 Mi'kmaq cultural and spiritual connections with resource stewardship and self-
769 governance. The International Indigenous Policy Journal, 2, 1-17.

770 R. v. Sparrow [1990] 1 S.C.R. 1075.

771 Ritchie, K. (2013). Issues Associated with the Implementation of the Duty to Consult and
772 Accommodate Aboriginal Peoples: Threatening the Goals of Reconciliation and
773 Meaningful Consultation. UBCL Rev., 46, 397-438.

774 Ross, M., Smith, P. (2003). Meaningful Consultation with Indigenous Peoples in Forest
775 Management: A Focus on Canada. Paper presented at the FAO XII World Forestry
776 Congress, Quebec. Retrieved from: http://www.fao.org/docrep/article/wfc/xii/1001-
777 c1.htm

778 Smith, J. (2015). Canada will implement UN Declaration on Rights of Indigenous Peoples,
779 Carolyn Bennett says. The Star. Retrieved from: http://www.thestar.com/news/canada/

780 Smyth, M. (2015). Smyth: When it comes to FNs, BC gov't prefers deals over courts. The
781 Province. Retrieved from: http://www.theprovince.com/

782 Squamish Nation (2015). PGL's environmental report on Woodfibre LNG proposal. Squamish
783 Nation Update, Issue 3. Retrieved from: http://www.squamish.net/wp-
784 content/uploads/2015/07/SN-WoodfibreUpdate-Summary-03.pdf

785 Stueck, W. (2014). Jobs vs. the environment: FNs face a tough choice. The Globe and Mail.
786 Retrieved from: http://www.theglobeandmail.com/report-on-business/rob-magazine/this-
787 land-is-our-land/article21349458/

788 Taku River Tlingit FN v. British Columbia (Project Assessment Director), [2004] 3 SCR 550,
789 2004 SCC 74.

790 Thomson, J. (2015). The Duty to Consult and Environmental Assessments: A Study of Mining
791 Cases from across Canada. Unpublished master's thesis. Waterloo University, Waterloo,
792 Ontario.

PeerJ Preprints | https://doi.org/10.7287/peerj.preprints.27348v1 | CC BY 4.0 Open Access | rec: 15 Nov 2018, publ: 15 Nov 2018

793 Tsilhqot'in Nation v. British Columbia, 2014 SCC 44 (CanLII).

794 Union of BC Indian Chiefs (2015). Joint Open letter: Prime Minister Justin Trudeau - United
795 Nations Declaration on the Rights of Indigenous Peoples & Free, Prior and Informed
796 Consent. Retrieved from: http://www.ubcic.bc.ca/pmtrudeau_undrip_fpic

797 United Nations (2011). Report of the Special Rapporteur on the rights of indigenous peoples,
798 James Anaya - Extractive industries operating within or near indigenous territories.
799 Retrieved from: http://www.ohchr.org/Documents/Issues/IPeoples/SR/A-HRC-18-
800 35_en.pdf

801 Walls, L. (2012). Canadian Environmental Assessment Act, 2012: Canadian Environmental
802 Assessment Agency presentation to International Association of Impact Assessment.
803 Retrieved from: http://www.iaia-wnc.ca/

804 Walker, T.R. (2012). Properties of selected soils from the sub−Arctic region of Labrador,
805 Canada. Polish Polar Research, 33, 207-224.

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808 **Figure legends**

809 **Fig. 1** Three factors required to trigger the DtC.

810 **Fig. 2** Three major relationships during the DtC, with the major roles/activities between each
811 outlined.

812 **Fig. 3** Common trends exhibited during positive and negative DtC examples.

813 **Fig. 4** Summary of recommendations.

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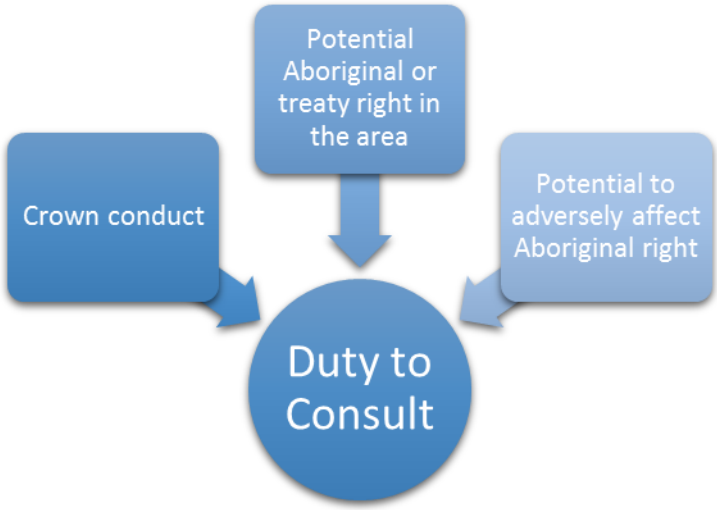
814 **Fig. 1**



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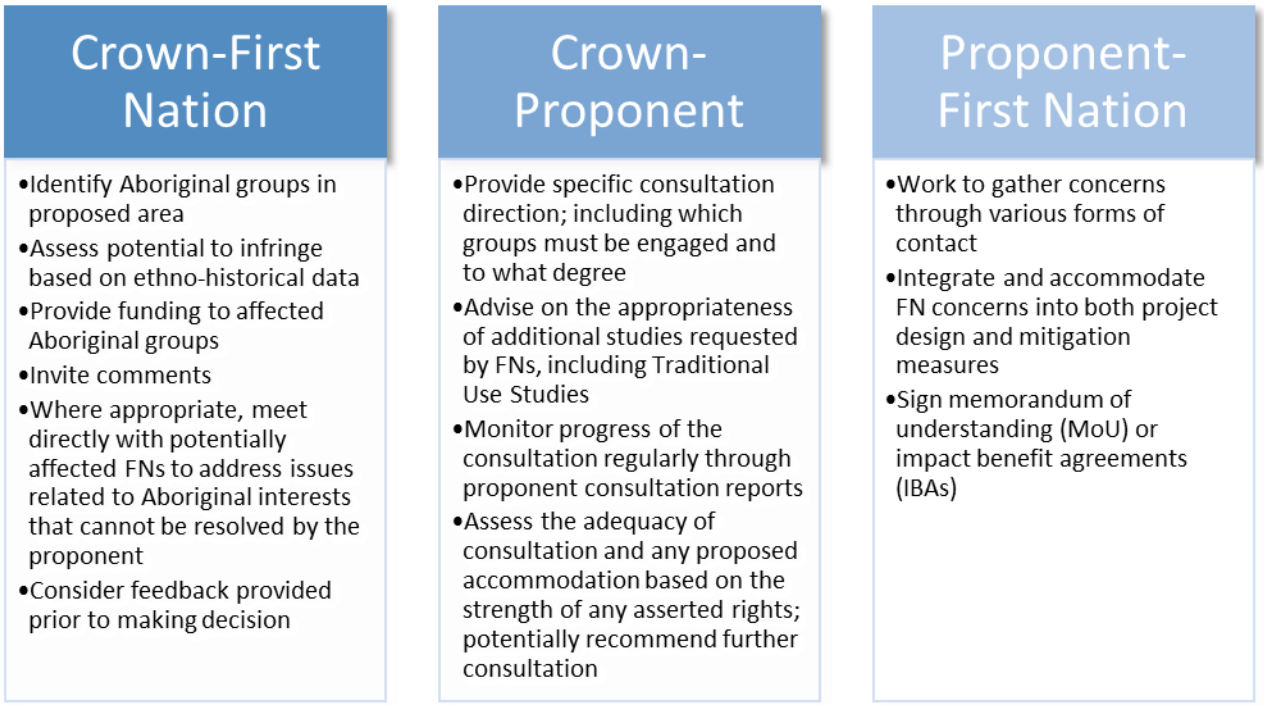
820 **Fig. 2**



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823 **Fig. 3**

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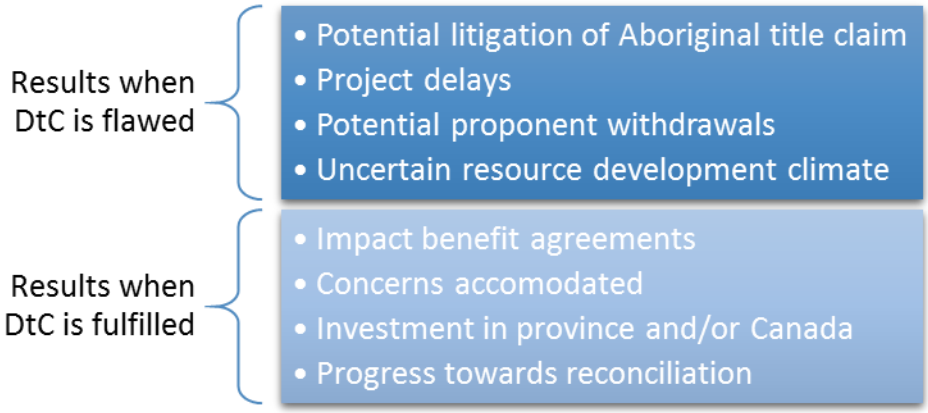

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828 **Fig. 4**

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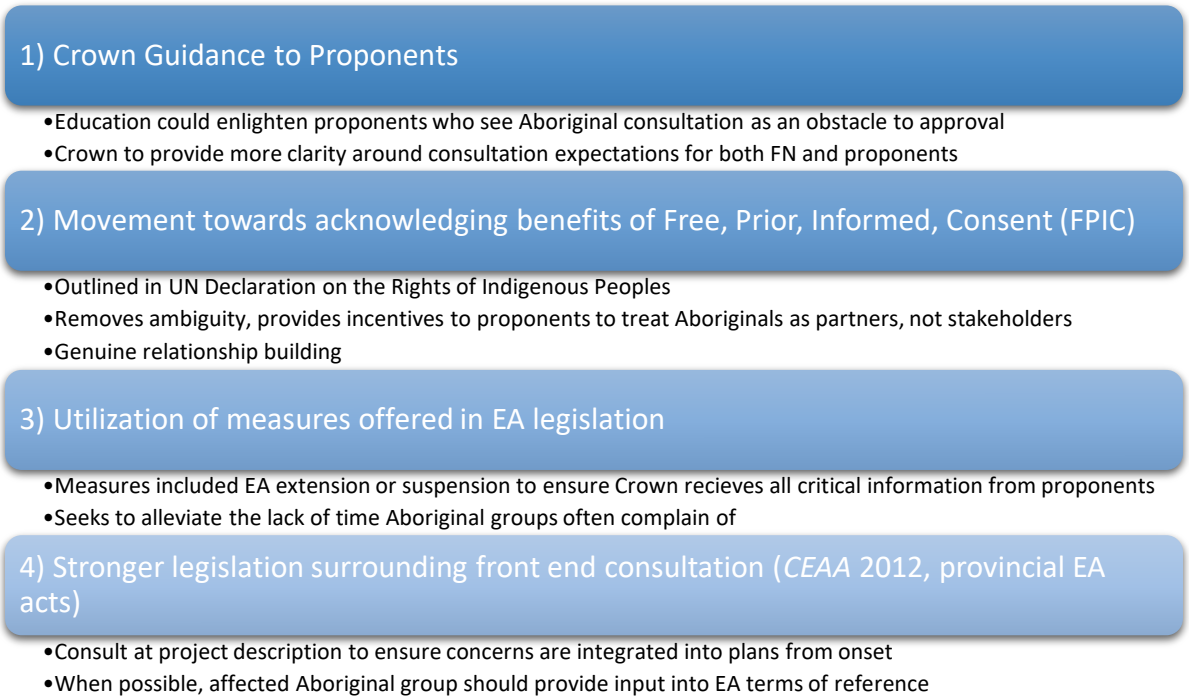

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832 **Table 1.** Comparison of the application of DtC criteria to recent EA case studies across Canada.

Criteria	Project		
	Energy East pipeline	**Donkin coal mine**	**Detour Lake gold mine**
Consistent approaches (federal and provincial)	3	5	4
Guidance for proponent delegation	3	5	4
Incorporation current case law into DtC	2	4	4
Incorporation of "sliding scale" into DtC	3	4	4
Incorporation of accommodation	2	5	4
Establishing strong DtC relationships	2	5	4
Engagement in meaningful consultation	3	5	5
Aboriginal engagement	2	4	4
Adequate opportunities for Aboriginal participation	2	5	5
Benefits to Aboriginal groups	2	5	5
Proponent participation beyond project approval	3	5	5
Mean score (+/- standard deviation)	**2.5 (0.52)**	**4.7 (0.46)**	**4.4 (0.50)**
Total score	**27/55**	**52/55**	**48/55**
Significant differences	**A**	**B**	**B**

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834 Notes: A five-point Likert scale, with an assigned numerical value was used to evaluate projects
835 against DtC criteria (Very Poor = 1; Poor = 2; Average = 3; Good = 4; Very Good = 5).
836 Significant differences were determined by one-way ANOVA followed by Tukey's test. Projects
837 assigned the same letters were not significantly different and projects with different letters were
838 significantly different at the $P<0.01$ level.

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