Indigenous Impact Assessment: A quiet revolution in EIA?

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1. Introduction

Indigenous Impact Assessment (IIA) is a recent development, with the first IIA we are aware of being conducted in 1991 by the Aboriginal community of Hopevale in far north Queensland (Holden and O'Faircheallaigh 1995). IIA now occurs regularly in Australia, Canada and New Zealand, though its occurrence remains far from routine. It is also beginning to emerge in other parts of the globe (Lawrence and Larsen 2017). IIA displays considerable diversity, being used to reappraise existing projects as well as new ones applying for regulatory approval, and ranging from extensive, multi-disciplinary studies considering a wide range of impacts and generating reports numbering hundreds of pages (KLC 2010a), to much more limited studies that focus on a single issue or area, for example cultural heritage (Jolley 2007). This chapter focuses mainly on Australia and Canada where the majority of IIAs have been conducted to date and where our experience largely lies.

Drawing on Gibson et al (2018, 10) we define IIA as follows:

A process that assesses, and sets out to manage, the impacts of a project, existing or planned, where the assessment is designed and conducted with meaningful input and a significant degree of control by affected Indigenous parties. The Indigenous parties exercise such control over scoping, data collection, assessment, management planning, and/or decision-making about a project.

As implied in this definition, we are not focusing on Indigenous inputs, often in the form of contributions to baseline studies or provisions of written comments on draft reports studies, into environmental impact assessment that is conducted and controlled by project proponents or regulatory authorities (referred to, as elsewhere in this volume, as 'EIA'). We are examining impact assessment (IA - by which we mean any form of impact assessment study) over which affected First Peoples have some capacity to determine what is assessed and how it is assessed.

Another definitional issue involves 'Indigenous'.

Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them (United Nations 2013, 6).

We use 'Indigenous' interchangeably with 'First Peoples', the term preferred by Indigenous peope themselves in some jurisdicitons.

As indicated by use of the terms 'significant' and 'meaningful' in our definition of IIA, 'control' is not a black and white concept in this context. There are degrees of control, depending on which aspects of IA, and how many of these aspects, are subject to Indigenous influence and the extent of that influence. In section 3, we identify four broad aspects of IA that are potentially subject to Indigenous control – scoping; who conducts IA; how it is conducted; and IA findings and recommendations. We discuss why these are important and the ways in which Indigenous control can be meaningfully exercised. In the process we provide the reader with a picture of what IIA entails and the ways in which it can be conducted.

We treat separately in section 4 the very important issue of Indigenous control over decisions about whether, and under what conditions, a proposed project should proceed. This is because IA systems generally maintain a distinction between IA, which is one component that feeds into major project decision making, which is conducted by an agency of the state based on multiple factors. This has implications for the aspirations and outcomes that First Peoples seek and associate with IIA.

Why has IIA emerged in recent decades? One negative force involves the fact that Indigenous peoples have, for reasons explored in detail in section 2, been excluded or marginalised from EIA. First Peoples have challenged this exclusion (Procter 2020), and in some cases responded by developing their own IA systems. A second more positive reason is the growing recognition of Indigenous legal and political rights in domestic jurisdictions and in international law (Gibson

et al 2016; O'Faircheallaigh 2016). This growing recognition has increased the ability of First Peoples to insist that their interests should be recognised in assessment of projects that affect them, and that they themselves should have the ability to define and articulate those interests. It has also placed pressure on governments and corporations to ensure that there is effective consultation with Indigenous peoples about such projects. IIA provides one such mechanism.

There has also been a growing recognition among corporate managers in recent decades that they must demonstrate their 'corporate social responsibility' in order to sustain their long-term profitability (O'Faircheallaigh and Ali 2008; Moody's Investor Service 2020). One means of doing so involves providing financial support for IIA, a critical matter given resource limitations experienced by almost all Indigenous communities. Another involves negotiation of agreements with affected Indigenous landowners and communities; IIAs may be conducted as a precursor to such negotiations, or may result from them with agreements requiring conduct of IIAs for any future project expansions.

We approach our discussion of IIA as follows. In the next section we identify critical weaknesses in EIA from an Indigenous perspective. We then examine what renders IIA distinctive, before examining in section 4 the way in which IIA is linked to decision-making by First Peoples, state regulators and corporations about whether projects should proceed and, if so, under what conditions.

Section 5 considers broader benefits arising from IIA, and in section 6 we consider a range of models that can be utilised in conducting IIA, consider their potential and limitations, and discuss practical constraints and choices that First Peoples face in utilising IIA. In concluding the chapter, we examine potential future trajectories of IIA.

2. Problems with EIA

By EIA we mean IA where the project proponent prepares an assessment of a project's expected impacts and makes commitments and proposes measures to mitigate these. The 'technical' work of compiling an EIA is exclusively or primarily conducted by specialist consulting firms employed, directed and paid by the proponent. A government statutory board and/or a minister

with relevant portfolio responsibilities will, on the basis of the proponent's EIA filings and in some cases comments on them by interested parties, determine whether or not a project should proceed; and if it is to proceed what conditions will be attached to it.

This conventional approach creates serious problems for First Peoples. EIA has often entirely ignored their interests and even their existence, with the result that there is no competing story of likely change from affected First Peoples and that proponents almost entirely control the narrative. For instance, Weitzner (2008, 8) notes that the Environmental and Social Impact Assessment for the Bakhuis bauxite project in Suriname entirely ignored impacts on Indigenous Guyanese communities, an outcome the proponent justified by denying that there were Indigenous peoples anywhere near the project (for other examples see World Bank 2011, 21). Exclusion of Indigenous peoples from EIA is not just a historical phenomenon or confined to developing countries. In a current EIA for a new mine in Australia adjacent to an Aboriginal community, the consulting firm retained by the proponent planned to undertake the scoping and baseline phases of the IA with no input at all from the affected community. 1 Even where Indigenous peoples are not entirely excluded, there are still issues about whether their participation is meaningful (Gibson et al 2018). In the Canadian context, Indigenous groups have raised a strong and consistent message that engagement by proponents and consultation by government has lacked meaning, and the Courts have criticized government for consultation processes that only allow First Peoples to 'blow off steam', meeting minimum consultation requirements rather than contributing substantially to project planning and conditioning (see Craik 2016).

There are a variety of reasons why the opportunities for First Peoples' participation in EIA may be severely restricted. Their access to EIA documents may by limited because they are only available in capital cities, are not translated into local languages, and are written in highly technical language. The definition of who has 'standing' in relation to a project and so has a right to comment on it may exclude affected Indigenous peoples, and time frames for public input may be unrealistic (Gibson 2012; Weitzner 2008). Proponents may conduct much or all of their

¹ We do not identify the project concerned because doing so might undermine negotiations currently under way between the community and proponent to ensure a much more substantive role for the community in the IA.

baseline data collection prior to engaging First Peoples and may be reluctant to reactivate such studies thereafter. Methodologies used in IA field studies can also reduce participation by failing to identify affected groups (Tsuji et al 2011).

Even where participation does result in Indigenous or community knowledge and perspectives being made available, there is no guarantee that proponents, consultants or regulators will pay attention to it, or assign it appropriate weight in relation to their own 'scientific' studies (Weitzner 2008). Even if the existence of Indigenous knowledge is recognised, significant problems can arise in ensuring that it is appropriately incorporated into EIA and environmental management (O'Faircheallaigh 2007; Gibson et al 2016). These include the risk that knowledge will be taken out of the hands of Indigenous knowledge holders and used out of context, being re-interpreted by non-Indigenous users in ways contrary to Indigenous interests (Nadasdy 2003). One of the biggest problems under EIA is that First Peoples' substantive inputs most often stop after baseline data collection. They produce studies that are then subject to proponent or state reinterpretation, and Indigenous peoples are disengaged from the assessment process.

One important underlying factor in EIA is the imbalance of resources between proponents and the state, on one hand, and Indigenous communities, on the other. The former can mobilise extensive political, financial, and technical resources. First Peoples can almost never match the resources available to the proponents and the state, placing them at a serious disadvantage. Government funding for Indigenous participation is in most cases completely inadequate, forcing First Peoples to negotiate with proponents to provide funding. This allows proponents to substantially control the extent and form of public participation in EIA (Rodriguez-Garavito 2011, 298), and may also impose significant negotiation costs on First Peoples and/or result in proponents demanding that Indigenous communities moderate any criticism of proposed projects in return for funding (Gibson and O'Faircheallaigh 2015, 85).

Another issue involves the fundamental values that underpin IA. The dominant narratives around large-scale industrial development emphasise its importance as a source of employment and economic growth, devalue nature and equate development with the 'public interest', making it difficult to oppose project approval and resulting in negative impacts being ignored or

underestimated. For example, Devlin and Yap (2008, 22) show how proponents of the Pilar Dam in Brazil equated the project with 'modernization and progress', arguing that it would attract industries and employment and result in provision of technical support to local farmers, and on this basis suggesting the project was a 'fait accompli'. One expression of this tendency to privilege industrial development is that government regulators have a high propensity to accept proponents' assessments of the significance of expected impacts from projects. For example, Singh et al (2019, 133) compared the significance determinations in proponent EIA reports to final regulator decisions in Canada and found that they are 'overwhelmingly identical (93–95%)'. They conclude that while regulators are financially independent of proponents, 'their decisions on significant are heavily dependent on the information and analysis provided by the proponent reports' (Singh et al 2019, 133).

Linked to the question of values is the evidence and theories of knowledge that underpin the impact assessment and management of large industrial projects. The Western biophysical and human 'sciences' which constitute the basis for EIA are deficient in fundamental ways when considered from an Indigenous perspective. Deficiencies can include shallow time depth in observations of, and limited understanding of, the biophysical and human environments; a 'silo' approach that fails to appreciate the links between different components of those environments, between human and non-human elements of creation, and between the spiritual and material aspects of life; and short time horizons in considering future impacts (Candler et al 2015; Hoogeveen 2016). Gaps in the consideration of Indigenous worldviews are seen throughout EIA, but are perhaps most noticeable in the weak consideration of cumulative effects. From an Indigenous worldview, it is the total sum of effects on Indigenous values over time that are important to consider when determining whether a new project should be allowed to proceed. Cumulative effects alter the vulnerability and resilience of Indigenous peoples and the resources they rely upon in the pre-project situation. This suggests that a deep understanding of cumulative effects should be integral to the assessment of project-specfic impacts. This is only rarely the case in most EIA, where a cumulative effects assessment is typically only conducted if substantial impacts on a valued component are first estimated for a project on a stand-alone basis. This means that existing impacts on Indigenous values and rights, often heavily damaged already, are hidden from view during impact assessment.

In the following sections we consider how IIA is being used to overcome EIA shortcomings.

3. IIA: Mechanisms of Control

'Control' under IIA should be understood as a spectrum. At one end a First People might have minimal influence over just a few aspects of IA, a situation we would clearly not define as IIA. Conversely extensive Indigenous influence across all aspects of IA would merit such a description. It is not helpful to nominate a specific point on the spectrum at which an IA should be labelled 'Indigenous'. Rather we highlight key areas where First Peoples should try to maximise their influence if IA is to work in their favour.

Control over scoping

The first area involves control over scoping, which includes defining what constitutes an impact, which impacts will attract the most attention and resources in an IA, and the space and time over which impacts will be assessed.

A key starting point involves defining the source of the impact to be assessed, which can be done more narrowly or more broadly. A narrow definition might include only the mining operation itself; a broader definition would also include, for instance, mine infrastructure and the impact of outsiders attracted to a region in the hope of gaining employment. A broader definition may be strongly preferred by Indigenous communities who may be affected as much, for instance, by roads built to access a mine site as by mining itself. Another issue involves whether a mine or oil field is considered as a discrete impact, or whether the impact is defined as the new mine *in addition to* whatever mining or oil extraction is already occurring or is about to occur. These cumulative effects are a major issue in the Alberta oil sands industry, for example, where some First Nations are, literally, surrounded by large-scale industrial activity, and have already lost much of the land they rely on for physical, cultural and spiritual sustenance (Candler et al 2015).

A second issue involves the space over which impacts are assessed and, related to this, defining the character of the feature that is impacted. In some cases, an area of impact may be narrowly and arbitrarily defined, for example by way of a set distance (X kilometres) from the mine site.

This may ignore the way in which impacts can be spread much more widely by, for instance, water flows, or movements of people.

Space and the character of the feature which receives impacts interact in the case of cultural heritage in Australia, as illustrated by the following example, involving two EIAs of Liquefied Nature Gas (LNG) projects in adjacent regions of Western Australia. In the EIA conducted by a project proponent, possible damage to Aboriginal cultural heritage sites was recognised, but limited to heritage sites within the project area. The proposed management response was to create exclusion zones around the sites. This focus on sites within the project area ignores the reality that site damage could occur much more widely as a result of a predicted increase in the non-Indigenous population living in the region, and that in Aboriginal culture, sites in one area are almost inevitably linked to sites elsewhere and to cultural practices associated with such clusters of sites. In contrast, an IIA for a second LNG project followed Aboriginal understandings in adopting a *regional* approach to the identification and management of the project's impacts on cultural heritage (O'Faircheallaigh 2017).

A third aspect of scoping involves the relative importance assigned to different impacts and the resources allocated to assessing them. In one EIA, considerable attention was focused on microscopic worms believed to occur in the project area because of their rarity. At the same time funds allocated to social impact assessment were limited. This led an Aboriginal community member to complain: 'The company and the government care more about worms you can't see than they do about people'.² An important aspect of IIA is that affected peoples and communities determine what should be the primary focus of assessment work. This is indicated, for example, by the fact that IIA typically has a strong focus on the cultural impacts of projects, an issue that often receives scant attention in EIA (Gibson et al 2011; O'Faircheallaigh 2017).

Another key issue is the time period over which predicted impacts are assessed. In EIA this is often driven by commercial factors that shape project design. Because future income is discounted and because proving ore reserves is expensive, mining companies often initially design a project for an operational life of about 15 years. However, once a project is operational,

² O'Faircheallaigh Field Notes, Browse LNG Project Aboriginal Social Impact Assessment, 2010.

additional ore reserves are usually established and mine life extended, sometimes for decades. In addition it is now recognised that the environmental and social impacts of mining can last well beyond the period when minerals are being extracted and a mining company has surrendered its leases, and that it is adjacent Indigenous communities that bear the brunt of that impact (Keeling and Sandlos 2015). Time depth must also be considered in the context of cumulative impacts arising from earlier industrial development and government policies. EIA tends to focus on changes that are occurring from present day, while Indigenous groups focus more on total cumulative effects on resources from further back in time. For example, when the container ship MV Rena ran aground on Otāiti (Astrolabe reef) in the Bay of Plenty, New Zealand, in 2011, it resulted in what is considered to be New Zealand's worst maritime environmental disaster. The resultant environmental impacts due to the fuel oil spilled and flotsam cost more than NZ\$660 million to clean up. Faaui et al (2017) show how an impact assessment using Maori methodologies that considered the disaster in the context of its cumulative impact in addition to earlier effects on Maori of colonisation and industrial development resulted in an assessment considerably more negative than analysis of the maritime disaster in isolation. One result of this approach was that efforts at environmental and cultural remediation that appeared positive when the disaster was considered in isolation were assessed as inadequate from a 'cumulative effects' perspective (Faaui et al 2017: 239-40).

A final point involves the heavy emphasis on avoiding or mitigating negative impacts that characterises EIA. This reflects an underlying and generally unstated assumption that the existing, 'pre-project' situation is satisfactory and that the task of EIA is to prevent any deterioration in this situation. However, for many First Peoples the existing situation is *not* satisfactory. Rather it is characterised by inadequate social services like health and education and limited employment opportunities; overcrowded housing; high rates of social trauma and incarceration; and limited control over their land and cultural resources. They want to know if a proposed project can *improve* the existing situation. Thus, IIA also tends to focus on whether and how positive impacts can be maximised and may be regarded as providing a foundation for the subsequent negotiation of benefit-sharing agreements with project developers (O'Faircheallaigh 2017).

In formal terms, these various aspects of scoping come together in the Terms of Reference or Scoping Document for an IA. An indication of Indigenous control of this area as a whole would be a requirement for affected First Peoples to approve this document before an IA could proceed.

Control over who conducts the IA

A key issue here is who conducts IA work, and to whom will they be accountable. In EIA, assessment work is usually carried out by large environmental and engineering services companies which often have limited understanding of what is needed to facilitative Indigenous participation, or of the values and worldviews which shape Indigenous understandings of project impacts. A critical aspect of Indigenous control involves the right to choose, or to approve the choice of, the team that will undertake IA work, so as to ensure that the people involved understand Indigenous values and the requirements to achieve effective Indigenous participation. Ideally, a team will include:

- individuals, Indigenous or non-Indigenous, with credentials in relevant professional areas and substantial experience in Indigenous communities;
- community members with relevant knowledge and expertise, for example elders with a deep knowledge of land use and culture, and individuals with extensive social networks and awareness of community dynamics; and
- younger community members who provide energy and a capacity to engage in particular with youth, and who can use the IA as a learning experience.

An IIA team would normally report to a community-based governing entity, either an existing body such as a Community Council or one created specifically for the purpose. An example of the latter would be the Steering Committees set up to oversee IIAs in Cape York in far north Queensland. These usually include a substantial number of elders; and representatives of formal governing bodies and of significant interests in the community, for example educators, health works, women and youth (O'Faircheallaigh 2000). A similar 'representational cross-section' approach was used by the Stk'emlúpsemc te Secwepemc Nation (SSN) for the Ajax Mine Project IIA in British Columbia, Canada (SSN 2017).

Control over how the IA is conducted

The first issue here involves the sort of information that is used in establishing baseline data and in documenting community concerns and aspirations in relation to a project. In EIA heavy reliance is placed on documentary sources and on collection of data through methods such as surveys of households; flora and fauna surveys; chemical analysis of water; physical monitoring of water flows and tidal movements; and computer-based modelling of expected bio-physical impacts. IIA may replace such methods, or supplement them, by documenting the experiential learning of elders and other community members with a deep knowledge, accumulated over generations, of environmental, cultural and social dynamics. Indigenous observational or sensory indicators, sometimes criticised for being qualitative and imprecise in nature by people whose only frame of reference is western science, are in fact detailed, rigorous, and replicable, and much more likely to resonate with affected First Peoples.

The second issue involves how information about a proposed project and its potential impact is communicated to people, and how their concerns and aspirations are documented. EIA relies heavily on provision of information in written form and on public meetings to solicit community input. Both have serious limitations in an Indigenous context, given that the dominant mode of communication is oral, that literacy in English or other official national languages is often limited, and that there may be serious inhibitions about expressing views in public, especially ones that contradict or challenge the perspective being shared by a proponent.

In IIA stronger emphasis is placed on communication of information orally and visually, and through small group interaction. Consultation may be conducted on the land or in people's homes, or through forums that lend themselves to discussion of specific issues, for instance meetings of elders, hunters and trappers, youth, or women. Strong emphasis is often placed on achieving consensus, not necessarily in terms of unanimity on matters of detail, but in terms of a

³ For example, Nesbitt et al (2018, 76) found that 'Inuit knowledge of their water sources and their ability to describe the relevant characteristics in terms of preferred taste, smell, mouth feel, temperature, and appearance set a foundation for improved quantification using IQ and western science together'.

shared understanding of issues that a proposed project raises and broad outcomes that are desirable, acceptable and not acceptable.

A final issue involves the time available for IA. Communication and engagement practices used in IIA require considerably more time than those typical of EIA. This does not mean that IIA cannot occur within tight time frames if adequate resources are available to, for instance, pursue multiple strands of research and engagement simultaneously. However, the very limited time frames applied in many EIA processes, for instance requiring responses to draft scoping documents or draft EIA reports within a matter of weeks, are unlikely to be compatible with IIA.

Control of IA findings

The culmination of an IA process is the preparation of a report that makes findings of fact and interpretation. Findings of significance are especially important, as they directly affect judgments as to whether or not impacts (and by extension, the project) are acceptable. They are also particularly open to multiple perspectives. For example, an expected decline of 10 per cent in the regional population of a particular food species may not be regarded as 'significant' in an EIA. In contrast, if a specific Indigenous community relies heavily on this species, or if it has high cultural or spiritual importance, any impact on its population may be deemed highly significant. In addition, IIAs are much more likely to focus on total cumulative effects on a wildlife species from all causes of impacts, rather than to focus only on the effect of one proposed project.⁴ Referring to the earlier discussion of cultural sites, loss of a single site of a form that is widely represented across a region may not be rated as significant in an EIA. If that site is part of a complex group of sites that is in turn linked to important ceremonial activity or spiritual connections, an IIA may regard its loss as so significant that it renders the project unacceptable (KLC 2010b).

Recommendations regarding management strategies can also be of great importance. If accepted and imposed as conditions on project approval, they will play a key role in determining the

⁴ For example, the First Nations Major Projects Coalition's (2019, 32) *Major Project Assessment Standard*'s criteria 8.10 rejects the "project contribution approach", and requires a focus on total cumulative effects loading: "The appropriate measure is... the total sum of all cumulative effects on each value from all sources".

ultimate residual impacts of a project. Here also there is considerable scope for divergence, especially as EIA, no matter how rigorous, is rarely informed by the understanding of ecological and social dynamics that IIA can apply in designing mitigation and management methods.

Finally, recommendations as to whether a project may proceed, and under what conditions, are of great importance. Though they may not formally bind decision makers (see next section), in most cases they create the parameters within which regulatory decisions are taken. A key indicator of Indigenous control in this area would be a requirement that an EIA report and recommendations would have to be approved by the affected First Peoples before submission to the relevant regulatory authorities.

4. The relationship between IA and decision-making

IIA seeks to give Indigenous peoples greater control over decisions that affect their lives, including whether a major project should proceed and, if so, under what conditions. However, this aspiration needs to be reconciled against the reality that in almost all impact assessment regimes, it remains the responsibility of other parties to make the ultimate decision on these issues. State authorities, typically a Minister, will approve, reject or require changes to the project as proposed. This state control over the fate of the project means that there are circumstances where Indigenous decisions to withhold consent are not adopted by the state. It is also the case that final investment decisions are undertaken by corporate proponents. In a capitalist system, only they can decide if a project approved by the state will proceed, and they have considerable discretion in shaping project design within parameters acceptable to the state.

It can be difficult to reconcile state and corporate decision-making with the aspirations of Indigenous groups who have ancestral stewardship and governance responsibilities for their territory, but in our experience IIA increases the influence that First Peoples can have on these other layers of decision making. IIAs can create judicial review pressures on statutory decision-makers to fully consider Indigenous evidence. Governments (and proponents) seeking to reduce legal risks have sought to more meaningfully engage Indigenous groups as a result, and IIA can allow them to do this. IIA has been used in Australia for over two decades to help influence

proponent decisions on project design and on systems for environmental and cultural heritage protection (O'Faircheallaigh 2000; 2015). In addition, IIA can be of fundamental value in the assertion and pursuit of First Peoples' governance and stewardship responsibilities which cannot be shirked even if they are not recognized by others (O'Faircheallaigh 2016, 68-69).

Not every IIA has control over decision-making on proposed projects as its primary outcome, especially as the state may be more willing to concede influence or control in other areas. MacDonald et al (2020) developed a 'control and responsibility' spectrum for IIA and, looking at case studies over the past decade, found that most commonly, IAs have seen Indigenous groups taking control over baseline studies. Less numerous are examples where Indigenous groups establish control over EIA processes (timelines, steps involved, information requirement), and least often are they involved in ultimate decision-making on a Project (assessment findings, condition setting, project approvals/rejections).

Each of these foci for IIA can be valuable; Indigenous control over ultimate decision-making can remain elusive without necessarily negating the value of IIA (see next section). However, it is important for First Peoples considering an IA to understand these limitations on control over ultimate decisions. If they are not recognized, disappointment in the outcomes of the assessment among leaders and the community could lead to a reluctance to participate in future IIAs.

A final and important point in relation to decision making is that IIA should be part of an overall strategy rather than the single tool used by Indigenous groups. Successful IIAs can be accompanied by activities on other fronts in order to help inform and influence final decisions on projects, including development of a political and media strategy, finding allies with environmental and citizen's groups, and mobilising pan-Indigenous action. All of these strategies were employed by the Kimberley Land Council in Western Australia, for example, to try and ensure that the findings and recommendations of the IIA of the proposed Browse LNG project were acted on by State and Federal government decision makers (for details see O'Faircheallaigh 2015).

5. Wider benefits of IIA

For Indigenous communities, a critical benefit of IIA is that if a proposed project proceeds, regardless of whether Indigenous consent is provided or withheld, they will be better prepared to deal with its impacts if they understand them as a result of IIAs they have conducted. Indigenous peoples may be more likely to engage in an IIA than in one run by a proponent or the state, as community members are more comfortable to engage within their own cultural group; processes are designed to share information in ways that make sense to First Peoples; and participants feel more confident that their information will be valued, acted on, and protected from misuse.

IIAs can also be used to develop internal unity, and to build impact assessment capacity that has benefits beyond the project concerned. They can be used to gather information critical to the Indigenous group both within and outside the project-specific context, and this information can be employed for example to lever additional funds from government or to develop new policies and plans to protect Indigenous territories. A well-structured and credible IIA can increase the leverage of the Indigenous group and allow it to negotiate an ongoing role in state IA processes. For example, the Carrier Sekani First Nations' multi-faceted IIA of the Coastal GasLink Project (Toth and Tung 2014; MacDonald 2014) was a critical precursor to negotiating a Collaboration Agreement with British Columbia for all future EIAs in their territories (BC, CSFNs and CSTC 2015).

The Indigenous worldview is often better aligned with principles of sustainable development and multi-generational planning, than the shorter-term and more primarily economic focused approach of project proponents. When coupled with increased state recognition of the importance of sustainability principles (see for example Canada's 2019 federal *Impact Assessment Act*), these Indigenous perspectives gain greater weight and have increased informational value for state decision-makers.

Both project-specific and cumulative issues raised by IIAs can lead to better project decisions, more extensive conditions on approvals to protect and benefit Indigenous groups and the environment, and wider benefits in the form of tools such as cumulative effects management

systems and co-management agreements. In the longer term IIAs can blaze a path for entirely new ways of conducting impact assessment at the state level. A steady stream of both calls for, and conduct of, IIAs were two of the factors contributing to changes to impact assessment legislation in Canada at the provincial (British Columbia's new BC *Environmental Assessment Act 2018*) and federal levels (*Impact Assessment Act 2019*).

IIA can assist proponents to ensure that they meet their legal obligations, and provide a basis on which to build long-term, positive relationships with affected communities, reducing the risk of project delay or disruption. The ability to finance a project is increasingly being subject to consideration of the degree to which First Peoples' rights and interests are being recognized and respected (Moody's Investor Service 2020).

In drawing together the benefits of IIA and the wider discussion to this point, it is useful to summarise differences between EIA and IIA across a number of key variables (Table 1). Each feature should be thought of as describing a tendency, rather than as an absolute or a situation which is manifested in every EIA or can be achieved in every IIA. For example, it is not the case that all EIA calculates impacts solely over a time frame driven by commercial discount rates, or that all IIA uses time frames spanning multiple generations. It is rather that EIA has a *tendency towards* the former approach and IIA has a tendency towards the latter. The priority for First Peoples is to shift IA as far as possible towards the right-hand column of Table 1 in order that decisions – those made by First Peoples, proponents, and state actors – are all informed by their worldview and knowledge.

Table 1: EIA and IIA - Tendencies Compared

Variable	EIA	IIA	
Indigenous participation in	Marginal to secondary	Central rationale and focus	
IA process			
Time frame for	Driven by project and regulatory	Driven by requirements for	
conducting IA	deadlines, often short	meaningful Indigenous	
		participation	
Time frame over	Economic life of project and	Expected duration of impacts	
which impacts	driven by discount rates	based on Indigenous knowledge;	
assessed		multi-generational; strong	
		emphasis on capturing cumulative	

Variable	EIA	IIA		
		effects over the entire project life		
		cycle		
Sources and	Short term, primarily	Heavily reliant on knowledge of		
nature of	quantitative data collection	Indigenous peoples, substantial		
knowledge	undertaken for EIA, written	time depth; experiential and		
_	(often secondary) sources	sensory; oral		
Legal	Written legislation and	Group specific laws and		
structures/orders	regulations; little latitude to	stewardship rights/responsibilities;		
	expand scope of assessment	may be encoded in stories.		
	beyond written norms			
Organisation of	Disciplinary and siloed	Holistic, recognising		
knowledge and	(examines separately impacts on	interdependency of elements of		
understanding of	water; air; vegetation; flora and	environment and of environment		
impact pathways	fauna; people); use of	and people		
	biophysical proxies instead of			
	socio-cultural perspectives			
	impacting harvesting			
Assessing for	Avoidance of significant adverse	Best future uses of Indigenous		
	effects from the Project;	territory ('net gains'); aspirational		
	preventative			
Assessment of	Project specific, based on	Cumulative, and based on		
significance	scientific or subjective	assessment of impact on well-		
	'professional opinion'	being and sustainability of		
	definitions of e.g. acceptable	environments, animals and people;		
	levels of contaminant releases;	more likely to be highly		
- · · · · · · · · · · · · · · · · · · ·	species 'rarity'	precautionary		
Relative weight	Economic values (local, regional	Focus on protecting land-based		
attached to	and national) are heavily	subsistence economic livelihoods		
economic,	prioritized	and social and cultural connection		
environmental		to land over the long term		
and social values		0 1 1 1 1		
Role for	Only considered (tangentially) if	Central to the whole process;		
cumulative	the Project causes a residual	cumulative change to date helps		
effects	adverse effect on a Valued	understand sensitivity to future		
	Component	change, and cumulative effects from all sources drives decisions		
Who conducts IA	Consultants salasted by and			
w no conducts 1A	Consultants selected by and	Community members supported by		
	reporting to proponent	technical experts chosen by and accountable to community		
Indigenous	Very limited, key decisions lie	Control over community level		
control over	with regulator, proponent	decisions; increased to substantial		
project decisions	with regulator, proponent	control over process/project		
project decisions		decisions		
		uccisions		

6. Opportunities and Obstacles for First Peoples Undertaking IIA

There is no 'best practice' in IIA; it is about what works best and is possible at the time for each Indigenous group. This section examines some of the opportunities, obstacles and choices First Peoples face in developing and undertaking IIAs. We break this down into discussion of a series of 'whether, who, what, and how' choices. These choices are presented in a linear fashion here; in reality they may occur in a different order and overlap and change during the course of an IIA.

Whether to conduct an IIA

There are a variety of specific enabling factors that will improve the chances of success of an IIA (Gibson et al 2018). Indigenous groups need to gauge their situational context and the 'art of the possible' when determining whether to make the effort to take greater control and responsibility in an IA. Enabling factors include the following:

- Supportive legislation including self-government and co-management mechanisms and opportunities built into statutory mechanisms.
- High degree of Indigenous leverage, which can be associated with the degree of
 connection to place and the centrality of the project's location within a Nation's territory;
 recognition of Indigenous rights through government agreements or legal precedents; and
 a history of community efforts to protect the territory.
- Having the whole of a Project within one Indigenous group's territory, rather than across the territory of multiple Nations, may increase leverage. Where there are multiple Indigenous groups involved, a diversity of values and opinions may emerge, a single IIA process may be more difficult to establish, and having different Indigenous voices in an assessment may reduce the clarity and consistency of messaging. That said, where regional Indigenous unity and cohesion can be attained, having multiple Indigenous groups involved is not necessarily a disabling factor, and indeed pooling of resources and assessment capacity among Indigenous groups can prove beneficial. The IIA for the proposed Browse LNG in Western Australia is a case in point. Here the regional representative organisation, the Kimberley Land Council, provided a coordinating role, facilitating mobilisation of human and financial resources and mutual support across a large number of First Nations (O'Faircheallaigh 2015).

- High Indigenous group human resources capacity. This may include a stable cadre of experienced staff with substantial experience in EIA.
- Degree of funding available. The greater the engagement in an IA, the greater First Peoples' internal, legal and consulting costs will be. Covering these costs may be difficult. A recent study has shown that in Canada, Indigenous groups have received guaranteed funding from state assessment bodies for only a very small portion of their IA costs (First Nations Major Projects Coalition 2018). Unless adequate and timely funding can be levered from the state or proponents, it may be difficult or impossible to conduct an IIA.

Not having one or more of these enabling factors does not mean that an IIA is not possible or advisable. Having as many in place as possible does, however, increase the likelihood that desirable outcomes are achieved, and to determine how far along the control spectrum the Indigenous group can venture. Indigenous groups considering conducting an IIA should first conduct an assessment of which enabling factors they have in place, what the implications are of their presence or absence, and identify means by which they can be augmented by, for example, building higher internal capacity or creating regional Indigenous alliances.

Who to partner with

There are three general models that can be adopted by Indigenous groups undertaking IIA (Gibson et al 2018):

- 1. **An independent IIA** where the Indigenous group 'goes it alone' and makes its own final, independent, decision on whether a Project should proceed and under what conditions;
- 2. A collaborative EIA conducted with the state impact assessment agency; or
- 3. **A co-developed IA where** the Indigenous group teams up with the proponent to assess some or all of a project's impacts.

There are potential benefits and limitations to each approach. For example, an independent IIA may work when an Indigenous group has substantial capacity, or funds to expand capacity, but it has drawbacks where the group lacks the leverage to enforce its decision or conditions at the end

of the process. Collaborative IIAs to date have required some degree of acceptance of (often flawed) EIA systems, and while an Indigenous group may gain a seat at the table with the state, increased process involvement without decision-making control over final outcomes may not see the fundamental change many groups are seeking. Engaging primarily with the proponent requires strong relationship building from the outset of a proposed Project and a willing and incentivized partner, but may put restrictions on Indigenous groups' ability to raise remaining concerns in public. Table 2 identifies some of the attributes we have encountered in examples from the three models.

Table 2: Comparing Three 'Partnership' Models for Conducting IIA

Factor	Independent IA ('go	Co-managed EIA	Co-developed IA
	it alone')	with state	with proponent
Degree of Indigenous control	High	Variable	Variable
Internal capacity /level of effort required	High to very high	Variable	Variable
Control over decision-making	Internal decisions – high; state and proponent - variable	Variable but potentially higher for state decisions	Variable but potentially higher for proponent decisions
Indigenous decision at end of process	Mandatory, highly structured	Optional	Optional
Funding sources	Greater requirement for self-funding; possible access to state and proponent funds	Greater access to state funding	Greater access to proponent funding
Level of community involvement	High to very high	Minimal to high	Moderate to high

It is important to remember that the choice of model is not 'once and for all'. For instance, early engagement with a proponent in the development of an EIA does not preclude an Indigenous group from later conducting its own IIA or engaging heavily in a partnership with the state.

What to focus the IIA on

First Peoples need to determine which aspects of an IA they are capable of undertaking, including conducting Indigenous baseline studies, taking more control over elements of the EIA

process, or producing assessment outputs and decisions. Conducting Indigenous baseline studies is the least daunting of these tasks. Such studies have at least three decades of track record (Tobias 2000) and many First Peoples are familiar with engaging in Indigenous knowledge and land use studies.

In comparison, running a full IA is beyond the capacity of many indigenous groups, and will inevitably duplicate elements of the EIA. A better choice may be to 'shadow' the EIA (Bruce and Hume 2015), and separate out key topics for Indigenous groups to control. These may include:

- Cultural impact assessment
- Indigenous-specific socio-economic impact assessment
- Indigenous knowledge and use studies
- Indigenous rights and title impact assessments
- Cumulative effects assessments across multiple valued components.

Focusing IIA in this way has the advantage of prioritising topics that are central to First Peoples' concerns, that Indigenous community members are strongly incentivized to engage with, and which EIA in general conducts poorly.

How to undertake the IIA – lenses and voices

Section 3 discussed some of the methods and approaches that are used in conducting IIA. Here we expand on the discussion of a key issue, that of determining significance. Two matters are involved here: how significance is assessed; and how decisions are taken about whether or not anticipated impacts are acceptable to a community.

There are a variety of ways to assess significance. They include typical EIA tools, which focus on the imposition of professional judgment and/or quantitative thresholds of acceptable or manageable change. Both are problematic from an Indigenous perspective, given that First Peoples tend to use qualitative observations over a much deeper time depth to make their judgments, and that the professionals making significance estimations rarely share the Indigenous worldview or knowledge base. IIA, in contrast, may involve the development of very different community-specific metrics or lenses, often using the type of decision-making tools that the Indigenous group would use to make other decisions. Examples include:

- Consent: what level and type of impacts will result in the community consenting to, or rejecting, a proposed project.
- Whether the Project will provide a net gain or net loss to the First Peoples or the resources they rely upon, for example whether the Project increases the risk that community ecological and socio-cultural restoration goals may not be accomplished (TWN 2015).
- Whether the Project will make Indigenous laws and norms difficult or impossible to adhere to (Okanagan Indian Band 2018).
- Whether the Project will cause problems for future generations (intergenerational equity), or continue the existing imbalance of benefits and risks between Indigenous and non-Indigenous peoples (impact equity).
- Whether the Project will contribute to or take away from, reconciliation between Indigenous and non-Indigenous peoples (Wabun Tribal Council 2016).

When it comes to the question of how decisions regarding IIAs and the projects they assess will be made, answers will vary depending on what is deemed appropriate by each Indigenous group based on their own governance norms. Decision-making options include the following, elements of which can be combined:

- Collaborative consensus or similar joint decision-making approaches have been sought in state-indigenous community engagement in some IAs, with the two parties seeking to find agreeable measures to fuel informed consent and protect the environment. However, power imbalances with the state retaining control over the ultimate decision, may hamstring this process.
- Community referendums or other community voting or consensus processes, using the type of governance mechanisms that are appropriate to the specific community. For example, IIA reports prepared in preparation for negotiation of agreements governing Rio Tinto's bauxite mine in Western Cape York were endorsed by widely-attended meetings in all the affected communities (O'Faircheallaigh 2016).
- Customized review panels may be struck from a broad cross-section of Indigenous community members, and a panel set up to hear evidence in a quasi-judicial or less formal setting. A panel of 26 community members was used by the Stk'emlúpseme te Secwépeme Nation in their assessment of the proposed Ajax Mine in Canada; their recommendations were provided to and endorsed by community leaders (SSN 2017).
- Leadership decision-making. In some cases, elected or customary leaders may be empowered to make decisions on behalf of the community, once the results of the IIA are available.

7. Conclusion

Indigenous Impact Assessment is an important emerging form of IA. The current growth of IIA is likely to continue because it helps address power imbalances related to proponent control over

information provision and gives expression to growing recognition of Indigenous rights; because First Peoples have growing access to financial and human resources they can apply to IIA; and because integrating Indigenous peoples into IA can be critical to long-term project security and viability.

IIA brings a variety of ingredients to the IA table that have been long neglected or underused. They include the ability to ensure that Indigenous culture, language, and way of life are central to IA; and access to Indigenous perspectives regarding current environmental, cultural and social conditions, how these might change as a result of project, and the significance and acceptability of predicted change. IIA can also allow much higher levels of collaboration and better relationships with the state and with Proponents, which in turn can result in tangible project changes and unique mitigation and benefit opportunities.

A continuing and serious challenge is to ensure that IIA has an impact on state and proponent decisions about projects on Indigenous land. Given this challenge, IIA should be designed to create benefits for communities even where it fails to shape project decisions. These benefits can involve increased capacity and knowledge of how to engage in IA, a more engaged community, and data collection that informs strategic initiatives to improve community well-being beyond the confines of the individual project (e.g., a community workforce capacity profile or an enhanced traditional land use database).

What can First Peoples do to maximise positive outcomes from IIA? First, decisions about whether to engage in IIA and what degree of control to seek must be informed by knowledge of the leverage available to the Indigenous group. Secondly, IIA should be part of a multi-pronged strategy designed to influence state and proponent decision makers that is political as well as technical. Third, and related to both these points, the decision to conduct an IIA has to happen as soon as possible in the planning for a proposed project. Wherever possible, First Peoples should develop their visions and structures for IIA even in advance of a specific project being proposed. Increasingly, Indigenous groups that have engaged in prior IIAs are moving in this direction (see for example, the 'Squamish Nation Assessment Model' for IIA (Bruce and Hume 2015)). First Peoples that have not conducted an IIA before can also use available tools and resources (e.g.,

Gibson et al 2018) to identify their protocols, methods, and information and resourcing requirements for IIA in advance of new projects being proposed in their territories.

What does the future hold for IIA? As we have shown, there is no one 'IIA', but many possible IIA pathways, in terms of rationale, scope, focus, and methods. This diversity is likely to continue because of the diverse circumstances faced by First Peoples, and the fact that most IIA does not have a statutory basis and so First Peoples are free to experiment and innovate. IIA role as a testing ground for innovative methods and lenses makes it of interest to the whole IA community.

If current trends persist, we envision a growing legislative requirement for IIA and a greater willingness by state agencies to embrace collaborative EIA with First Nations. We also envisage greater collaboration with proponents, not just in EIA but also in the overall management of projects and their impacts. As collaboration with both state agencies and corporate actors grows, we expect an increased focus in EIA on Indigenous values and knowledge, with greater attention paid to oral histories and other forms of Indigenous Knowledge, and new assessment frames such as sustainability and intergenerational equity, impact equity (who wins and who loses from a Project), and the need for projects to offer net gains and contributions to recovery of ecosystem. As the participation of First Peoples in EIA grows, we would eventually expect to see them achieve a growing influence on the determination of impact significance, and on final decisions about whether, and on what terms, projects should be allowed to proceed.

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Abstract

This chapter evaluates the shortcomings of state-led EIA processes in addressing Indigenous interests and the need for Indigenous participation in assessing projects that affect Indigenous territories. It shows how these shortcomings can be addressed through Indigenous Impact Assessment (IIA), an important and emerging form of impact assessment. The control or influence that Indigenous groups have in IIA extends into scoping, who conducts the IA, how the IA is conducted, and control over IA findings. The chapter also considers the wider benefits of IIA for proponents, the state, and the environment. The analysis concludes that there is no 'best practice' for conducting IIA, reflecting the diversity of Indigenous peoples and contexts and the scope for innovation that IIA offers. The key issue is that in seeking to gain the most from IIA Indigenous peoples face important choices, including who to partner with, what methods and lenses of assessment to adopt, and where to focus their efforts given limited availability of resources. IIA is likely to become more prevalent because it helps address structural power imbalances, gives expression to growing recognition of Indigenous rights, and reflects a greater willingness by state agencies and proponents to embrace collaborative EIA with Indigenous groups.

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