

# Navigating Imperfect Information on Indigenous Interests and Underappreciated Risks of Privacy Controls in Canada

Jordan Tam, BA, MA, PhD,<sup>1</sup> and Tamlyn Botel, BSc<sup>2</sup>

## Introduction

Impact assessments are exercises in predictive analysis and decision-making under imperfect information. Information is often in shortage but is foundational for sound assessment. Privacy controls, at their core, reduce information flow and availability, directly undercutting this foundation of good assessment and decision-making. This paper explores privacy controls as an underappreciated source of risk to the integrity of assessments related to Indigenous Interests.

### *Defining Indigenous Interests*

By Indigenous Interests, we mean Aboriginal and treaty rights protected under sections 25 and 35 of the Canadian *Constitution Act, 1982*, and broader aspects of Indigenous values and culture that may be affected by a project. Assessments of potential effects to Indigenous Interests are required by the federal *Impact Assessment Act* (S.C. 2019, c. 28, s. 1), and British Columbia's (BC's) *Environmental Assessment Act* (S.B.C. 2018, c. 51). The BC Environmental Assessment Office's User Guide (2021) proposes the following informational inputs to understand the scope of Indigenous Interests: governance; current and future use of the project area; socio-economic, health, and environmental interests; and ethnohistoric and cultural information.

## Cycles of Information Scarcity, Misinterpretation, and Privacy Controls

Consideration of privacy is vital because information for assessments on Indigenous Interests often rely on what community members are willing to share. The alternative is public data that is often too broad or specific, imprecise, inaccurate, outdated, second or thirdhand, irrelevant, or some combination of these. Yet communities are often resistant in providing information. The result is that high-quality information is often in short supply.

One reason for this information scarcity can be traced back to historical and contemporary misuse of Indigenous and community knowledge, which has rightfully heightened concerns among Indigenous peoples about data privacy and ownership. This includes a long and complex history of:

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<sup>1</sup> Principal, Qortado Environmental Consulting, [jordan.tam@qortado.com](mailto:jordan.tam@qortado.com)

<sup>2</sup> Senior Director, Regulatory Engagement & Social Impact, C3 Alliance, [tbotel@c3alliance.ca](mailto:tbotel@c3alliance.ca)

- Systemic abuse of information, for example to promote colonial, industrial, or other agendas, resulting in loss of land and resources, and disruptions to families and communities;
- Superficial consultation, including in impact assessment processes where engagement has not meaningfully addressed impacts;
- Misinterpretation, even by well-meaning people;
- Loss of narrative control once data are released; and
- Loss of anonymity, including where information has been sensitive or stigmatizing.

Communities are understandably inclined to add privacy controls to protect data as a result, restricting what data are shared, how, and when.

Privacy controls, however, can affect Indigenous Interests assessments in some surprising ways. We earlier noted how privacy controls reduce information flow and availability, and are therefore inversely related to information quantity; privacy controls add “friction” to the flow of information. Simultaneously, as concerns about privacy go up, the amount of information people are willing to share goes down. Even if privacy controls create friction, if information is needed and people are concerned about providing it, more privacy controls are often the solution. The surprising part is that, in the context of Indigenous knowledge and data, implementing **privacy controls may be contributing to more concerns about privacy**, not less.

## Privacy controls beget more privacy concerns and controls

The explanation for this unintuitive assertion is that less information makes available information less representative, increasing the risk of misinterpretation, further increasing concerns about privacy, necessitating and motivating more controls—creating a **feedback loop**.

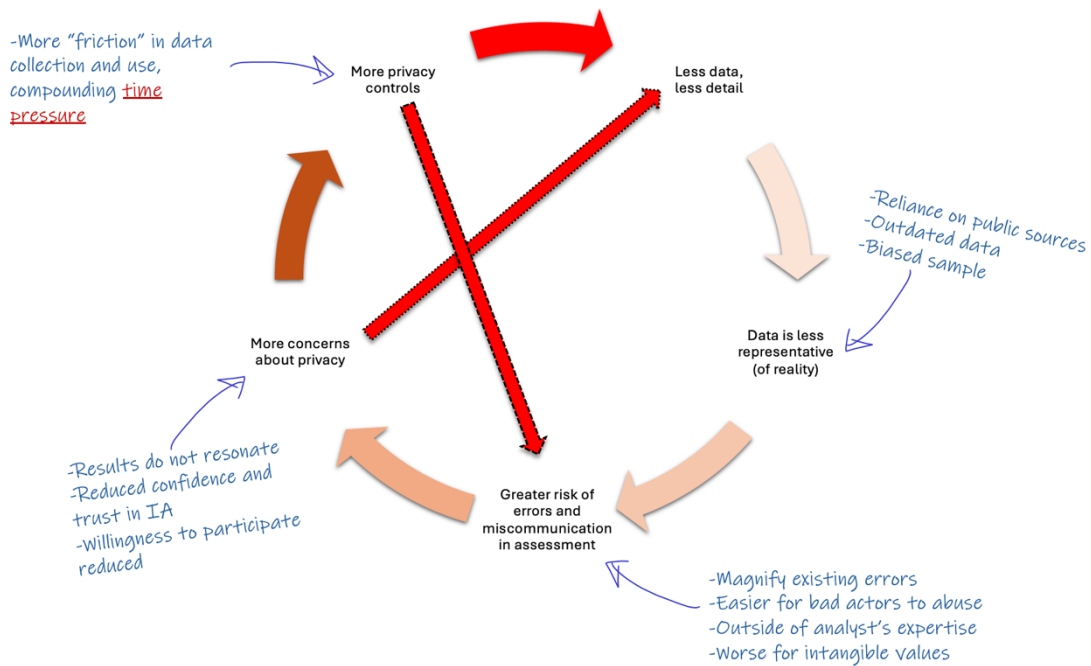


Figure 1. Cycle typical of proponent-driven Indigenous Interest assessments.

### *Privacy Controls*

Many controls can be used to protect the privacy of individuals, communities, and their information, including informed consent; redacting information; regulating how information is transferred and held; aggregating data; and buffering mapped points. Our purpose is not to question the need for privacy controls, but to emphasize that each layer of protection and oversight increases data collection and sharing effort and reduces what data is made available.

### *Data are less representative*

Less information when assessing effects to Indigenous Interests is a problem for two obvious reasons.

First, data are inherently imperfect. It is well known in statistics and the social sciences that the less information there is, the less likely the information is representative. Less data means a greater risk of errors being expressed in the data, such as the over- or under-representation of certain views, places, values, and people.

Second, when firsthand information is scarce, analysts will rely on public sources. However, the public record is often made up of ethnohistorical accounts not written from Indigenous perspectives; potentially outdated information that may have been collected for entirely different purposes; and past assessments produced for a different place and project, with their own data challenges. Although valued components may be similar between projects, the importance of place within the larger context of a Nation's territory is essential for understanding impacts to Indigenous Interests.

### *Greater risk of misinterpretation and miscommunication in assessment*

If data are poor and scarce, even the most well-meaning and impartial analysts would be challenged to avoid misinterpretation or miscommunication in assessment, especially if analysts are not versed the community's cultural nuances and perspectives (as is typically the case). Risks of misinterpretation are greater still as the focus of assessment moves from the tangible to the intangible and as reliance on secondary sources increases. If data are sparse and details vague, there are also more opportunities for bad actors to bias analyses and arguments to fit specific conclusions. The result is assessments that are less accurate and less likely to be accepted by communities.

Indigenous Interests assessments typically occur at the end of an already compounded timeline, when pressure to finish is highest. Friction from privacy controls also add time: to provide oversight, vetting, and checks. Indigenous Interests assessments are thus frequently rushed, making mistakes more likely.

### *More concerns about privacy*

A common refrain heard working with Indigenous communities is that participation in assessment is pointless as the outcome is a foregone conclusion. Underlying these unfavourable views is often a deep mistrust of the impact assessment enterprise, of proponents, Crown governments, and sometimes Indigenous community members and governments. Poorly conducted assessments that misconstrue or misinterpret, intentionally or not, the knowledge and experiences of communities only engender and cement mistrust and a lack of confidence in assessment. The

consequence is a reduced willingness to provide information and a perceived need for greater control over information use and interpretation to prevent similar future occurrences.

## Potential Solutions

If privacy controls can inadvertently lead to poorer assessment outputs and more privacy concerns, then indiscriminately adding more controls cannot be the solution. How then, can the right to privacy be balanced with the need for more and improved information on Indigenous Interests?

One approach is to identify points of intervention to disrupt the cycle, for example, by targeting the “ability to collect and access data” or the “ability to use data” (Figure 2). Another approach is to counteract the cycle by changing the context in which Indigenous Interest assessments are done or the approach to assessment, i.e., by “relocating” or “exiting” the cycle.

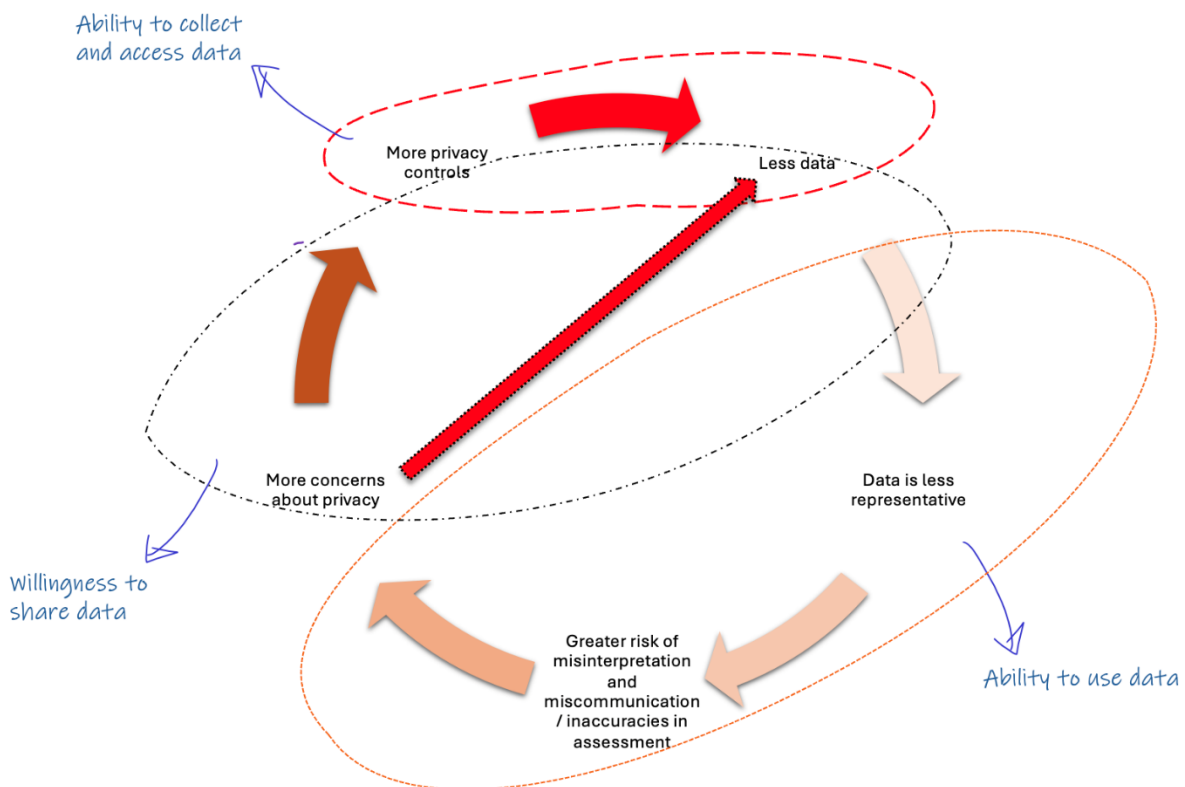


Figure 2. Points of intervention in a simplified privacy-data-analysis-concern feedback loop.

### Relocate the Cycle

Indigenous-led Assessment (ILA) may be the most promising but also most demanding way of counteracting the cycle. This is because ILAs upend the typical model of assessment by putting data collection, access, and use directly in the hands of Indigenous communities.

Taking an assessment “in-house” does not guarantee that the issues raised in this paper are automatically nullified. But, in theory, community control over assessment means that fewer privacy controls are needed because there is relatively greater trust in the institutions and people within the community. Analyses conducted by communities also increase the likelihood that

interpretation will be done by people with proper context and expertise, lowering the risk of misinterpretation, and increasing the likelihood that the results will be accepted.

ILAs are unlikely to be a solution for every community due to the required time and effort. Communities that well-resourced in money and expertise are more likely to succeed. For communities that are remote and where developments are relatively rare, the ability to execute an ILA, unless scoped very tightly, becomes much more difficult.

Importantly, the degree to which Crown governments recognize Indigenous jurisdictions and self-government can greatly affect the feasibility, flexibility, and scope of ILAs, and the willingness of Indigenous communities to undertake them. But, because of the capacity requirements of ILAs, it may be both more feasible and desirable for some communities to undertake smaller and specific aspects of assessment.

### *Improving the Ability to Use Data*

There are some simple steps that can be taken by communities and proponents to improve analyses and minimize risks of misinterpretation. This can include mutual agreement on third-party practitioners to conduct Indigenous interest assessments or communities providing guidance to analysts on the use and interpretation of Indigenous Knowledge.

Community vetting of proponent chapters, or achieving consensus on conclusions before submission, are more involved. Another higher effort option is to have community experts share in assessment duties, such as co-authoring assessments or holding workshops on key topics to mitigate against misinterpretation.

Limiting the scope of assessment can help reduce the risk of misinterpretation by reducing the amount of information required and room for error. Though perhaps counter to a holistic approach, it is one that has been adopted in some ILAs, and should be weighed against the potential of a larger assessment done poorly.

Indigenous Interest assessments are often among the last to be completed. Proactive application of the precautionary principle can help relieve time pressures. Baseline data and preliminary project designs can be a sufficient basis to apply a precautionary lens, and can be refined if major changes arise. A precautionary approach also frees up time to focus on creating better mitigations, monitoring and management plans, and follow-up programs.

### *Improving Data Collection and Access*

Careful and considered privacy control design is likely less impactful to disrupt the cycle, but can nonetheless be important for protecting privacy while improving information flows.

Increasing intra-community accessibility to information is an important low-effort step, which can improve community representatives' ability to engage effectively in assessment. Similarly, consultants working with communities should ensure that information is not locked behind proprietary software or systems.

Consent processes should be designed to protect privacy while maintaining simplicity and efficiency, saving time and attention to collect more and better data. Information flows may also be improved if proponents verify acceptable sources with communities before use and/or

communities can make preferred datasets available, thereby defining what information is appropriate to use. Many communities have information in their archives, but making these ready for external parties can be an expensive and laborious undertaking. Although likely a high-effort endeavour, communities can try to “correct” the public record by removing unauthorized sources to reduce the risk of misinterpretation.

The representativeness of information can also be improved by conducting a gap analysis to inform data collection.

### *Exit the Cycle*

A final way of counteracting the cycle is to build from other processes and venues where Indigenous Interests have already been clarified with communities. Land use plans, modern treaties, and settled land claims can reduce the overall need to collect and interpret data as the nature of Interests, major concerns, and potential impacts may have already been distilled and critically, agreed upon.

There is also opportunity if Indigenous communities, proponents, and Crown agencies can agree to work collaboratively and creatively outside the official confines of assessment processes. Taking key issues around Interests out of the “public eye” of assessments so that they can be dealt with and negotiated in private (e.g., such as in bilateral agreements or benefit agreements) can help protect privacy and reduce the risk of misinterpretation, though at the expense of broader transparency. Opportunities are again constrained by the quality of relationships between the government, proponents, and Nations.

## Key Takeaways

- Privacy controls are necessary but create friction that reduces data quantity and quality.
- A feedback loop exists: less data increases misinterpretation risk, which increases privacy concerns and more controls.
- ILAs offer a promising path by relocating assessment within communities, but depend on resources, respect, and good relationships.
- Interventions targeting data use, collection, and access can disrupt the cycle without sacrificing privacy.
- Collaborative processes outside formal assessment can be used to bypass the cycle.

## References

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

*Environmental Assessment Act*, S.B.C. 2018, c. 51.

Environmental Assessment Office. 2021. EAO User Guide, Introduction to Environmental Assessment Under the Provincial *Environmental Assessment Act* (2018). Version 1.02.

*Impact Assessment Act*, S.C. 2019, c. 28, s. 1.