

British Columbia First Nations
Regional Information
Governance Centre



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Advancing Compensation & Valuation Strategies

A Guide for First Nations Governments in British Columbia

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Who is the BC RIGC?

The British Columbia First Nations Regional Information Governance Centre (BC RIGC) is advancing implementation of the national *First Nations Data Governance Strategy* adopted by First Nations leaders. The BC RIGC supports BC First Nations governments and organizations in owning, protecting, and using their data as a foundation for self-determination and good governance.

Our approach is built to be responsive to First Nations' needs and governance, and has been tested by Nations. We offer data consulting services, data capacity assessment and development resources, access to funding, and more, all at no cost. Through our Build Your Own Data Centre platform, First Nations can access complimentary data storage and analysis tools and data sets that can support valuation, and our team of experts can support Nations in navigating and implementing various approaches. For more information, visit

<https://www.bcfnrigc.ca>.

Background

This Guide is intended to support First Nations in B.C. in navigating complex choices related to compensation and valuation in situations where they choose to engage in those discussions and negotiations. This Guide is limited to valuation approaches for projects or actions that may proceed. It is acknowledged that there is also a value to withholding consent and saying 'no'. Valuation in that context is beyond the scope of this Guide, but may be a subject for further workshops and development of tools or guidance.

For Nations engaging in compensation and valuation discussions and negotiations, the issues at hand are layered: they involve law, governance, economics, culture, and lived experience. The words we use to discuss them are equally complex. Terms like *value*, *compensation*, and *impact* carry multiple meanings depending on context, discipline, and worldview. No single definition can capture their full range of uses, nor do we attempt to set universal ones here. Instead, we provide working definitions to create a shared language for this Guide. These definitions are practical tools — clear enough to ground discussion, while broad enough to recognize the diversity of perspectives that exist across leadership, practitioners, and legal counsel.

- **Value:** We use *value* broadly to capture the significance something holds for people — whether through direct use, cultural or spiritual meaning, or the possibility of future use. Value includes *use value* (benefits from using goods or services, sometimes reflected in market price), *intrinsic or intangible value* (the importance of a sacred site, a relationship, or a species), and *option value* (benefits of knowing something can be used or preserved for the future). Our working definition does not extend to the value that other species might hold for things, but is grounded in people's and groups' beliefs, preferences, and perceptions, whether or not these are reflected in markets.
- **Compensation:** We use *compensation* to refer to the ways harms, losses, or imbalances are addressed or remedied. Compensation can be monetary or material and is sometimes bundled with other forms of redress, such as recognition or apology. At its core, compensation reflects accountability and an effort to restore fairness, balance, or relationship — not only to replace what was lost but also to acknowledge the harm itself.
- **Impact:** We use *impact* to describe the difference a situation, action, or condition makes compared to what would exist in its absence. Impacts may be immediate or long-term, direct or indirect, tangible or intangible. They include damages, harms, and losses, as well as broader shifts in relationships, resources, opportunities, cultural continuity, and ecological health. Impacts matter not just in the present, but also in how they affect past understandings and future possibilities for communities and Nations.

Together, these terms provide a shared vocabulary for the Guide. We recognize that outside this document, each of these words may be used differently — across disciplines, legal frameworks, and worldviews. Within this Guide, however, they serve as practical anchors to support clarity, consistency, and meaningful dialogue.

First Nations in British Columbia have advocated for generations for principled and just approaches to addressing the harms and impacts to their lands and resources perpetrated by colonization. 'Land Back', the full recognition and implementation of Title and Rights, and respect for Indigenous laws regarding governance, management, and stewardship of lands and resources are core to addressing this enduring and pernicious legacy of colonization.

As this vital and ongoing work in pursuit of a just reconciliation proceeds, there is also a requirement and need for compensation to First Nations for past and new impacts with respect to their lands, waters, and resources. This is articulated in the standard of redress in the United Nations Declaration on the Rights of Indigenous Peoples ("UN Declaration") which requires, amongst other things, that where free, prior, and informed consent is not granted "Indigenous peoples have a right to redress, by means that can include restitution or, when this is not possible, just, fair, and equitable compensation." (Article 28) Compensation is also integral as damages for the unjustified infringement of title and rights, and the accommodation of new impacts, pursuant to section 35 of the Constitution Act, 1982.

UN Declaration on Right to Redress

The UN Declaration has many articles that address the right to redress for impact. For example:

Article 8

1. Indigenous peoples and individuals have the right not to be subjected to forced assimilation or destruction of their culture.
2. States shall provide effective mechanisms for prevention of, and redress for:
 - a. Any action which has the aim or effect of depriving them of their integrity as distinct peoples, or of their cultural values or ethnic identities;
 - b. Any action which has the aim or effect of dispossessing them of their lands, territories or resources;
 - c. Any form of forced population transfer which has the aim or effect of violating or undermining any of their rights;
 - d. Any form of forced assimilation or integration;
 - e. Any form of propaganda designed to promote or incite racial or ethnic discrimination directed against them.

Article 11

1. Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.
2. States shall provide redress through effective mechanisms, which may include restitution, developed in conjunction with indigenous peoples, with respect to their cultural, intellectual, religious and spiritual property taken without their free, prior and informed consent or in violation of their laws, traditions and customs.

Article 20

1. Indigenous peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities.
2. Indigenous peoples deprived of their means of subsistence and development are entitled to just and fair redress.

Article 28

1. Indigenous peoples have the right to redress, by means that can include restitution or, when this is not possible, just, fair and equitable compensation, for the lands, territories and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used or damaged without their free, prior and informed consent.
 2. Unless otherwise freely agreed upon by the peoples concerned, compensation shall take the form of lands, territories and resources equal in quality, size and legal status or of monetary compensation or other appropriate redress.
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While compensation is an essential part of the constitutional and human rights of Indigenous peoples, there are few established, principled, and just approaches to determining compensation amounts. At the same time, all First Nations across British Columbia are actively involved in processes of negotiation and/or litigation where compensation and redress – which may take various forms including apology, program investments, monetary settlements, and more – are expected and necessary outcomes. Although not the subject of this Guide, for some Nations and in some circumstances, the conclusion may be that no amount or form of compensation can justify certain impacts. As noted earlier, this Guide is focused on when Nations decide to move forward with exploring compensation and valuation when a project or action may proceed.

In order to help close this gap – between the active pursuit of compensation in negotiation and litigation and the limited range of established and principled approaches – the Union of BC Indian Chiefs (UBCIC) and the BC First Nations Regional Information Governance Centre (BC RIGC) supported by UBC PhD candidate Nicole Kaechele, have co-developed this Guide for Advancing Compensation & Valuation Strategies (Guide) to support First Nations governments and their advisors and counsel. It is intended to consolidate practical guidance on compensation valuation in order to support informed, confident, Nation-led decision-making on valuation approaches best aligned with their interests. It is also intended to be relevant within a range of contexts where First Nations may be seeking compensation alongside advancing other goals, navigating complicated trade-offs and choices that have to be made as they strive to honour the generations that came before, the needs of current generations, and the well-being of the generations to come. These contexts include:

- Accommodation for potential impacts to Title and/or Rights;
- Compensation for infringement of Title and/or Rights;
- Compensation for infringement of historic or modern Treaty Rights;
- Compensation for a failure to fulfill or a breach of lawful obligations, including in the Specific Claims process;
- Redress for the violation of the human rights of Indigenous Peoples as expressed in the *United Nations Declaration on the Rights of Indigenous Peoples*; and
- Benefit-sharing and revenue-sharing models with the Crown or third parties.

At this time the Guide is not designed to inform the valuation of losses resulting from harms to the person, failure to deliver required or adequate programs or services, or discrimination

in the delivery of programs and services. Nor is it, as noted, intended to address how a Nation decides whether to say yes, no, or “not yet” to a proposed activity or arrangement.

To ensure this Guide is relevant and useful, its development is following a series of steps that draws on the guidance and experience of First Nations, as well as input from technical experts and advisors. Legal, policy, and economic experts developed an initial draft of the Guide, drawing upon literature and practice. Subsequently, a workshop was held on September 10-11, 2025 with practitioners, First Nation leadership and staff, and legal experts who reviewed and provided input to the Guide. Based on this input, the Guide was revised and shared with First Nations through the UBCIC, BC RIGC, and UBC, with support available through the BC RIGC for Nations interested in applying the Guide in their specific contexts.

The content and design of this Guide have been intentionally developed to reflect the diversity of the compensation and valuation space, and the broad range of potential audiences for this Guide - from political leadership, to negotiators, to legal counsel, to practitioners and technicians.

The sections of this Guide are as follows:

Key Terms and Definitions

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A description of how critical words are used throughout this document.

Policy and Legal Context

p.14

A description of the political, policy, and legal environment within which valuation processes occur.

Background on Value and Valuation

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A summary of relevant background about the discipline and practices of valuation.

Nation-Led Valuation Strategy

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A sequence of phases to support Nations to move through the valuation process.

Conclusion

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A reflection on the gaps in Crown approaches to compensation and the role of Nation-driven valuation methods as practical, evolving tools for change.

Methodology Guide

p.59

Approaches to valuation, including the what, why, data requirements, and steps involved in each.

Throughout, we ground practical guidance in **hypothetical scenarios** Nations face.



Section 1 :

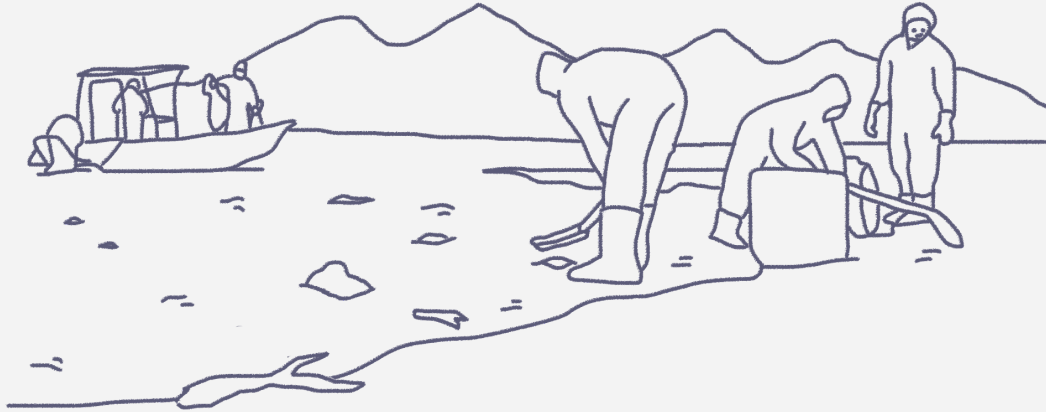
Key Terms and Definitions

The terms used throughout this paper carry multiple meanings depending on context, discipline, and perspective. Leadership, practitioners, and legal counsel may all interpret these words differently, and no single definition can capture their full range of uses. This list is not intended to provide definitive or universal definitions, but to establish a shared understanding for the purposes of this Guide. By clarifying how we are using these terms in this context, we can ensure consistency in meaning within the document, while acknowledging that outside this paper, these words may be used in other valid ways.

Compensation	The act of providing something of value to make amends, restore balance, or address harm, loss, or imbalance. This may take the form of monetary payment, material goods, or services, and is sometimes bundled with other forms of redress, such as symbolic gestures, apologies, acknowledgments, participation in cultural protocol, or other actions intended to repair relationships, restore fairness, or express accountability.
Economic Rents	The surplus value generated after all costs of production—including labor, capital, and materials—have been accounted for.
Fair Market Value	The price that a willing buyer and seller would agree on. A fair market value occurs in an open market, with neither being forced to act and both having full information. Often used in legal or financial contexts to estimate what something is “worth.”
Flow	The ongoing benefits, revenues, or losses that occur over time from using or accessing a resource — such as annual income from leasing land or the loss of fishing harvests over many years. Flow valuations estimate value across time.

Impact	Impact refers to the full range of ways a situation, action, or condition changes the Nation — past, present, or future — compared to how things would be in its absence. It encompasses damages, harms, and losses, as well as broader shifts in relationships, resources, opportunities, cultural continuity, ecological and physical health, and wellbeing. Impacts may be tangible or intangible, direct or indirect, immediate or long-term. Together, they represent the difference made by an event or condition, measured not only in material or economic terms but also in social, cultural, environmental, and intergenerational dimensions.
Non-Use Value	The value of something even if it's not used directly — such as the importance of knowing a sacred site exists or that a species continues to thrive.
Opportunity Cost	The value of what you give up when you choose one option over another. For example, if a Nation lost the ability to develop land, the opportunity cost could be the income or benefits that would have come from that use.
Option Value	The value of keeping the possibility open to use something in the future, even if it's not being used now — like preserving land for future generations.
Revealed Preferences	Revealed preference methods study behaviours that people undertake and their costs, such as how far they travel to visit a site or how much more they pay to live near a cleaner environment (hedonic pricing) and use those to infer value.
Stated Preferences	Stated preference methods collect data, through surveys and other means, from individuals directly, about their willingness-to-pay or willingness-to-accept under hypothetical scenarios.
Stock	A fixed asset or resource that exists at a point in time — such as a parcel of land, a forest, or a fishing license. Stock valuations estimate the value of something as it is.

Substitution	A way of estimating value by comparing to something similar that does have a market price. For example, if traditional food sources aren't bought or sold, their value might be estimated using the cost of store-bought alternatives.
Use Value	The value of something based on the direct benefits it provides through use or access — like fishing in a river, living on the land, or harvesting resources.
Utility	A term from economics that means the satisfaction, benefit, or usefulness someone gets from something. It helps explain why different people or communities may value the same thing differently.
Value	The value something holds in and of itself to people, regardless of use or benefit to people — this includes the value derived from using it, knowing it exists, or preserving it for others such as the spiritual or cultural significance of a place. Some methods and disciplines focus on subsets of value (e.g. non-use, use, option, or market value).
Willingness to Pay / Willingness to Accept	Willingness to Pay (WTP) is the maximum amount someone is prepared to spend to gain something. Willingness to Accept (WTA) is the minimum amount someone would need to be compensated to give something up.



Hypothetical Scenario: **Marine Fuel Spill in a Key Harvesting Area**

A coastal Nation's territory includes an ecologically rich inlet that serves as a central harvesting area, a travel route, and a teaching place for youth and Elders. Despite repeated warnings from the Nation about navigation risks in a narrow channel, a commercial tug-and-barge encounters mechanical failure and runs aground on nearby rocks. Thousands of litres of diesel and lubricants spill into the water. The slick spreads quickly, contaminating clam beds, disrupting marine habitat, and forcing closures of food harvesting areas relied on by many households.

In the immediate aftermath, the Nation mobilizes its own responders – Guardian teams, harvesters, and knowledge holders – drawing on generations of local expertise. While federal and provincial agencies initiate their standard response protocols, the Nation observes delays, conflicting jurisdictional roles, and cleanup decisions that do not align with Indigenous knowledge or local conditions.

As the spill stabilizes, the Nation faces a complex set of choices about how to seek redress and accountability:

- **Regulatory and legal pathways:** The Nation could pursue remedies under federal spill response legislation, or bring a claim for damages to Aboriginal Rights, Title, and governance. Each route is technically available but slow, costly, and shaped by colonial frameworks that do not reflect the Nation's laws or the full extent of the impacts.

- **Negotiation with governments and the company:** The Crown and the shipping company signal interest in a negotiated solution, but their mandates focus narrowly on market losses—cleanup costs, commercial fisheries impacts, and limited short-term measures. Cultural impacts, governance impacts, and long-term damage to marine systems fall outside their standard approaches.
- **Nation-led valuation and assessment:** The Nation considers launching its own impact assessment grounded in Indigenous law, governance, and marine stewardship protocols. This includes valuing losses to food systems, intergenerational knowledge transfer, cultural continuity, and the Nation’s role as caretakers of the territory. The assessment could form the basis of a comprehensive compensation claim that exceeds what the Crown’s fragmented frameworks currently contemplate.
- **Systems change:** The Nation also sees an opportunity to push for systemic reforms—co-governance of spill response, Indigenous-led marine safety, and investment in local capacity to prevent future disasters.

In the wake of an infringement to Rights, Title, and governance, a Nation is often forced to navigate **multiple, imperfect pathways** at once. The Crown’s limited and siloed policy frameworks shape what kinds of impacts are acknowledged, what compensation is considered “valid,” and how quickly redress is possible. In response, the Nation must choose whether to work within those limits, challenge them, or make use of its own valuation and governance processes – choices that set the stage for the Nation-led strategies explored in this Guide.

Section 2 :

Policy and Legal Context

Compensation for B.C. First Nations has historically been fragmented, arbitrary, and often resisted by the Crown. Nations encounter refusals, lengthy processes, limited opportunities to say no to projects, and inconsistent treatment across negotiations, claims, and courts. Legal and policy frameworks offer only partial guidance: while courts have developed some principles, they have yet to be applied comprehensively or coherently, and arguably remain rooted in colonial perspectives. At the same time, governments have approached implementation of UNDRIP in an ad hoc and minimalist manner.

Two central legal pathways illustrate these limitations: compensation for infringements or impacts to section 35(1) Title and Rights, and breaches of fiduciary obligations concerning reserve lands under the Indian Act. Both reveal gaps in legal principles, policy, and practice that shape current approaches to valuation and compensation.

For millennia, First Nations generated and preserved value through protocols, practices, and norms that supported sophisticated governance systems, cultural expression, languages, and the production of food, goods, and knowledge. Oftentimes, these approaches to generating and safeguarding value also focused on preserving value for future generations. Value creation and preservation was expressed through decisions about how to organize society and use lands, waters, and resources in ways that align with First Nations worldviews and systems. Further, First Nations' governance and legal systems provided foundations for understanding impacts, compensation, and wealth. These healthy legal orders were disrupted by colonization, which eroded many of these protocols, practices, and norms, and introduced different ones, reflecting a different worldview.

Today, Nations are faced with the need to seek compensation and recognition of losses to value and infringements on rights and title due to impacts from the Crown, while simultaneously rebuilding the systems of governance and legal orders that support and recognize First Nations' role as decision makers. This reality sets up choices and tradeoffs, as Nations are brought into decision-making processes that do not reflect their governance systems, in cases, do not have sufficient capacity to support meaningful participation, or do not constitute a meaningful opportunity to decide or influence a decision outcome.

Compensation for colonial impacts, whether past or present, has been hard to come by. First Nations have typically faced complete Crown refusal to compensate for harms done,

or at best been forced to endure decades long processes where the Crown seeks to make only arbitrary and unprincipled payments.

Recourse to the Courts has often been necessary, where First Nations have achieved success in confirming some principled foundations for compensation based on the common law. However, these principles are in their nascence, and as the Courts are themselves colonial institutions, there is at best only cursory attention given to what compensation may mean in Indigenous legal traditions. At the same time, even as Court decisions establish principles for valuation of compensation, the Crown continues to resist their application in negotiations with First Nations.

The effect of this on First Nations is that in pursuing compensation they are consistently confronted by roadblocks, demands for trade-offs, and exploitive approaches that seek to prey on the conditions of poverty and economic exclusion that are integral to colonization. Further, it is essential to acknowledge that there are depths of losses as a result of colonization which can never be appropriately quantified or compensated, or redressed through material means, including generations of interference with the transmission of knowledge, spiritual practices, identity, connection to place, community, and ancestry, and myriad forms of cultural expression.

The tortuous path First Nations have been put on has also resulted in a patchwork of contexts within which the requirement of compensation arises. For example, First Nations can find themselves at once: in negotiation for accommodation for new Crown land and resource decisions; in comprehensive Title and Rights negotiations whether treaty or non-treaty; pursuing settlement of multiple claims related to reserve lands or violations of historic treaties through the Specific Claims Process; and in Court seeking compensation on any range of matters.

There was perhaps some hope that through the passage of laws implementing the *United Nations Declaration on the Rights of Indigenous Peoples* by Canada and British Columbia that a more principled and coherent approach to compensation – including through application of the standard of redress – would emerge. This has not happened as, perhaps unsurprisingly, governments have approached the implementation of the UN Declaration with its traditional ad hoc, arbitrary, and minimalist pattern.

It is beyond the scope of this paper to delineate all of the policy and legal dimensions of the contexts within which issues of compensation may arise and how valuation has been dealt with. However, an overview of some aspects of the legal and policy dimensions of compensation for infringements or impacts to section 35(1) Title and Rights, and of compensation breaches of fiduciary obligations with respect to *Indian Act* reserve lands,

provides a helpful grounding for orienting how the Guide may be used in the current *status quo*. In particular, it reveals the limitations and challenges in both the legal principles, as well as policy and practice, that currently informs valuation for compensation. Understanding this context supports Nations in determining what path is best for them in seeking compensation.

Although these contexts are distinct, compensation strategies and methods can span compensation for infringements or impacts to section 25(1) Title and Rights, and fiduciary obligations with respect to *Indian Act* reserve lands, as well as other contexts not treated in as much detail in this Guide. For example, the principles of compensation outlined in *R. v. Southwind*, in particular the articulation of 'equitable compensation', have been used as foundational guidance to methods used in cases outside of Specific Claims context from which it emerged. Overall, as First Nations navigate the patchwork of contexts within which compensation arises, valuation methods that align with and better capture First Nation's concepts of value are one tool that can help shape more principled approaches to compensation across contexts.

Compensation and Section 35(1)

The scope of section 35(1) is broad, covering Aboriginal title, Aboriginal rights, as well as treaty rights. Compensation can arise in all of these contexts, and in the case of Aboriginal title and rights, whether or not they have been proven, established, or agreed to. The duty to consult and accommodate about so-called 'asserted' rights also can give rise to a need for compensation as a form of accommodation.

It is beyond the scope of this paper to examine the legal and policy intricacies of each of the ways compensation may arise under section 35(1). A good illustrative starting point, however, is the legal framework of Aboriginal Title, which is at the core of the work of reconciliation across British Columbia. The following aspects of the law of Aboriginal Title are informative to developing approaches to compensation.

Aboriginal Title is distinct from Indigenous Title

Aboriginal title is a creation of the common law. It exists, is defined, and operates within, not without, the role of section 35(1) to articulate collective rights that exist as limits on action by the Crown. This is distinct from what may be called Indigenous title, which is the political and legal relationship Indigenous Nations held as sovereigns with the lands that make up Canada prior to colonial settlement, treaty-making, and the establishment of Canada. Indigenous title is defined through Indigenous legal orders and customs, animated by conceptions of

property, relationships to land, and worldviews that are in many ways different from those that undergird the common law.

The discussion between Aboriginal Title and Indigenous Title is important because it illustrates how when First Nations are seeking compensation for impacts or infringements to Aboriginal Title they are already in a place of compromise. While the common law recognizes the existence of Indigenous Title, and how it is an aspect of Indigenous sovereignty with which reconciliation must occur, what is being compensated and accounted for through section 35 is the common law legal construct of Aboriginal Title.

Aboriginal Title is a Sui Generis Property Right

Aboriginal title is a distinct, and *sui generis* form of property right. As the Supreme Court of Canada states in *Delgamuukw*:

Aboriginal title is a right in land and, as such, is more than the right to engage in specific activities which may be themselves aboriginal rights. Rather, it confers the right to use land for a variety of activities, not all of which need be aspects of practices, customs and traditions which are integral to the distinctive cultures of aboriginal societies. Those activities do not constitute the right per se; rather, they are parasitic on the underlying title. However, that range of uses is subject to the limitation that they must not be irreconcilable with the nature of the attachment to the land which forms the basis of the particular group's aboriginal title. This inherent limit...flows from the definition of aboriginal title as a *sui generis* interest in land, and is one way in which aboriginal title is distinct from a fee simple. (*Delgamuukw*, 111)

In *Tsilhqot'in Nation* the Supreme Court of Canada also reinforces the *sui generis* nature of Aboriginal title:

The characteristics of Aboriginal title flow from the special relationship between the Crown and the Aboriginal group in question. It is this relationship that makes Aboriginal title *sui generis* or unique. Aboriginal title is what it is — the unique product of the historic relationship between the Crown and the Aboriginal group in question. Analogies to other forms of property ownership — for example, fee simple — may help us to understand aspects of Aboriginal title. But they cannot dictate precisely what it is or is not. As *La Forest J.* put it in *Delgamuukw*, at para. 190, Aboriginal title “is not equated with fee simple

ownership; nor can it be described with reference to traditional property law concepts". (Tsilhqot'in Nation, 72)

Aboriginal Title is a property right that includes ownership, and the full beneficial interest in the land

Aboriginal title is a collective beneficial interest in the land– the title holders have the right to the benefits associated with the land, which the Court describes as the right to “use it, enjoy it, and profit from its economic development”. (*Tsilhqot'in Nation*, 70). This includes:

- Ownership rights similar to those associated with fee simple – such as the right to decide how the land will be used, the right of enjoyment and occupancy; the right to possess the land; the right to the economic benefits of the land; and the right to pro-actively use and manage the land;
- A restriction on the use of Aboriginal title lands is that the collective title is held for the present generation and all future generations. The implications of this are that “it cannot be alienated except to the Crown or encumbered in ways that would prevent future generations of the group from using and enjoying it” (*Tsilhqot'in Nation*, 15). This does not mean that changes to the land, including permanent ones, are impossible. It will depend on the specifics of the proposed use;
- While Aboriginal title is tied to the historic occupation of the land prior to sovereignty, the uses of the land by First Nations are not confined to historic uses and customs. The land can be used in a modern way, if that is what the Nation chooses.
- Where Aboriginal title exists the Court stated that the lands in question “vests” in the Aboriginal group. This means that the full beneficial interest in the land – the right to enjoy the land and its resources and enjoy the fruits of their use, is that of the Aboriginal group and not the Crown.

Where Aboriginal Title exists the standard is consent, and where Title is infringed compensation is owed

A functional reality created by the nature of Aboriginal title is that the only path to true certainty for land and resource development is through achieving consent. While a choice may be made to technically rely on the ‘prior to proof’ approach to consultation and accommodation developed in Haida Nation, the reality is that a government or third party can never be certain whether Aboriginal title exists or not unless the matter has been determined and resolved by treaty or court declaration. A practical and principled choice thus has to be

made between bearing the substantial risk of project cancellation or owing damages – as well as other potential political and social challenges – or pursuing consent.

Further, as identified above, the relationship between Crown land and Aboriginal title is clear – wherever Aboriginal title exists the full beneficial interest in the land is the proper title holders. The Crown, subject only to the stringent standards of justification, requires consent in order to authorize or use the land. This substantive limitation on Crown property rights has existed since the time of Confederation wherever Aboriginal title exists.

Where dealing with consultation and accommodation, the economic dimension of Title and Rights continues to be operative

The economic interests of First Nations do not arise only in the context of established or treaty protected title and rights. They are always operative, including where the duty to consult and accommodate arises. These economic interests may arise in multiple ways, including the value of the land or resource which may be exploited or impacted by a decision, the economic aspects or expressions of particular rights, such as to fishing or hunting, or the costs associated with properly protecting or mitigating impacts to Indigenous values, interests, or rights. At the same time, there is very little case law that specifically elucidates principles for calculating what compensation may be owed as part of accommodation.

While some principled foundations for compensation exist in case law, the Court has not itself conducted many valuations for the purposes of compensating Aboriginal Title and Rights

While the Courts have laid down principles, such as those of Aboriginal Title, that are a foundation for valuation of compensation for impacts to Title and Rights, they are not, to date, in the practice of determining and ordering compensation amounts. There are a range of reasons for this including: technical issues related to how matters are brought to Court and the types of remedies sought or available; Court bias towards negotiation between Crown and First Nations, as opposed to judicial determinations, as foundational to reconciliation; and a lack of technical expertise by Courts on how to determine appropriate amounts.

In addition to the law of Aboriginal Title and Rights, there is growing jurisprudence regarding valuation for the violation of promises in historic treaties. While these only have limited applicability in British Columbia (because of the limited number of historic treaties) they do reflect the expansive nature of the compensation owed for the violation of Aboriginal rights.

For example, in *Restoule v. Ontario*, the Supreme Court of Canada was explicit that an annuity treaty promise had been violated for over a century because it had not been increased, and that failure to do so had deeply undermined the treaty relationship. Compensation must be paid for the past, that considers economic conditions over time, and the purposes of the treaty to share the wealth of the land. The Court further outlined in a process where time-bound negotiations would occur, and that an outcome with Crown payments for the past and into the future must result. The outcome would be subject to court review.

While the Courts have laid out these principles regarding section 35(1), they are not typically expressed in negotiations with the Crown. Specifically, despite the adoption of the UN Declaration, as well as the *Principles Respecting the Government of Canada's Relationship with Indigenous Peoples* (which have been mirrored by British Columbia) as a framework for Crown relations with Indigenous peoples, Crown negotiation approaches continue to be ad hoc and arbitrary. Neither the provincial or federal Crown has any principled approach to the valuation of compensation for infringement of or impacts to section 35 rights despite the guidance from the Courts. While there are many forms of agreements that provide compensation, the Crown's approach to compensation is often experienced as incoherent.

For example, revenue-sharing models in British Columbia that are intended to constitute an aspect of 'economic accommodation' are not based on any legal principles regarding the compensable value of a First Nation's title or right. Rather, they are based on the sharing of pre-existing forms of revenue that British Columbia generates – revenues that are not calculated in any way based on the value of the title or rights. Reflecting this, mineral revenue-sharing is based on a share of the pre-existing mineral tax that is collected by the Province. The mineral tax is calculated on net revenues after capital investments, not on the value of the resource itself. Similarly, forestry revenue-sharing is based on a small percentage share of the total forestry revenue generated in an area, as well as a return of a portion of the stumpage paid to the Province (for First Nations who hold forest licenses).

Another example is comprehensive agreements, whether within or without the modern treaty process. In both contexts, a foundation, especially in recent years, is that these comprehensive agreements are to be based on the recognition of title and rights, and in some instances (such as modern treaties) define and determine the scope and extent of title. One does not see in those agreements, however, a principled valuation for the infringements of that Title, or formulas for how future infringements will be dealt with. Rather, payments are made, in various forms, with little transparency regarding how the calculation was determined, or how they may reflect or address principles regarding compensation for impacts or infringements to title and rights.

Even, for example, in the *Gaayhllxid / Gíihlagalgang “Rising Tide” Haida Title Lands Agreement* signed with BC in 2024, and the mirror agreement signed with Canada in 2025, the issue of valuation and compensation of past infringements is left unaddressed. As those agreements are implemented, the issue of compensation will have to be addressed, and it will be interesting to see if the same principled approach to the recognition of Title is applied to the economic aspects of Title.

Compensation for Breaches of Fiduciary Duties Regarding Indian Act Reserve Lands

There are many contexts in which breaches of fiduciary obligations and legal obligations owed to Indigenous peoples can give rise to compensation. One of those, which has been the subject of extensive litigation and negotiation over many decades, is breaches of fiduciary obligations owed with respect to *Indian Act* Reserve lands.

The Supreme Court of Canada recently ruled on the principles of compensation for such breaches in *R. v. Southwind*. Amongst the principles stated by the Court are the following:

- The fiduciary relationship between the Crown and Indigenous Peoples is sui generis in nature. This relationship is rooted in the honour of the Crown and the goal of reconciliation. In this regard, there is a mirroring of the guiding framework for title and rights.
- With respect to reserve land, the Crown’s fiduciary duty imposes a range of obligations on the Crown including: loyalty, good faith, and full disclosure; the protection and preservation of the First Nation’s quasi-proprietary interest from exploitation; where a surrender of reserve land is to occur an obligation to protect against improvident bargains, manage the process to advance the best interests of the First Nation, and ensure that it consents to the surrender.
- The remedy for a breach of the fiduciary duty will be to restore the First Nation to the positions they would have been in had the Crown not breached its duty. Further, when it is possible, the actual land should be returned. Where that is not possible, the appropriate remedy is equitable compensation.
- Equitable compensation has two purposes: to remedy the loss suffered by “restor[ing] the actual value of the thing lost through the fiduciary’s breach”; and to enforce the trust which forms the heart of the fiduciary relationship by deterring future

wrongdoing. Such compensation will be based on the principle that the First Nation would have made the most favourable use of the property in question.

- Calculation of a value should be based on what the Crown ought to have done and on the full value of loss to the First Nation.

Unlike matters involving title and rights, there are some established processes for compensating for breaches of this nature, and in particular the Specific Claims Process. The Specific Claims Process takes place in accordance with a Policy which outlines certain compensation criteria that are limiting in nature. In this context, a typical valuation approach that is followed for the taking of reserve land without lawful authority is a calculation of the current unimproved market value of the land, as well as of the loss of use of that land since the breach of fiduciary obligation occurred. But the Policy excludes any compensation for the "special value to the owner" or additional amounts for the "forcible taking of land". Additionally, the Specific Claims Tribunal has specific limits regarding compensation, including in particular legislated a \$150 million cap on compensation that it can award. First Nations have long raised concerns about the arbitrary nature of this cap, and how having such a cap does not align with legal principles.

Additionally, the Specific Claims Policy and Process do not account for many dimensions of how Indigenous peoples are attached to and relate to their lands and waters. For example, many aspects related to loss of culture – which is in itself a broad category with many elements – end up excluded from compensation. Similarly, elements of the integral role of lands to the cultural, social, political, or economic systems of a First Nation may be left aside. In some respects, this can raise similar challenges in legal and policy frameworks as in the section 35(1) context, where, as a result of the distinction between Indigenous Title and Aboriginal Title, aspects of First Nations connection to their lands are not accounted for in the common law.

First Nations have long advocated for reforms to the Specific Claims Policy and Process. Some changes were made with the formation of the Specific Claims Tribunal in 2008. Currently, there is a strong push by First Nations for a more independent and principled approach to valuation and settlement of specific claims, including consideration of how Indigenous legal orders would understand their connection to the lands in issue, and value the loss that has to be compensated.

The Challenge of Navigating the Legal and Policy Landscape

As the above illustrates, Nations who are in discussions and negotiations regarding valuation operate within a complex, underdeveloped, and often unprincipled legal and policy landscape. Given this, Nations typically have to develop, articulate, and advocate for, approaches to valuation in the context of specific discussions and negotiations.

These efforts will include developing approaches that can account for forms of valuation that the Crown typically resists, such as cultural loss. At the same time, Nations will be faced with hard choices about trade-offs that might need to be made, and whether other forms of action (such as litigation) are needed to support reaching proper outcomes. Nations will also have to consider how a negotiated outcome can support their ongoing critical work of rebuilding their governing system and legal orders, and advancing the exercise of their jurisdiction.

The remainder of this Guide is designed to support Nations as they determine valuation strategies and approaches, consider the trade-offs, and advance outcomes that support their goals.

Section 3 :

Background on Value and Valuation

The concepts of “value” and “valuation” themselves are not neutral. Eurocentric, market-based theories have long dominated, equating price with worth and obscuring much of what First Nations value. While newer approaches informed by decision analysis, behavioural sciences, and related fields can begin to reflect Indigenous perspectives, choices about methods often remain constrained by what is feasible in existing legal and policy contexts.

This section provides an overview of this context, illustrating opportunities where First Nations can respond by using Eurocentric models of valuation purposefully, as well as adapting and applying methods that better capture their own concepts of value, culture, and well-being. Understanding where valuation methods emerged from can support Nations in making choices within and outside the current policy framework that continue to shift and unsettle entrenched patterns through valuation strategies aligned with their priorities and interests.

Value is a general concept representing what people care about and believe something is worth, regardless of whether it is or can be bought and sold, and valuation is how to measure that worth. Therefore, concepts of “value” and “valuation” are not neutral, but are deeply rooted in worldviews.

For First Nations, value is inherent to a range of unique things that have historically and continue to be important to them, and which commonly fall in the following categories:

1. **Culture:** Impacts, losses, or benefits to language, culture, teaching, and continuity of cultural expression, including impacts to spiritual traditions and practices.
2. **Governance:** Impacts, losses, or benefits to capacity to govern, make decisions, and determine the trajectory of a Nation’s territory and peoples.
3. **Health and wellbeing:** Impacts, losses, or benefits to the health and wellbeing of the people, lands, and waters.
4. **Land and waters:** Impacts, losses, or benefits to a Nation’s ability to live on, access, use, and steward their territory and waters, including for uses by them and others.
5. **Resources:** Impacts, losses, or benefits from the extraction of resources like water, timber, minerals, oil, gas, fish, and others, from a Nation’s territory.

Today, the fields of economics, finance, and business, largely tied to a Eurocentric worldview, dominate definitions of value and methods for valuation, and monetary value and market economies shape much of how we think about value. First Nations find themselves navigating these different worldviews – seeking to generate and safeguard value in ways that align with their worldviews, as well as seeking compensation for past and future impacts, utilizing valuation methods largely tied to Eurocentric worldviews.

This section describes the history of many concepts that underpin valuation methods, to help illustrate where these concepts can be helpful, and where they can fall short in illuminating value for, and serving interests of, First Nations. Some examples in this section of the Guide (like sunsets, hockey cards, or widgets) are deliberately unrelated to real applications, so they can serve as straightforward illustrations of the concept.

In the field of economics, historically, value was thought to arise from inputs to production with a focus on labour, though some consideration was paid to other inputs like land. This framing is known as the Objective Theory of Value. As an example, suppose labour costs \$30 an hour and a widget takes three hours to produce from start to finish, including gathering any materials. This theory would say that the value of the widget is $3 \times \$30 = \90 , and \$90 is the value of the widget. Valuation, in this context, consists of adding up the labour required to produce the widget. Proponents of the Objective Theory of Value acknowledged that prices sometimes diverge from the value in the short term, but suggested that they would return over time. Some valuation methods (e.g. cost approach and production function) discussed in this paper align closely with this Objective Theory of Value.

Around the turn of the 20th Century, a major evolution in terms of how we think about value took place, called the “Marginal Revolution”. An example for understanding the main idea of the Marginal Revolution is the value of water in different situations. The value can be extremely high – think about the value of water for someone if they were dying of thirst, walking through a desert. It can also be very low – think about someone having gone overboard in a lake, in that moment they’d probably pay to have less water, implying a negative “marginal” value. This perspective then leads us to consider how much the next unit of something is worth (eg. a litre of water) in a particular situation, which helps us understand the value of something at the margin. Through the Marginal Revolution, most economists began to equate the intersection of the subjective value that people hold for things (demand) with the costs of production (supply), as determining both price and value.

This is now known as the Subjective Theory of Value where market prices, driven by supply and demand, represent the value of things. As an example, consider a rare Wayne Gretzky hockey card from his rookie year. It took very little labour to produce, so if we applied

our labour-based valuation technique we would say the value of the card is pennies, almost zero. However, if we consider demand (very high, though maybe waning a little more recently) and supply (very few cards left in pristine condition) the price we observe is very high. If we are applying the Subjective Theory of Value and equating market price as determined by supply and demand with value, then the value of the card is thousands of dollars, not pennies. By and large, even with much thought and effort put into understanding where market prices fail to equate with value, this is still how Eurocentric societies understand value and valuation.

Most economists recognize that market prices are not neutral or complete reflections of value. Instead, they reflect the preferences and purchasing power of those who participate in the market, and ignore or exclude what is not easily bought or sold. A simple example is a sunset. Consider two evenings identical in every way except one has a beautiful sunset. Most people agree that we value the evening with a beautiful sunset more than the same evening without, but what is that sunset “worth”? That’s a tough question as there is no market for sunsets. This gap between value and what is priced in the market is particularly important in the context of valuation for First Nations, as the value of things that matter most to First Nations are often not reflected in market economies and prices.

Consider a more applicable and complex example: A First Nation may deeply value maintaining access to fishing for a particular species that they have historically and continue to rely upon as a source of food, but if that species has been excluded from the market economy – or prohibited from fishing by regulation – there is no market transaction to reflect that value in monetary terms. As most mainstream techniques focus on market values, other valuation methods would be needed to identify appropriate compensation for the loss of fishing access to that particular species. Today, value and valuation are understood to be complex and not always equal to a market price for many reasons, often because markets do not exist for many things we value, or the conditions do not exist for market prices to do a good job of accounting for what matters. Valuation methods are continuing to evolve to better reflect this complexity, and better capture the value of a particular thing. While some approaches are still rooted in observable market prices, others attempt to estimate the value of things not traded in markets. Some of these newer approaches use foundations from fields outside of economics – such as decision analysis and behavioural sciences – to create space to include things of value that have long been omitted, and doing so in ways that are defensible, transparent, and rigorous. These emerging methods are being ‘tested’ in courts and negotiations, and may open doors for Nations to better articulate what they value in monetary terms.



Hypothetical Scenario: **Proposed Forestry License near a Cultural Use Area**

The Province issues a referral regarding a proposed 5-year non-replaceable forest license on Crown land. The harvest area overlaps with an area where community members hunt moose, gather medicinal plants, and conduct seasonal camps. The area is also near an old village site and includes an unrecorded archaeological feature.

Approach

To gauge the impacts of this proposed forest license, the Nation examines how the license would affect cultural activities and estimates the resources required to support members to undertake similar activities elsewhere (see **Cost Approach (Replacement & Reproduction)** p.73). Given the current usage of the site, they determine that the Nation would need to develop new trails, build a new camp, and support travel costs for members to access other areas of the territory. This approach does not capture the unique value of the area. They conclude that even the rebuilding and travel costs are too high relative to the anticipated benefits to the Nation from the license, before even considering the unique value of the area. They are able to negotiate an exclusion of that area from the forest license.

Section 4 :

Nation-led Valuation Strategy

Within the legal, political, and policy landscape, First Nations must make complex and often difficult choices about what they value, how those values have been impacted, whether to pursue compensation, and what methods and data to rely on. These choices are not only technical but also strategic, requiring trade-offs that balance cultural priorities, legal constraints, and available resources.

To guide this process, we present three phases of work: clarifying the impacts that matter, assessing feasibility and importance, and selecting valuation methods. While described in sequence, in practice these phases overlap and inform one another. Some contexts may call for moving directly to method selection, while others require careful groundwork in identifying and prioritizing impacts. What remains consistent is the need to situate each choice within the specific compensation context at hand, recognizing that the scope of what can be compensated is almost certainly narrower than the full range of impacts experienced. Nations may therefore decide whether to press for broader recognition of their values, or to strategically focus on methods that maximize what is relatively easier to achieve within the negotiation process.

Within the foregoing legal, political, and policy landscape, First Nations must navigate complex choices – about what they value and how that has been impacted, what is “right” for them in terms of pursuit of compensation, and what kinds of methods and data they will employ. This includes having to make difficult trade-offs about what may be prioritized at a particular moment in time, or in the given negotiation or process that they are involved in.



Hypothetical Scenario: **Utility Corridor for Transmission Line Expansion**

BC Hydro submits a referral for a proposed transmission line upgrade that crosses through a wide stretch of First Nations' territory considered "Crown land", including wetlands and traditional travel routes. While the corridor avoids registered archaeological sites, it fragments wildlife habitats and may interfere with future land-use planning.

Approach

This referral is one among many that the Nation receives and must process and respond to. There isn't enough time or resources to fully assess each referral, and the Nation is working on developing a land use plan and decision tool that will help ensure referrals can be assessed and responded to more quickly.

At this stage, they are unable to collect baseline data and develop an understanding of the anticipated impacts directly. However, a private transmission line serving a mine has recently completed an extensive study on the cumulative effects of linear disturbances as part of its Environmental Assessment process, just south of the proposed BC Hydro project. The areas are deemed sufficiently similar in terms of wildlife habitat that the cumulative effects study results could plausibly be used to understand the wildlife impacts of BC Hydro's proposal. The Nation posits that, given the proximity of the projects, similarity of the wildlife habitat, the cumulative effects of linear disturbances present on the landbase already, and the fact that the BC Hydro project is slightly smaller than the private project that the same monitoring, mitigation, remediation, and offsetting should take place for the BC Hydro project to proceed (see **Benefit Transfer Method p.63**). Additionally, the Nation is seeking one-time funding to

support continued development of their land-use plan and to develop a database of similar studies to support decision-making going forward.

In choosing how to approach valuation and navigate the trade-offs, Nations will generally have to navigate the following three phases, all grounded firmly within the specific compensation context at hand:

1. Get clear on the impacts that matter.

This involves identifying all the impacts the Nation has or will experience to what they value. One way to get at this is to answer the question: *“what are all the ways our Nation, past, present, and/or future, would be different in the absence of this specific situation?”* Defining this clearly and precisely helps to determine the appropriate valuation approach, as well as how to apply different methods. This list should include all the things that matter; for example, those values that have direct markets (and therefore be easier to monetize), and those values do not, for instance the Nation’s ability to practice culture and govern.

2. Assess feasibility and importance.

This means recognizing the broader Nation priorities and pressures, assessing the trade-offs – the human, financial, emotional, and time costs of undertaking valuation of the impacts that have been identified. It also requires an assessment of the broader legal and policy context of the negotiation or other process at hand, and what kinds of values are considered compensatory in this context (e.g., is it within the context of the Specific Claims Policy.). Together, these trade-offs and considerations inform choices. Essentially, this answers the question: *“recognizing all of the impacts are important to us, with the time and resources we have available, and the constraints of the context and process, what makes sense to pursue through valuation?”*

3. Choose valuation methods.

With an understanding of the intersection of what’s important to the Nation, what’s legally and politically feasible, and where resources are available to support valuation work, it is time to determine which methods can best capture the relevant impacts, and start to pull together the necessary information and data to implement that approach. This phase answers the question: *“what data are available and which*

processes will we undertake to arrive at a numerical value for the impacts we have experienced?"

The reality is that, while these phases are presented above in sequential order, in real life they often inform one another, particularly early on. For example, an understanding of what valuation approaches exist (phase 3 above) is helpful to decide what is feasible (phase 2). In some straightforward contexts, it may make sense to skip straight to selection and implementation of a particular valuation method (phase 3). In other cases, it may make sense to spend significant time contextualizing and categorizing values (phase 1), using these as the foundational guide to which methods are used (phase 3).

The phases of Nation-led valuation strategies may also look different depending on whether the Nation is looking back at impacts of the past, or looking forward and trying to anticipate impacts in the future. The time, resources, approaches, and steps involved in each phase will depend on the context the Nation is working in, what is being valued, and whether there is an opportunity to seek compensation for redress, meet objectives of the Nation moving forward, or some combination of both.

Moving through all three phases necessarily touches on a combination of legal, technical, governance, strategic, and policy matters. Assembling an interdisciplinary team can help ensure that each phase is considered through multiple lenses, and the Nation's decisions are well informed by a balance of advice from relevant backgrounds and disciplines.

Finally, like all Nation-led activities, participating or driving a negotiation process can connect and support the Nation's broader interests in reasserting governance, Indigenous legal orders and practices, and developing capacity. The negotiation team can likewise consider how the process itself can be enriching and support other outcomes of interest to the Nation, for example, through capacity funding from tables, undertaking community-based research, or finding opportunities to weave in cultural ceremony and healing for community members impacted by Crown decisions.

Figure 1: Relationships between Value and Valuation Methods

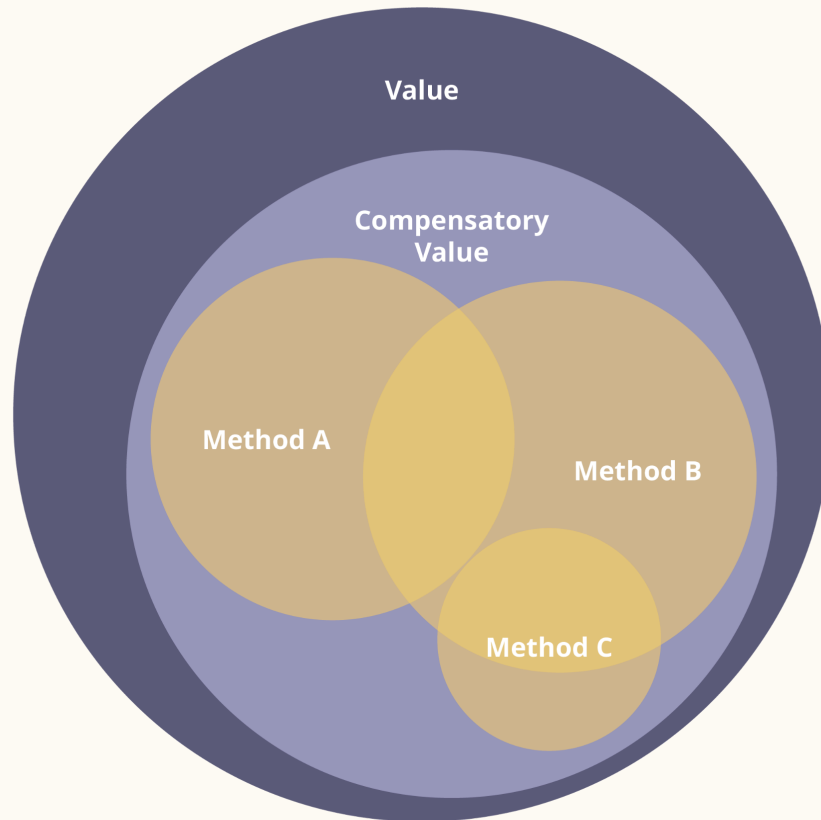


Figure 1 shows how the three phases relate to each other in terms of how they capture value. In this illustration, imagine the value of something as being represented by the dark purple circle. This is a full and complete accounting of value, which in almost all cases only exists as a concept. In reality, this concept is almost always larger than the scope of compensatory value for the same thing – Nations typically experience greater impacts or place a greater value on something than what negotiation and compensation processes account for, as represented by the smaller lighter purple circle. The Nation’s negotiation team may choose to try to maximize the extent to which the compensatory value approximates value – pressing for the negotiation scope to be inclusive of as much value as possible. Alternatively, they may accept a smaller compensatory value in order to expedite the negotiations process. Finally the negotiations team may select one or more methods, managing the trade-off between additional effort (via additional methods) and the increasingly smaller incremental value described by the additional effort, as represented by the yellow circles, themselves a subset of the potential compensatory value.



Hypothetical Scenario: **New Commercial Recreation Tenure (Backcountry Lodge)**

A private business is applying for a long-term adventure tourism tenure to operate a backcountry lodge on Crown land. The location is within a traditional territory and is accessed by helicopter and seasonal trails. The tenure would involve the construction of permanent infrastructure and guided activities such as skiing and hiking. This part of the territory is difficult to access, but important to many Nation members.

Approach

The impacts to the Nation and members are potentially large, as there will be permanent infrastructure and increased use in the area. The Nation has a proactive stance on economic development, seeking opportunities to build capacity and revenues through new, low impact commercial activities. As part of the consultation process, the Nation communicates its priority to increase access to members, and its interest in a partnership that could generate revenue and build capacity in eco-tourism for the Nation. The Nation engages with other operators and businesses with similar tenures to get an understanding of the sector and business models, and with the Nation-run tourism company that runs tours in other parts of the territory. By examining other comparable businesses and industry standards, they develop an approximation of the costs to build and operate a lodge, as well as forecast revenue from operations (see **Indirect Market Approach** p.71). This provides the Nation with a sense of the range of revenues that could be shared as part of a partnership model to accommodate for the impacts of the lodge. The approach does not estimate the value to the Nation, but it does provide a sense of what the Nation could gain, given the value it could lose from the project's impacts.

Given the margins will be small for the first couple of years and that the business is

interested in running some cultural tours in the summer, the Nation and business determine a partnership model that includes an equity stake in the business, provisions to hire Nation members for cultural tours, as well as reserving the lodge for exclusive Nation-use during the shoulder seasons while the lodge does regular maintenance and repairs. These benefits are intended to offset the loss to the Nation, but also to ensure that the culture and values of the Nation are part of the business model going forward.

Phase 1: Get clear on the impacts that matter

“What are all the ways our Nation, past, present, and/or future, would be different in the absence of this specific situation?”

This phase is about mapping the full range of ways a Nation has been, or will be, affected by a specific situation — culturally, politically, socially, environmentally, and economically. While not every impact will fall within the scope of a negotiation or valuation study, starting with a comprehensive picture ensures that the Nation’s priorities and experiences guide the process. By identifying what truly matters — across culture, governance, health and wellbeing, land, and resources — Nations can lay the groundwork for principled, context-specific valuation and compensation.

Colonization has left a multi-faceted legacy of impacts, some uniquely experienced by each individual, family, and Nation, and some following broad patterns, much of which remains unresolved in the process of reconciliation.

This phase of work focuses on answering, “what are all the ways our Nation, past, present, and/or future, would be different in the absence of this specific situation?” This is often a big question, and one that may raise impacts outside of the scope of the specific valuation. Participants may find it challenging to only discuss a specific situation and not all the ways the Crown has impacted their lives. Although this is the case, answering this question should be shaped by the scope of the valuation, negotiation, and process context at hand. For a scope focused on past impacts, a Nation may consider matters such as:

- What is the specific time period under consideration?
- What is the nature and scope of the specific event that we are discussing?

- What was life like before and after this specific situation (in cases where this memory exists)?
- What uncertainty do we have about the impacts of the event?

For a scope focused on potential future impacts, a Nation may consider matters such as:

- Does this decision create or destroy value for our Nation?
- What do we know about potential impacts of this event, what can we infer or anticipate?
- How much uncertainty or risk do we face?
- What time frame is relevant? Will these impacts be permanent, temporary, or take time to come into effect?

Although each specific situation will be different, there are types of impacts that are commonly raised by First Nations relating to the following topics:

1. **Culture:** Impacts, losses, or benefits to language, culture, and continuity of cultural expression, including impacts to spiritual traditions and practices.
2. **Governance:** Impacts, losses, or benefits to capacity to govern, make decisions, and determine the trajectory of a Nation's territory and peoples.
3. **Health and wellbeing:** Impacts, losses, or benefits to the health and wellbeing of the people, lands, and waters.
4. **Land and waters:** Impacts, losses, or benefits to a Nation's ability to live on, use, and steward their territory and waters, including for uses by them and others.
5. **Resources:** Impacts, losses, or benefits from the extraction of resources like water, timber, minerals, oil, gas, fish, and others, from a Nation's territory.

These topics, which are of course described in different words and terms by diverse Nations, are nonetheless conceptually common and can therefore be used as a way to identify and list the various potential impacts that could be considered as a basis for compensation and a valuation study.



Hypothetical Scenario: **Compensation for Dam Impacts (Phase 1)**

In the 1950s, a hydroelectric dam was built on a river within a Nation's territory without their consent. The dam flooded a large portion of a valley and continues to operate today. For many years, the Nation pursued compensation for the impacts of the dam, including through litigation, which has now brought the parties to the negotiating table. The Nation is preparing to undertake a valuation study to inform this negotiation.

Phase 1: Get clear on what matters

The Nation starts by asking: *What are all the ways our Nation, past, present, and future, would be different in the absence of the dam?* Because the dam is still operating, the Nation must both consider the impacts of harms experienced to date, as well as potential future impacts as well as new opportunities over the lifespan of the project.

They choose to start by reviewing all the evidence they have gathered through the years. This allows them to describe the significance of the area prior to the dam's construction without their consent, and list what specific uses and access to resources have been lost as a result. The team then engages with the Nation's lands and resources, health, culture and language teams, and the Elder's advisory committee to surface additional evidence of how this loss of use impacted the Nation more holistically. Through several meetings and iterations, all of this information is added to the categorization of losses and impacts the Nation has experienced.

As with many Nations, the breach related to the dam is not the only impact the Nation has experienced over this time period, and the team takes care to identify which impacts can be directly linked to the dam, and which are connected to broader disruptions, like climate change or colonial policies. Further, the team works hard to ensure the categories of losses and impacts are both comprehensive and discrete, recognizing that many impacts are interconnected.

The team organizes impacts from the dam into five broad categories in order to support an assessment of their feasibility, relative importance, and associated methods for valuation. At the same time, the team identifies which of these impacts are likely to continue today given the dam's continued operations.

Culture

- Flooding submerged burial grounds, ceremonial areas, and places of cultural teaching.
- Elders describe how activities like seasonal fishing camps or plant gathering in the valley were central to teaching language, stories, and practices. The flooding cut off those spaces, weakening cultural and spiritual continuity.
- With the loss of place-based practices, some language tied to those lands, waters, and practices has fallen into disuse.

Governance

- The dam was built without consent, undermining the Nation's authority to make decisions about its lands and waters in the past and limiting options for the use of these lands and waters into the future.
- The Nation's ability to manage the valley and river in accordance with its laws and responsibilities was stripped away.
- Provincial and federal agencies control dam operations, leaving the Nation with limited influence over water levels, fish passage, or mitigation.
- The Nation has been forced into ongoing legal and negotiation processes just to be recognized, draining time and resources that could otherwise strengthen governance and capacity in other areas.

Health and Wellbeing

- Salmon runs and other aquatic foods were heavily disrupted, reducing access to traditional diets and forcing reliance on store-bought food.
- Elders and families describe grief, stress, and trauma from watching the valley flood and seeing practices tied to that land disappear.
- Loss of access to traditional harvesting areas reduced opportunities for physical activity, cultural connection, and wellbeing rooted in land-based practices.

Land and waters

- Flooded valley lands are no longer accessible for hunting, gathering, or

habitation.

- The dam changed river flows, leading to erosion, siltation, and habitat loss both upstream and downstream.

Resources

- Blocked fish passage decimated salmon runs, reducing access to a critical resource for food, trade, and ceremony.
- Other aquatic and terrestrial species were lost or diminished with the valley's flooding and ecosystem disruption.
- Timber, fish, and other resources from the valley were lost, with no compensation to the Nation, while hydroelectricity profits flowed to external actors.

Continues in the next section...

Phase 2: Assess feasibility and importance

“Recognizing all of the impacts are important to us, with the time and resources we have available, and the constraints of the context and process, which are we going to pursue through valuation?”

This phase is about strategy. Because not every impact identified in Phase 1 can be fully valued, Nations must make deliberate choices about how to best advance their objectives, including what to pursue through valuation, or through other aspects of a negotiation, and what to set aside. These decisions balance internal priorities, available resources, emotional and cultural considerations, and the external limits of legal and policy frameworks. At its core, this phase asks, “What does a successful outcome look like for us, in this negotiation, at this time?” and then considering “all of the impacts are important to us, with the time and resources we have available, and the constraints of the negotiation process, what makes sense to pursue through valuation?” While there is no single right answer, clarifying what is most important and feasible ensures that the Nation charts a principled path forward — even while recognizing that compensation will never fully capture the breadth of value to the Nation.

Fully undertaking valuation of all impacts determined in Phase 1 is uncommon. The reality is that the Nation must make choices that are shaped by many external and internal factors – charting a strategy for the negotiation that maximizes their interests while providing for the realities of constraints. This is just as much about what you say “no” to, as it is what you say “yes” to. This strategy will centre the question “recognizing all of the impacts are important to us, with the time and resources we have available, and the constraints of the context and process, which are we going to pursue through valuation?” – in other words, “what does a successful outcome look like for us?” and consider matters such as:

- The level of monetary settlement that feels acceptable and feasible
- What impacts feel critical to be acknowledged, and how
- Whether some impacts feel too hard or inappropriate to “put a number to”, including the potential emotional toll of some of the valuation methods
- The other projects and obligations that the Nation is pursuing that also need time, attention, and resourcing
- How long the Nation is willing to wait for resolution
- How much energy, time, and resources are available to do the work, including where the available data are currently limited and will take a lot of work to collect
- What legal or policy parameters or mandates exist about compensatory factors in the context of the negotiation at hand
- Whether valuation can inform other forms of mitigation and accommodation

There is no “right answer” to a negotiation strategy. Answers may also evolve over time, particularly as broader policy and legal contexts and mandates shift. Some may choose to value more impacts than are typically recognized in the process they are in given their importance and available time and resources. Others may choose to maximize a financial settlement within existing negotiation and policy parameters, in order to expedite the process and balance the work against other Nation priorities. In all cases, these choices seek to maximize outcomes recognizing that the reality is that in all cases there is an imperfect match between compensable impacts and the value in which a Nation is interested.

...Continued from the previous section



Hypothetical Scenario: **Compensation for Dam Impacts (Phase 2)**

The same Nation who has enumerated impacts related to the construction of a dam on their territory is now considering how best to approach the negotiation. To do this, the negotiation team, with input from the Elder's advisory committee and leadership, have a series of meetings and workshops to help shape their strategy. Through this process they...

Discuss the level of monetary settlement that feels acceptable and feasible

This topic is largely debated with leadership and the negotiation team. They review previous negotiations and settlements of similar magnitude, as well as applicable legal principles. The legal counsel on the negotiation team is able to advise a range that seems feasible, and the Nation is generally comfortable with that range.

Identify what impacts feel critical to be acknowledged, and how

The Nation feels that the land and resource-based impacts they experienced have been well acknowledged, but that the Crown does not fully understand or recognize how this has also impacted the culture and the health and wellbeing of their people. It is critically important to the Nation that these past and present impacts to culture are recognized, but they do not feel confident that the Crown will have any mandate to discuss compensation in this regard. They agree that a formal apology in accordance with cultural protocol is something they will pursue.

Identify whether some impacts feel too hard or inappropriate to “put a number to”, including the potential emotional toll of some of the valuation methods

Many Elders stressed that the burial grounds and sacred sites were critically important to the Nation, but were worried about putting a number to their worth. They were particularly worried that this would give industry and government a number that

might seem justifiable to pay in order to make decisions with similar outcomes in the future. They want to keep the future focus instead on culture and language revitalization. Given the low feasibility for compensation for past harms, and the Elders' reluctance to attribute a compensatory value to those harms, the team considers seeking establishment of a culture and language revitalization fund as part of their negotiating strategy, rather than framing this as compensation for past harms.

Discuss the other projects and obligations that the Nation is pursuing that also need time, attention, and resourcing

The Elder's advisory committee has expressed fatigue about the lengthy pursuit of compensation, and are keen to focus on projects that support transmission of language, knowledge, and teaching, rather than negotiations.

How short or long the Nation is willing to wait for resolution

The Nation wants a resolution as soon as possible given the age of their Elders that lived through the impacts of the dam's construction.

How much energy, time, and resources are available to do the work, and where the available data are currently limited and will take a lot of work to collect

- The Nation has some resourcing to support a negotiator role, as well as \$150,000 to commission valuation studies over the next two fiscal years.
- The Nation has previously gathered spatial and environmental data, as well as baseline socio-economic and wellbeing data about their citizens.

What legal or policy parameters or mandates exist about compensatory factors in the context of the negotiation at hand

The legal team feels that the mandate and precedent already exists for compensation related to resources and lands, but not for culture and language, although the concept of a revitalization fund may be seen as a reasonable compromise by the parties.

The negotiation team summarizes what they have heard related to the overall approach, and each impact enumerated in phase 1.

Whether valuation can inform other forms of mitigation and accommodation

The negotiations are not just about past harms, they are also about future benefits and mitigations given the dam is continuing to operate. Understanding the total value

of revenues that have been generated from the dam to date, as well as other economic benefits that the Nation could derive is helpful context to inform negotiations for how the Nation would like to see the project go forward. The team considers emerging opportunities, including revenue sharing agreements and negotiating new terms to the operating lease the proponent holds with the dam. These considerations inform a different component, separate from historical impacts and redress, and may help address the articulation of future impacts the community had identified in phase 1.

Impacts	Likely for Comp	Size of Impact	Priority to Value
Culture			
Flooding submerged burial grounds, ceremonial areas, and places of cultural teaching.	Low	High	Low
Elders describe how activities like seasonal fishing camps or plant gathering in the valley were central to teaching language, stories, and practices. The flooding cut off those spaces, weakening cultural continuity.	Med	High	Med
With the loss of place-based practices, some language tied to those lands, waters, and practices has fallen into disuse.	Low	Med	Low
Governance			
The dam was built without consultation, undermining the Nation's authority to make decisions about its lands and waters in the past and limiting options for the use of these lands and waters into the future.	Med	High	Med
The Nation's ability to manage the valley and river in accordance with its laws and responsibilities was stripped away.	Low	High	Med
Provincial and federal agencies control dam operations, leaving the Nation with limited influence over water levels, fish passage, or mitigation.	Low	Med	Med
The Nation has been forced into ongoing legal and negotiation processes just to be recognized, draining time and resources that could otherwise strengthen governance and capacity in other areas.	High	Med	High

Health and Wellbeing			
Salmon runs and other aquatic foods were heavily disrupted, reducing access to traditional diets and forcing reliance on store-bought food.	High	High	High
Elders and families describe grief, stress, and trauma from watching the valley flood and seeing practices tied to that land disappear.	Low	High	Med
Loss of access to traditional harvesting areas reduced opportunities for physical activity, cultural connection, and wellbeing rooted in land-based practices.	Low	High	Med
Land and waters			
Flooded valley lands are no longer accessible for hunting, gathering, or habitation.	Med	Med	Med
The dam changed river flows, leading to erosion, siltation, and habitat loss both upstream and downstream.	Med	Med	Med
Resources			
Blocked fish passage decimated salmon runs, reducing access to a critical resource for food, trade, and ceremony.	High	High	High
Other aquatic and terrestrial species were lost or diminished with the valley's flooding and ecosystem disruption.	High	Med	High
Timber, fish, and other resources from the valley were lost, with no compensation to the Nation, while hydroelectricity profits flowed to external actors.	High	High	High

As is often the case, most of the impacts are significant to the Nation. Considering the willingness or priority to put monetary values against those impacts, and the likelihood of compensation, can prioritize and point towards appropriate methods. This process pointed to impacts that are good candidates for valuation studies, and the Nation begins considering methods for these in more depth.

Continues in the next section...

Phase 3: Choose Valuation Methods

“What data are available and which processes will we undertake to arrive at a numerical value for the impacts we have experienced?”

With a strategy in place, this phase focuses on selecting the methods best suited to capture the Nation’s prioritized impacts. In some cases, this will mean relying on familiar, market-based approaches such as land or resource prices, which are easier to source, defend, and negotiate but may fail to reflect the full value at stake. In other cases, non-market approaches — such as testimony, community-driven studies, or novel adaptations of economic tools — are required to measure cultural, governance, or wellbeing impacts that markets cannot capture.

Each approach carries trade-offs: market methods are more familiar to external parties but risk oversimplification, while non-market methods are truer to Indigenous values but demand more time, resources, and openness from negotiating partners. In practice, Nations often combine methods, ensuring they complement rather than duplicate one another. Ultimately, this phase is about aligning methods with both the Nation’s definition of value and the realities of the negotiation context.

Once a Nation has determined its overall strategy and approach to valuation, the next step is to confirm the methods that are best suited to advance that strategy, and recruit the appropriate expertise to carry out the work. Depending upon the impacts identified for valuation, different methods may need to be combined or deployed to calculate what compensation might look like. Care may be required to ensure that each method is compatible with one another (for example, that they do not double count the same thing).

As noted earlier in this paper, most mainstream techniques to valuation focus on market values, and this means that First Nations seeking compensation for certain types of impacts that are not based on market values require different methods to be able to capture those values. Of the five common categories of compensation, some (most notably culture, governance, and health and wellbeing) are more likely to require methods that do not rely on market prices alone whereas others, particularly land and waters and resources, are more likely to rely on market-based prices and approaches to valuation.

Figure 2: Compensation categories and their relationship to market-based methods



Non-market based pricing means that there is no direct market for the goods or services, and therefore no easy monetary representation of value. As such, attributing a monetary value requires methods that either use market prices in novel ways to approximate components of their value or measure value using Nation-specific information. Methods that rely on non-market pricing may require different forms of evidence, such as community testimony, historical records, or specially designed surveys and/or workshops. These methods tend to be newer and/or are emerging from experience in other fields, and therefore they are not necessarily common or well established in compensation-specific negotiations contexts.

Approaches that rely on market information—like the prices of land, fish, or timber—to estimate value are likely more familiar to external parties in negotiations or legal proceedings. Although valuing land and resources using market prices can capture part of their value, market prices often fail to approximate value for a number of reasons. For example, monopolies occur when one seller (or buyer, a “monopsony”) dominates the market, limiting competition and distorting prices. Externalities arise when costs or benefits are not captured in the price—for example, environmental damage from logging that is not included in the price of timber. Information asymmetries happen when one party has more or better information than the other, allowing them to set prices or make decisions to their advantage. In each of these cases, the price produced by the market may be misleading, incomplete, or unfair—making it important to consider whether market-based valuation is the best fit for the value a Nation is trying to capture.

Ultimately, market-based valuation is more common, observable, and easily quantifiable – it is easier to source data, defend, and negotiate, in large part because these approaches are

more familiar to the Crown, and grounded in data that are generally available to both parties. Non-market valuation is less common and relies more heavily on qualitative data and the collection of new data, often specific to the valuation study.

The following chart describes various valuation methods, listing them in descending order in terms of how familiar and typical their application has been in negotiations with the Crown. Methods at the top of the list (brown) tend to rely on more Nation-specific information and are relatively novel approaches to valuation in negotiations with the Crown, whereas those at the bottom of the list (yellow) rely more on information that is a product of interactions between many individuals in the market and are likely more familiar to the Crown. This sorting of valuation methods helps Nations to consider:

- For items closer to the top of the list, the availability of data, the resourcing requirements to run a study, the time it may take to collate data, and the other party's openness to new approaches.
- For the items closer to the bottom of the list, the relevance and applicability of the method to the specific impacts of priority to them, in other words, how well market prices reflect what is most important to measure.

In practice, these methods are often mixed and matched or embedded to advance any Nation's specific context. For example, implementing a multi-attribute utility theory method requires the valuation of some component of compensatory value using a market-based approach; in other contexts, a Nation may choose one valuation method appropriate for lands that have been primarily used for forestry, and another method for lands that have primarily been used for residential purposes. Mixing methods, or using different methods for different components of value, can be a useful strategy – though requires consideration to ensure that each method is capturing discrete value and not double counting.

Method		Considerations
1	<p>Multi-Attribute Utility Theory (MAUT)</p> <p>p.59</p> <p>Discrete Choice Modelling</p> <p>p.61</p>	<p><i>What is this?</i></p> <p>These are techniques that ask people about their relative preferences for certain attributes, goods, or services.</p> <p>These are "stated preference" methods that can be very powerful for understanding complex preferences for multi-faceted goods or services where no market exists. They rely on additional methods, such as survey design, statistical modeling, community engagement, and sometimes hypothetical scenarios presented to participants. Depending on the negotiation context, these can be difficult to apply without sufficient time and skill. They are well established methods, but may be considered "newer" when compared to market-based approaches in compensation valuation situations.</p>
2	<p>Contingent Valuation</p> <p>p.62</p>	<p><i>What is this?</i></p> <p>Similar to Discrete Choice Modelling, this method asks people to state their willingness to pay for a hypothetical scenario.</p> <p>This is a "stated preference" method, relying on surveys asking hypothetical willingness-to-pay. It's frequently challenged for its hypothetical nature and potential for biases, though it's one of the few ways to capture non-use values.</p>
3	<p>Benefit Transfer Method</p> <p>p.63</p>	<p><i>What is this?</i></p> <p>This approach takes findings from another study or survey that is determined to be sufficiently similar, and applies those findings to the context under consideration.</p> <p>This method's "concreteness" is highly dependent on how similar the "source" and "target" contexts are. It's often seen as a less rigorous alternative to site-specific studies and thus more easily challenged on its applicability.</p>
4	<p>Travel Cost Method</p> <p>p.64</p>	<p><i>What is this?</i></p> <p>This approach is a revealed preference method - it observes how much people are willing to pay to access a resource including time, direct travel expenses, and opportunity costs.</p> <p>This is a well-established method in environmental economics for recreational sites, but its application is limited to use values and can be complex to model accurately.</p>

5	<p>Production Function</p> <p>p.66</p>	<p><i>What is this?</i></p> <p>This approach estimates value by examining how a non-market good or service, such as environmental quality, contributes as an input to producing a final output that does have a market price, like a timber harvest.</p> <p>While based on economic principles of how inputs affect outputs, applying this to non-market goods like ecosystem health or governance requires sophisticated modeling and assumptions about the functional relationships, making it more prone to challenge on methodological grounds.</p>
6	<p>Valuation of Economic Rents</p> <p>p.68</p>	<p><i>What is this?</i></p> <p>This method values a resource by calculating the surplus value (economic rent) generated after all costs of production—including labor, capital, and materials—have been accounted for.</p> <p>While requiring more calculation than direct price comparisons, it's a recognized economic concept for valuing the "surplus" from resource extraction and is widely used in resource economics and royalty discussions. It is simple and clear, but the politics get complicated. This is a very useful concept to know and consider in a resource-based negotiations context.</p>
7	<p>Hedonic Value</p> <p>p.69</p>	<p><i>What is this?</i></p> <p>This is a revealed preference method based on the idea that the value of non-market goods and services is embedded in the prices people pay for related market goods, such as the additional price paid for a house with a mountain view.</p> <p>Similar to the travel cost method, it's recognized in environmental and property valuation, but requires statistical analysis and a large dataset to isolate the implicit value of non-market attributes, making it more complex and potentially open to statistical challenge.</p>
8	<p>Indirect Market Approach</p> <p>p.71</p>	<p><i>What is this?</i></p> <p>This approach estimates the value of goods or services not traded in a market by looking at the prices of similar goods or services that are traded in a comparable private market.</p> <p>This method uses proxies from existing markets, which can be less direct than the above but is still rooted in observable market behavior. Its acceptance depends on how "comparable" the markets truly are.</p>

9	<p>Avoided Damage Costs</p> <p>p.72</p>	<p><i>What is this?</i></p> <p>This approach estimates the value of a good or service by looking at the costs that people or governments are willing to pay to prevent or reduce damages, using these expenditures as a proxy for the value placed on avoiding the harm</p> <p>This is gaining more acceptance, especially in environmental and public health contexts, as it ties value to tangible costs incurred to prevent harm. It still relies on measurable costs.</p>
10	<p>Cost Approach (Replacement & Reproduction)</p> <p>p.73</p>	<p><i>What is this?</i></p> <p>This approach equates the value of something with how much it would cost to replace it. For example, how much a house is worth is equal to how much it would cost to build it. It can be applied in more abstract settings; the cost ("value") of nearly losing a language is the cost of rebuilding it to a prior state.</p> <p>This is quite standard for physical assets and can be applied to re-establishing certain conditions. Its "concreteness" depends on the clarity of the costs and the "target state."</p>
11	<p>Income Approach</p> <p>p.75</p>	<p><i>What is this?</i></p> <p>This approach assigns a value to a resource or asset based on the present value of the stream of income it is anticipated to generate. This approach is common when valuing businesses, but can be applied in many contexts.</p> <p>Also very standard, especially in real estate and business valuation, as it's based on expected financial returns. It's concrete if the income streams are clear and consistent.</p>
12	<p>Price Comparison Approach</p> <p>p.77</p>	<p><i>What is this?</i></p> <p>This approach estimates the value of a resource or property right by examining recent or historic transactions for similar assets in comparable markets</p> <p>This is generally considered the most straightforward and least challenged for valuing market goods and property rights, as it relies on direct observable market transactions.</p>

...Continues from the previous section



Hypothetical Scenario: **Compensation for Dam Impacts (Phase 3)**

The same Nation is now looking at methods to value a subset of the impacts experienced on account of the dam. They have \$150,000 for an initial study, so want to select those that will be feasible within those constraints. They opt to undertake valuation studies that are lower costs, across more identified impacts, rather than trying to undertake a detailed study on any one topic at this time.

Impacts	Methods	Considerations
<p>The Nation has been forced into ongoing legal and negotiation processes just to be recognized, draining time and resources that could otherwise strengthen governance and capacity in other areas.</p>	<p>Price Comparison Approach The Nation sums up legal fees incurred as an approximation of the opportunity cost of the time spent on litigation, that could have been spent on other governance initiatives.</p>	<ul style="list-style-type: none"> • Low cost approach • Does not capture the knock on effects of those governance investments into the future or other areas.
<p>Salmon runs and other aquatic foods were heavily disrupted, reducing access to traditional diets and forcing reliance on store-bought food.</p>	<p>Cost Approach The Nation assesses the total quantity of fish that would have been in the river had the dam not been constructed, assumes a sustainable harvest rate, based on data from the DFO for the region, and estimates the cost to the Nation to purchase that quantity of fish for consumption.</p>	<ul style="list-style-type: none"> • Medium cost approach, requiring collecting data from a range of sources and working with fisheries experts to ensure reasonableness of estimates • Does not capture impacts of a store bought diet, impacts related to other species (i.e. other fish or land mammals) the value of fish and other species
<p>Other aquatic and terrestrial species were lost or diminished with the valley's flooding and ecosystem disruption.</p>		

<p>Blocked fish passage decimated salmon runs, reducing access to a critical resource for food, trade, and ceremony.</p>		<p>to the ecosystem or future generations, or its use in ceremony</p>
<p>Timber, fish, and other resources from the valley were lost, with no compensation to the Nation, while hydroelectricity profits flowed to external actors.</p>	<p>Timber: Income and Indirect Market Approaches:</p> <p>The Nation engages foresters, who use aerial photos and surveys from prior to the dam's construction to estimate the volume of timber in the area. The Nation then works with their forestry arm to identify how the timber would have been managed, had the dam not been built, and what returns would be expected from that stand by observing market sales of timber over the time period for comparable products.</p>	<ul style="list-style-type: none"> • Low cost approach that leverages the Nation's expertise • Does not capture value from the ecosystem, outside of what is reflected in the income generated from a timber harvest
	<p>Hydroelectricity profits: Valuation of economic rents</p> <p>The hydroelectric dam is run by a publicly traded company with financial disclosure requirements. To estimate the value of economic rents, the Nation analyzes the financial disclosures published by the company against a benchmark of profitability for similar projects. The Nation opts to do this, rather than look at what was collected by the Crown alone, as the Crown has set favourable rates for these kinds of projects over the time period in question.</p>	<ul style="list-style-type: none"> • Medium cost approach • Economic rents can be hard to estimate for a specific project, requiring a good understanding of the hydro sector and requirements for construction and operations. • Does not capture profit directly, rather the total value that could be shared between both the Crown and the company, regardless of what was paid through taxes, fees, and other levies to the Crown.

Conclusion :

Tying it all together



Compensation from the Crown remains fragmented, minimalist, and shaped more by fiscal convenience than by principled redress. While courts have articulated important standards, governments have resisted applying them, leaving First Nations to navigate colonial frameworks that rarely capture the full scope of losses. This Guide offers practical tools to support Nations in reclaiming the authority to define and measure value on their own terms. By applying and adapting valuation methods that reflect their worldviews and priorities, Nations can strengthen their strategies within existing processes while also pressing for more principled and Indigenous-informed approaches to compensation over time.

The current landscape of compensation for Crown wrongs reflects a deeply uneven and often incoherent framework. While Canadian courts have articulated important principles – recognizing the sui generis nature of Aboriginal title, affirming fiduciary duties regarding reserve lands, and confirming that compensation must reflect both loss and deterrence – Crown governments have consistently resisted applying these standards in practice. Instead, their approaches to compensation remain ad hoc, minimalist, and shaped more by fiscal convenience than by principled redress.

For First Nations, this creates a patchwork of avenues, each of which is constrained by colonial legal constructs that fail to account for Indigenous laws, values, and the full scope of losses experienced. Even where rights to compensation are established, processes are lengthy, capped, or exclude critical cultural and spiritual dimensions of harm. At the same time, First Nations are doing the critical work of rebuilding Indigenous legal orders and governance and exercising their jurisdiction. As all of this important work progresses of both Nation rebuilding and attending to past impacts, First Nations are continually choosing how to allocate their time, resources, and energy in ways that best advance their interests now and for future generations

Taken together, the current status quo reveals both the necessity and urgency of developing more principled, transparent, and Indigenous-informed approaches to valuation. Over time, certain approaches to valuation have evolved that are now better able to articulate value in compensable ways – ways that are both methodologically credible and often truer to the lived experience of First Nations. These approaches demonstrate that valuation can be, and is, a technical exercise that should be shaped by a Nation's worldview and political and cultural context, and which serves their interests.

But more work remains to be done, including in advancing approaches in discussions and negotiations that apply concepts of value in Indigenous worldviews, cultures, and governance and legal orders. By supporting First Nations to navigate these processes grounded in their own definitions of value, and the truth about the impacts they have experienced, change will continue to advance. The approaches outlined in this Guide are not fixed or prescriptive tools. They are to be used, adapted, and changed, and their effectiveness rests on the foundation of Nation-driven processes.

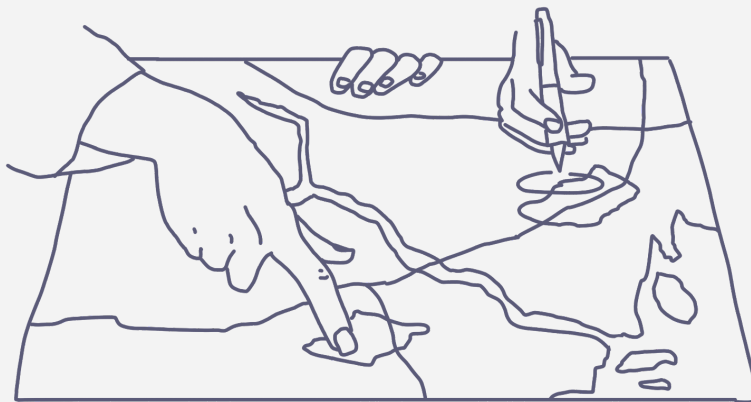
What is next?

In addition to this Guide, a range of other resources that may be of value in supporting First Nations in their compensation and valuation work have been suggested, and may be the focus of future products, including:

- **Leadership-facing summary materials:** Concise, plain-language overviews that highlight the purpose of the Guide, when and how it can be used, and key considerations for political leadership.
- **Practical implementation tools and templates:** Facilitation tools and step-by-step aids to support internal discussions and workshops, as well as adaptable templates that can be tailored by Nations to their own processes.
- **Integrated data and practitioner supports:** Curated lists of practitioners and technical experts, along with catalogues of relevant datasets and indicators. This could include stronger integration with the BC RIGC's tools and platforms, access to specific datasets, examples of useful transformations or analyses, and practical guidance on accessing and using available data.
- **Nation-led case studies and examples:** Case studies developed and shared by Nations that illustrate concrete approaches, experiences, challenges, and lessons learned in compensation and valuation, with appropriate attention to confidentiality and Nation control over what is shared. This could include how Nations have navigated non-consent or saying "no" to certain proposed infringements, and case studies examining past (historic harms) and future (proposed projects) impacts.
- **Decision-support and strategy tools:** Customizable decision tools to help structure options assessment and strategy development, designed to complement Nation-specific laws and decision-making processes.

- **Broader frameworks and reference materials:** Access to or development of common frameworks and tools, such as cumulative effects frameworks, wellbeing frameworks, and other approaches to understanding impacts and benefits that can complement the methods outlined in this Guide.
- **Living resources on settlements, cases, and precedents:** Exploration of a periodically updated summary of valuation agreements or cases that are publicly available, focused on the kinds of questions Nations have in practice.
- **Further workshops:** Additional workshops or working sessions with Nations to explore specific methods in more depth.
- **Crown-facing resources:** Materials highlighting gaps in current policies and processes) to support education, dialogue, and more informed engagement by Crown representatives.

This Guide serves as a resource and starting point for Nations, and is supported by additional resources through the BC RIGC. This includes access to data, expertise, and tools. Please visit <https://www.bcfnrigc.ca> for more information or contact us at info@bcfnrigc.ca



Hypothetical Scenario: **Different approaches to understanding underlying value and using it to shape a valuation approach**

Three Nations are preparing to begin valuation work for claims they have submitted under the federal Specific Claims process. Specific Claims address certain historical wrongs, most often related to the Crown's failure to fulfill its legal obligations regarding reserve lands and assets, breaches of fiduciary duty, or illegal land takings. Claims can be resolved through negotiation or, if negotiations fail, through a binding

decision of the Specific Claims Tribunal, who can award up to \$150 million per claim. In each scenario, the Nations believe their claims are worth more than \$150 million, and are looking to negotiate a settlement.

Each claim involves the wrongful taking of lands that were intended to be set aside as reserve. Under the Specific Claims policy and precedence, compensation is generally based on the current unimproved market value (CUMV) of the land, plus the loss of use (LOU) since the breach – valued as if it were reserve lands. The policy does not recognize cultural, spiritual, or governance-related losses as compensable.

Each Nation starts by furthering their understanding of the underlying value at stake. They seek to answer the question, “what are all the ways our Nation, past, present, and/or future, would be different in the absence of this specific breach?”.

The negotiation teams have a good understanding of some of this, given the research and evidence compiled to support the submission of their claims to Canada, but this research and evidence is narrowly focused on substantiating the breach – that is, evidence that the lands should have been set aside as reserve – and not on the impacts or implications of this breach on the Nation. Those implications form the basis of the value a Nation would be seeking compensation for, thus looking to value through the negotiation process with Canada.

Each Nation chooses to run a series of community workshops, interviews with Elders and Knowledge Keepers, and undertakes additional archival and background research in order to surface a fuller picture of the breadth of impacts they have faced on account of the breach. Each Nation also uses research undertaken to support the submission of the Specific Claim to Canada as an input to community meetings, focusing the dialogue on exploring impacts to the economic prosperity, cultural continuity, governance, political power, and health of the Nation. The dialogue in these workshops is not limited to compensatory values defined by the Specific Claim policy.

Nation 1: Enumerating and Categorizing Losses for Valuation

Nation 1 has been negotiating resolution to this Specific Claim for many years, having begun negotiations under previous leadership that stalled, in part, on account of the narrowness of Canada’s approach to the claim. After years of inaction, the Nation is re-pursuing the claim.

In this context, Nation 1 has direction from leadership to pursue a broad vision for the valuation study, with an interest in attributing monetary value to as much of the

value to the Nation as possible. They choose to use Multi-Attribute Utility Theory (see **Multi-Attribute Utility Theory (MAUT)** p.59) which requires the Nation to isolate a set of impacts and measure them using market prices, and then work with the community to understand the relative importance of those impacts that have been measured compared with all other impacts experienced.

To do this, they use community meetings and research to not only surface evidence of the impacts experienced by the Nation, but also to understand their relative impact and importance to the Nation. Implementing this method involves organizing impacts into distinct categories, and running a series of workshops and surveys that collect data from participants on the relative size of the impacts.

Concurrently, the Nation engages experts to run a valuation of the lands in question, including a loss of use study that relies on the income approach, and a current unimproved market study. These monetary values, in combination with the community engagement data collected allow the Nation to estimate the monetary value of the losses experienced, reflecting Nation-specific understandings of what matters most, and for which the Nation and community members feel are reflective of the true value.

When they conclude the valuation study, they face a negotiation with Canada that will require them to identify which parts of this study can align with and be workable through the federal system, and to seek resolution on differences in each party's perspectives on what can and should be included in the settlement.

Nation 2: Mixed Methods Approach to Negotiations

The claim is for a unique and important part of the territory from which the Nation was displaced by settlers, and the team of negotiators for the Nation know that the community has experienced great harms from these events. In this context, there is a worry that the defined and narrow pathways of the Specific Claims policy may not produce estimates of monetary values that represent enough of the underlying value lost to the community to feel willing and supportive of a settlement. Federal negotiators are clear that they only have a mandate to discuss compensation for the matters described in the Specific Claims Policy.

The Nation is looking to resolve this claim relatively quickly, while also honouring the profound harms the community experienced from being displaced from a unique and important part of their territory. Recognizing that the standard valuation methods

under the policy may not capture the full loss, the Nation adopts a mixed-methods approach to construct a comprehensive case that nonetheless can be parsed out into aspects that fall within, and outside, of the Specific Claims Policy.

- Standard Valuation: First, the Nation commissions a standard valuation study that provides a defensible monetary value within the narrow confines of the Specific Claims process. This includes:
 - A Price Comparison Approach (see **Price Comparison Approach p.77**) to determine the Current Unimproved Market Value (CUMV) of the wrongfully taken lands; and,
 - An Income Approach (see **Income Approach p.75**) to calculate the Loss of Use (LOU), estimating the income the Nation could have generated from the land over the claim period.
- Valuing Lost Production: The Nation relied heavily on the lands lost as fall hunting grounds. To quantify this specific economic loss, the Nation employs a Cost Approach, Replacement (see **Cost Approach (Replacement & Reproduction) p.73**). They collaborate with biologists and historians to estimate the annual harvest lost and then calculate the modern cost of purchasing an equivalent amount of protein. This creates a separate, tangible value for a lost economic activity not captured by the Standard Valuation.

The team presents this case at the negotiating table, anticipating that the standard CUMV and LOU valuation will be accepted and using the value of lost production to support their argument for an additional settlement amount for the lost hunting grounds.

Nation 3: Developing Scenarios to Inform a Terms of Reference with Canada

In the early stages of this negotiation, Nation 3 and Canada have notionally agreed to a spatial boundary for the claim in question. There has been intense and profitable industrial, residential, and forestry activities in this claim area predating and since the start of the claim period. Given this history, the Nation feels confident that studies focusing on economic value generated from the land will yield large settlement values. To substantiate this intuition, they undertake a preliminary review of data on forestry activities, concluding that the value of this asset alone would exceed specific claims precedent for claims of a similar size and nature. The Nation is interested in a fast resolution of the claim, as they have many other priorities and pressures for their time

and resources.

In this context, the Nation used background research and community based workshops to develop multiple scenarios that could form the basis of a valuation study with Canada. These scenarios range from valuing the economic activities that actually occurred on the territory since the time of the breach, for instance, settler business and residential development, to a hypothetical scenario that reflects how the Nation would have used and developed the lands over time in more sustainable ways. This includes a more diverse set of businesses that would have had lesser negative environmental impacts on the territory. The Nation used these scenarios to:

- Undertake exploratory analysis of various compensatory values, giving them a sense of what the most valuable activities are in monetary terms
- Seek leadership direction and strategy for the claim overall

Through this process, the Nation concluded that a simplified scenario, most focused on forestry activities, including harvesting and a modest pulp and paper operation would be the most strategic basis for valuation, likely to yield high monetary values and be faster to resolve with Canada. The Nation co-develops a Terms of Reference on the basis of this scenario with Canada and jointly hires an expert to conduct the study.

Now the Nation faces negotiation with Canada on a scenario that both parties have agreed to, using methods that are within the typical bundle of approaches Canada uses for valuation studies. The team must ensure that the settlement moves quickly without settling for less than they are interested in.

Methodology Guide



Multi-Attribute Utility Theory & Values-Based Thinking (Rank and Weight Approaches)

What it is

This method relies on stated preferences, and involves first clearly scoping the scenario, and then categories what matters (attributes) - in terms of losses or gains. Attributes (such as ecological integrity, cultural continuity, or economic benefit) are then ranked based on their relative importance, and rankings are then converted into weights. These weights can be used in a valuation model to compare alternatives. This captures stated preferences around trade-offs explicitly without requiring participants to reduce intangible values (like cultural identity or knowledge transmission) into dollar terms.

Why it works / what it measures

This approach relies on people's ability to accurately articulate what matters to them, and to make trade-offs between various, sometimes complex and multi-dimensional things in relative terms. It typically involves identifying impacts or compensatory values and organizing these into discrete and comprehensive categories. These categories form the basis of the analysis. Participants are then asked to rank each category, and describe, generally numerically, the relative importance of each (weights). So long as one of the categories can be estimated in dollar terms, you can use that value and the weights to infer the monetary value of all categories.

For example, in assessing salmon habitat restoration, communities may weigh cultural values, ecological health, and food fish. The process involves asking members to allocate 100 tokens across each category, where a token represents the importance of each category. When you sum contributions across the participants, you find that ecological health gets half as many tokens as food fish, and cultural values get twice as many tokens. If you can estimate the value of food fish, by looking at what it costs to procure fish of the same quantity and quality, then you can infer the other values. For example, if food fish is worth \$100, then using this method, cultural values would be worth \$200 and ecological health would be worth \$50.

Data requirements

- Enumeration and distinct categorization of all components of value
- Collection of rankings and weights of value components
- Monetary valuation of one component of value

Steps

1. Identify and confirm the multiple dimensions impacts of impact.
 2. Assess the relative importance of each impact category.
 3. Calculate the value of dollar based impacts.
 4. Calculate monetary equivalents for impacts not directly measured in dollar terms.
 5. Sum across all impacts to estimate total monetary compensation.
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Discrete Choice Modelling

What it is

Discrete choice modelling (DCM) is a stated preferences method that builds on Contingent Valuation by asking individuals to choose between sets of alternatives that vary by attributes (including costs). By analysing these choices, you can estimate the implicit price of each attribute and the trade-offs people are willing to make.

Why it works / what it measures

This method captures how people balance competing priorities across multiple dimensions. It works if you can understand the way costs associated with various options change, and design choices that allow you to understand the relationship between those costs and the other attributes of that scenario. Discrete choice modelling can thus use people's stated preferences to reveal their willingness to pay for scenarios, or the marginal value of specific attributes, such as the incremental benefit of improving salmon passage rates in a river system.

Data requirements

- Survey data, designed to capture preferences around clearly defined attributes and levels (including costs).
- Modelling to estimate WTP/WTA from survey data.

Steps

1. Identify relevant attributes and levels for the good or service.
 2. Design surveys that present respondents with choice sets.
 3. Collect responses
 4. Estimate WTP/WTA for attributes, by isolating relationships between costs and choices.
-

Contingent Valuation

What it is

Contingent valuation is a stated preferences method that involves directly asking people how much they would be willing to pay (WTP) to receive, or willing to accept (WTA) to give up something of value. The approach is particularly suited to public goods, where no market transaction reveals preferences—such as valuing salmon habitat restoration, cultural practices, or species protection.

Why it works / what it measures

Contingent valuation works by directly asking people about their values. This allows it to include values that markets completely ignore, such as:

- Use Value: The value of directly using a resource (e.g., fishing in a river).
- Non-Use Value: The value of simply knowing a resource exists and is protected, even if you never visit it (e.g., the cultural value of a sacred site).
- Option Value: The value of preserving a resource for future generations to use.

By capturing these different dimensions, the method provides a more complete picture of what something is worth to a community.

Data requirements

- Carefully designed survey and responses capturing people's willingness to pay or accept realistic and understandable scenarios or values.

Steps

1. Identify respondents.
 2. Pose valuation questions (WTP or WTA) through surveys.
 3. Estimate WTP/WTA values from responses.
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Benefit Transfer Techniques

What it is

The benefit transfer method uses findings from valuations of nonmarket goods and services in one context to estimate the value of nonmarket goods and services in another context with similar or common criteria / characteristics.

Why it works / what it measures

This method works on the assumption that if two sites are similar enough in their salient (e.g. ecological, cultural, or economic) characteristics, then the values people hold for them will also be similar. It's a practical way to get an estimate when time and resources are limited. However, its accuracy depends entirely on how well the original study site matches the new context.

Data requirements

- A valuation study, and detailed description of what is being valued
- Detailed information about both the original site and the new site to justify the comparison.

Steps

1. Find a credible existing valuation study.
 2. Critically assess whether the context of the original study (e.g., the resource valued, the affected population) is similar enough to your own.
 3. Identify how the two contexts are similar or different.
 4. Adjust the valuation from the original study to better reflect your specific context.
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Travel Cost Method

What it is

The travel cost method estimates the value of a good, service, or resource by examining the expenses people incur to access it. The underlying assumption is that the number of visits to a site is influenced by the “price” of visiting, where price is understood broadly to include not just entry fees but also travel expenses, accommodation, time, and other opportunity costs. By treating these costs as a proxy for price, the method allows the estimation of a demand curve for goods and services—such as recreational sites—that do not have a direct market. This approach is most often applied to parks, tourism destinations, and other outdoor recreation sites.

Why it works / what it measures

This method works because it uses actual observed behaviour (revealed preferences) to infer value. Individuals demonstrate how much they are willing to “pay” through the travel and opportunity costs they incur. In this way, the method captures the use value of a site, reflecting its recreational, cultural, or ecological importance to those who visit. However, it does not capture non-use values, such as the value of knowing the site exists or that it will be preserved for future generations.

Data requirements

To apply the travel cost method, data is needed on:

- The number and nature of activities individuals or households take, for example visits to the site over a defined period.
- The total cost of each visit, including transportation, accommodation, entrance or parking fees, and the opportunity cost of travel time.
- Substitutes (other similar sites) and their associated costs.
- Socioeconomic information such as household income, demographics, and preferences that may influence demand.

Steps

1. Define the recreational site or resource and the boundary of its potential visitors.
2. Collect data through surveys (or secondary sources) on the number of visits, travel-related costs, and visitor characteristics.
3. Specify the functional form of the demand curve, using total travel cost as the price variable.
4. Estimate the demand curve and measure how visitation responds to changes in cost.

5. Calculate consumer surplus (the area under the demand curve above the observed price) to derive the economic value of the site.
-

Production Function

What it is

The production function approach estimates value by looking at how a non-market good or service contributes to producing a final output that does have a market price. In simple terms, it asks: *if this input (e.g., land stewardship, community governance, language, or environmental quality) were reduced or improved, how would the final economic output change?* The contribution of the non-market input is then assigned a value based on the market price of the output.

Why it works / what it measures

This approach works because it links the value of a non-market input to observable, measurable outcomes in the market. It highlights the role of non-market factors as *inputs* into broader systems of production. For example, strong governance may enable more effective economic development, healthy ecosystems may support fisheries or forestry, and language or cultural continuity may support social cohesion that contributes to productivity and wellbeing. The production function approach thus measures the *marginal contribution* of a non-market good or service to a market-valued outcome.

Data requirements

To apply the method, a Nation would need:

- A final good or service that has a clear market value (e.g., timber harvest, fish catch, tourism, workforce productivity).
- Relevant non-market inputs that contribute to producing that good (e.g., ecosystem health, governance systems, cultural practices, social capital).
- A functional relationship (production function) that specifies how these inputs interact to generate outputs.
- Empirical data on input quantities, quality, and changes over time.
- Market price data for the final good or service.
- Opportunity cost data to compare input trade-offs.

Steps

1. Identify the final good or service of interest (e.g., fish harvest, mine output, or public health outcome).
2. List key inputs, including both market inputs (capital, labour, equipment) and non-market inputs (environmental quality, governance capacity, social networks).

3. Specify the production function, describing how these inputs combine (e.g., Cobb-Douglas, CES, or empirical model).
 4. Estimate changes in output that can be attributed to changes in the non-market input (e.g., decline in fish stock due to reduced habitat; productivity gains from better governance).
 5. Apply the market price of the final output to those changes, translating the contribution of the non-market input into monetary terms.
 6. Incorporate opportunity costs to identify the economically optimal allocation of resources.
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Valuation of Economic Rents

What it is

Economic rent is the surplus value generated by a resource after accounting for all costs of production. It is the difference between the actual payment received for using a resource (such as timber, minerals, or fish stocks) and the minimum payment required to cover all opportunity costs, including labour, capital, and materials. In other words, it represents the unearned income derived from controlling a scarce resource. Valuing a resource through economic rents involves estimating the stream of net revenues that exceed these opportunity costs and discounting them to present value.

Why it works / what it measures

This method isolates the *true surplus* associated with a resource, making it especially relevant in contexts where Nations are negotiating royalties, compensation, or co-management agreements. By focusing on the value that remains after covering all inputs, economic rent highlights the inherent worth of the resource itself rather than the broader operations surrounding it. This approach can inform the design of a fair royalty regime or revenue-sharing agreements related to natural resource extraction, since it reflects the portion of value that accrues from resource ownership.

Data requirements

- Detailed revenue data (e.g., quantity of resource extracted × market price).
- Comprehensive accounting of costs, including labour, capital, materials, operating, and opportunity costs.
- If looking to the future,
 - Assumptions about prices, extraction volumes, and costs.
 - An appropriate discount rate to convert future rents into present value.

Steps

1. Estimate revenues from the resource (e.g., timber sales, fish harvests, or mining outputs).
 2. Subtract all input costs –labour, capital, equipment, operations, & any other foregone uses.
 3. Determine the net surplus value generated each year.
 4. Apply a discount rate or inflation rate to bring values into present terms.
 5. Aggregate across the time horizon to estimate the total value of the economic rents associated with the resource.
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Hedonic Value

What it is

The hedonic pricing method is based on the idea that the value of non-market goods and services is embedded in the prices people pay for related market goods. By breaking down the price of a product (such as housing, wages, or agricultural land) into its underlying attributes, analysts can estimate the implicit value of non-market characteristics. For example, the additional price paid for a house with a mountain view, reduced noise levels, or proximity to salmon habitat can reveal the value people place on those non-market qualities.

Why it works / what it measures

This approach works because market prices for complex goods (like homes or farmland) reflect the bundle of attributes they provide. Some of these attributes are directly priced (e.g., square footage, number of rooms), while others represent non-market characteristics (e.g., cultural landscape, environmental quality, access to recreational fishing). By examining systematic variations in prices across properties with and without a given attribute, hedonic pricing estimates the implicit willingness-to-pay for that non-market good. This method is particularly useful for capturing use values associated with environmental or cultural amenities, such as clean air, access to healthy ecosystems, or quiet surroundings.

Data requirements

Applying the hedonic pricing method requires:

- Detailed price data for the market good (e.g., property sale prices, wage levels, agricultural lease rates).
- Attribute data for each good, including both market-based features (e.g., size, quality, location) and the non-market attributes of interest (e.g., water quality, cultural landscape, air quality).
- Socioeconomic data on buyers (e.g., income, demographics) to control for differences in preferences and purchasing power.
- A sufficiently large dataset to identify price variation attributable to the attribute being studied.

Steps

1. Identify a market good (e.g., housing, land, wages) that incorporates the non-market attribute of interest.

2. Specify a hedonic price function with the market price as the dependent variable and both market and non-market attributes as independent variables.
 3. Use statistical methods (e.g., regression analysis) to estimate the contribution of each attribute to the total price, focusing on the non-market characteristic.
 4. Derive the implicit price (willingness-to-pay) for the non-market attribute.
 5. Aggregate individual willingness-to-pay estimates to calculate the broader social or community value of the attribute.
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Indirect Market Approach

What it is

The indirect market approach estimates the value of goods or services that are not traded in a market by looking at the prices of similar goods or services that are traded. In practice, this means identifying a comparable private market and using the behaviour and willingness-to-pay observed there as a proxy for a good or service. Governments often use this method to design and fund programs like education, housing, or healthcare.

Why it works / what it measures

The method works because private markets reveal how much people are willing to pay for comparable goods or services, even if the public or collective version of that good is not bought and sold. For instance, if private school tuition is \$12,000 per year, that information can be used to approximate the value of providing education through public schools. Similarly, private rental rates can provide a benchmark for estimating the value of publicly funded housing.

Data requirements

- Market price and quantity data from comparable private services (e.g., tuition, program fees, service charges).
- Information on the quality and scope of both the private and public good, to ensure they are reasonably comparable.
- Adjustments for accessibility, cultural relevance, and community needs (since public services may differ substantially from their private counterparts).

Steps

1. Identify the public or collective good to be valued (e.g., language revitalization, wellness services, governance supports).
2. Find a comparable private good or service (e.g., language course fees, therapy session costs, mediation services).
3. Collect market price and quantity data from the private market.
4. Adjust for differences in quality, scope, and accessibility to improve comparability.
5. Apply the private market data as a proxy for the value of the public good.

Avoided Damage Costs

What it is

The avoided damage cost approach—sometimes called *costing mitigating behaviours*—estimates the value of a good, service, or condition by looking at the costs people or governments are willing to pay to prevent or reduce damages. For example, households may install double-glazed windows to avoid noise pollution, or governments may invest in flood barriers to prevent property damage. These expenditures serve as a proxy for the value placed on avoiding the harm.

Why it works / what it measures

This method works on the principle that the money people spend to prevent or reduce harm reflects the value they attach to avoiding that harm. While it does not directly measure the full benefit or loss avoided, it provides a market-based signal of at least part of that value. Avoided damage approaches are often applied in contexts where harms are diffuse, long-term, or otherwise difficult to price directly—such as climate change impacts, environmental degradation, or public health risks.

Data requirements

Applying this method requires information on:

- The likely future or actual historic damages that occur without intervention (e.g., health costs from air pollution, economic losses from flooding).
- The goods, services, or actions required to mitigate or prevent those damages (e.g., filters, infrastructure investments, health treatments).
- The costs of those mitigating actions, which must be observable in markets or estimable from existing data.

Steps

1. Identify the types of damages that could occur under a “no intervention” scenario.
 2. Estimate the goods, services, or actions required to mitigate those damages.
 3. Collect data on the costs of these goods, services, or actions, using market prices where possible.
 4. Aggregate the costs of mitigation to produce a proxy value for the avoided damages.
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Cost Approach (Replacement and Reproduction Costs)

What it is

The cost approach estimates value based on the principle of substitution: no one would pay more for an asset than it would cost to replace or reproduce it. Traditionally, this is applied to physical structures, where the value is estimated as the cost of constructing a substitute (replacement cost) or a replica (reproduction cost), minus depreciation. In broader applications, including Nation-led valuation, the method can be adapted to ask: what would it cost to restore or rebuild the social, cultural, or economic conditions that were lost?

Why it works / what it measures

This approach works because it ties value to the real costs of restoring utility or achieving outcomes, rather than relying on markets. For Nations, it can provide a structured way to estimate the cost of repairing harms—whether rebuilding governance systems, revitalizing languages, or re-establishing economic opportunities. In this sense, the method measures the tangible financial requirements of moving from a current state to a target state that represents what conditions would have been had the breach not occurred, or what is needed for rebuilding moving forward.

Data requirements

To apply the method in this context, a Nation would need:

- Indicators of socio-economic, cultural, or governance outcomes (e.g., employment rates, language fluency, land access, housing conditions).
- Target levels for these indicators, reflecting either a “no breach” scenario or a desired future rebuilding scenario.
- Intervention options to reach these targets (e.g., programs, infrastructure, services).
- Cost data for interventions, drawn from comparable programs, markets, or funding arrangements.
- Depreciation or adjustment factors to account for existing assets or partial progress.

Steps

1. Identify priority indicators of socio-economic, cultural, or governance well-being that have been impacted.
2. Define target levels for those indicators, based on counterfactuals (what would have been absent the breach) or aspirational rebuilding goals.

3. Determine interventions that could realistically move conditions toward the target levels (e.g., housing investments, governance capacity funding, education programs).
 4. Estimate the costs of those interventions, drawing from market costs or analogous programs.
 5. Adjust for depreciation or existing progress, to avoid double-counting.
 6. Aggregate costs across indicators and interventions to form the estimated replacement or rebuilding cost.
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Income Approach

What it is

The income approach—also called the income capitalization approach—is a method for valuing an asset based on the income it generates. It is most commonly used in real estate and investment valuation, but can also be applied to land, natural resources, or other assets that provide a steady stream of revenue and is often the underlying concept estimated in Loss of Use studies. The approach assumes that the value of an asset is equal to the present value of the future income it can produce.

At its simplest, the method involves dividing the net operating income (NOI) by a capitalization rate (cap rate), which reflects the expected rate of return in the market.

Why it works / what it measures

The income approach ties value directly to economic productivity. Rather than looking at sales of comparable assets, it measures how much revenue an asset can generate over time, net of expenses. This is useful in contexts where Nations or governments are assessing the financial value of a lease, landholding, fishery, or timber operation. For example, the approach could be applied to estimate the value of a long-term lease on reserve land, where the NOI comes from annual lease payments, or to determine the value of a fishing license based on projected revenues from catch sales.

Data requirements

- Gross income: revenues generated by the asset (e.g., lease payments, harvest sales, license fees).
- Operating expenses: costs associated with managing or maintaining the asset (e.g., administration, monitoring, upkeep).
- Net operating income (NOI): gross income minus expenses.
- Capitalization rate (Cap Rate): often derived from comparable assets or market benchmarks, representing the expected rate of return.

Steps

1. Estimate NOI: Subtract operating expenses from gross income to calculate net operating income. *Example: A timber license generating \$2M in annual sales with \$500K in expenses has an NOI of \$1.5M.*
2. Determine cap rate: Identify an appropriate capitalization rate by reviewing comparable assets or market returns. *Example: If similar forestry operations trade at a 7% return, the cap rate is 0.07.*

3. Apply formula: $\text{Value} = \text{NOI} \div \text{Cap Rate}$. *Example: $\$1.5\text{M} \div 0.07 = \21.4M estimated value of the license.*
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Price Comparison Approach

What it is

The price comparison approach estimates the value of a resource or property right by examining recent or historic transactions for similar assets in comparable markets. For example, if a Nation is negotiating compensation for timber rights, the value of similar timber sales in nearby regions can be used as a benchmark. This method is commonly used in real estate appraisals, resource valuation, and treaty or litigation contexts where comparable sales data is available.

Why it works / what it measures

This approach works because markets—when functioning well—produce observable evidence of what buyers are willing to pay and sellers are willing to accept. By looking at recent sales of similar land, fish quotas, or resource extraction rights, analysts can estimate what the asset in question would be worth if sold under similar conditions. Price comparisons are widely accepted in courts, negotiations, and financial reporting because they are grounded in actual transaction data, not hypothetical estimates.

Data requirements

- Recent sales data for comparable properties, rights, or resources.
- Contextual information about each sale (e.g., quality of timber, type of fishing quota, size and location of land parcel).
- Adjustments for differences between the comparables and the asset being valued (e.g., differences in accessibility, productivity, or ecological quality).

Steps

1. Select recent sales of similar assets (e.g., land parcels, timber rights, fish quotas) in the same or nearby markets.
 2. Collect information on prices, volumes, and terms of sale.
 3. Account for factors such as quality, location, or restrictions that make the asset more or less valuable than the comparables.
 4. Use the adjusted comparable prices to infer the fair market value of the asset under consideration.
 5. Where possible, compare results with other valuation methods (such as income-based or cost-based approaches) to validate the estimate.
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