

**Supporting Indigenous Water Governance in BC:
An Exploration into Opportunities Within the
Water Sustainability Act**

**by
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Abstract

Indigenous peoples have maintained that sovereignty over their waters is a priority for them. Yet, most water governance systems across Canada exclude Indigenous peoples from decision-making processes over the waters that sustain them. There is growing recognition across water practitioners and watershed users that this needs to change. In BC, the modernization of the province's water laws through the introduction of the *Water Sustainability Act* has enabled a suite of water governance tools that show potential to be leveraged to support Indigenous water governance. This paper draws on a literature review, expert interviews, and case studies to analyze how select tools in the *Water Sustainability Act* could be used to further Indigenous sovereignty over water. Then, it provides recommendations to the BC Government on areas of action that would enable or assist with the uptake of water governance tools by Indigenous peoples.

Keywords: Water governance, Indigenous governance, Indigenous rights, British Columbia

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Positioning Myself

I write and think about this topic as a settler living and learning on the unceded territories of the Coast Salish peoples including the xʷməθkʷəy̓əm (Musqueam), Sḵw̓x̓wú7mesh (Squamish), and Səlílwətaʔ/Selilwitulh (Tsleil-Waututh) in Vancouver. My parents immigrated from China to the lands currently called Canada and I was born on Treaty 4 lands in Regina in the territories of the nēhiyawak (Cree), Anihšināpēk (Saulteaux), Dakota, Lakota, and Nakoda, and the homeland of the Métis/Michif Nation. I was raised on the unceded territory of the Algonquin Anishnaabeg people in Ottawa. Growing up, I was taught theories of multiculturalism that integrated my story into the narrative of the nation, while papering over other perspectives and historical complexities. For example, the country's capital is built on stolen lands that include sacred meeting places for Indigenous inhabitants from time immemorial. It took me time to appreciate the contradiction that common framings of multiculturalism work to assimilate the cultures that were here first. Today, I understand that creating a just society requires an honest reckoning with our colonial past.

I approach my work as a settler with my personal background, experiences, biases, and limitations. Further, I operate within the discipline of public policy, which in itself is a colonial construct that comes with its baggage and blind spots. I do not engage directly with Indigenous communities in my work. I try to avoid giving prescriptions to Indigenous peoples, and I recognize that each Indigenous nation is unique and should be free to shape decision-making in their communities.

Writing this paper has been a learning process for me, and there remains a lot I am ignorant about. Still, I engage in this work despite my positional, methodological, and epistemological limitations because to me, reconciliation requires Indigenous people and settlers continue a process of respectful dialogue. I hope that my efforts may contribute to this dialogue more than they may harm it.

Note on Terminology and Language

First Nations have stewarded their waters for thousands of years. By fitting Indigenous relations with water into contemporary notions of governance, this may be fitting water into Western human-nature binaries and concepts of water as a resource. When I refer to Indigenous water governance throughout this paper, I say this recognizing that for many Indigenous peoples, before there is water governance, there is water as a relation which people have responsibilities to.

Marine waters are incredibly important to Indigenous peoples and settlers alike, and ocean governance is an important topic which can be highly connected to freshwater governance. However, due to scope limitations, my paper only discusses freshwater. Thus, all references to “water” and “water governance” in this paper refer to freshwater and freshwater governance.

I predominantly use the term “Indigenous peoples” throughout the paper to convey the diversity of Indigenous communities. When I use the term “First Nations”, it is in contexts connected to discussing First Nations as a legal or administrative category such as First Nations under the *Indian Act*.

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List of Acronyms

BC	British Columbia
CETF	Critical environmental flow threshold
CVRD	Cowichan Valley Regional District
CWB	Cowichan Watershed Board
DRIPA	Declaration on the Rights of Indigenous Peoples Act
EFN	Environmental flow need
FITFIR	First in Time, First-in-Right
FLNRORD	Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC)
FPIC	Free, prior, and informed consent
IK	Indigenous Knowledge
MOE	Ministry of Environment and Climate Change Strategy (BC)
MOU	Memorandum of Understanding
OECD	Organization for Economic Co-operation and Development
UBCIC	Union of British Columbia Indian Chiefs
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
WSA	Water Sustainability Act
WSP	Water sustainability plan
YRITWC	Yukon River Inter-Tribal Watershed Council

Executive Summary

Water plays an essential role across Indigenous communities in a physical, economic, and cultural sense. Yet today in British Columbia, Indigenous peoples are excluded from most decision-making processes that control the waters that sustain them. There is growing recognition across water practitioners and watershed users that this needs to change. This is complemented with evolving understandings of Indigenous water rights and the increasing legal recognition of Aboriginal rights and title.

This paper explores Indigenous water governance and opportunities for the BC Government to support the expansion of Indigenous sovereignty over water. The key guiding questions for this paper are: (1) What are common water governance initiatives taken up by Indigenous peoples in BC; (2) what are examples of governance arrangements that have improved Indigenous water governance or water rights; (3) how can select WSA tools be used to improve Indigenous water governance?; and (4) what should the BC Government do to enable the uptake and prepare for the implementation of WSA tools to support Indigenous water governance? To answer these questions, I conduct a literature review, interview 13 experts, and analyze five case studies of Indigenous water governance arrangements. These five cases are: the Cowichan Watershed Board, the Yukon River Inter-Tribal Watershed Council, the *Nisga'a Final Agreement*, the San Juan River Settlement of 2005, and the *Te Awa Tupua (Whanganui River Claims Settlement) Act*.

I construct a roadmap of efforts the BC Government could use to frame and guide their support to renew Indigenous water governance. Component A is to recognize Indigenous peoples' water rights and authorities. Component B is to develop water governance values defined by Indigenous peoples. Component C is to reflect Indigenous rights and values into administrative and legal water regimes. I focus on component C in this paper, acknowledging that while examining the ways BC can alter its legal or administrative regimes to support Indigenous water governance is by itself valuable, these efforts will only become more so as we recognize Indigenous water rights and values within our frameworks. Specifically, I assess the ways in which three select tools enabled through the *Water Sustainability Act* (water sustainability plans, delegated authority, and advisory boards) could support Indigenous water governance.

Given the complexity of Indigenous water governance and the diverse on-the-ground realities of Indigenous communities across BC, different contexts will require different solutions. This paper

approaches the topic with flexibility and considers a broader and diverse set of criteria and objectives when assessing *Water Sustainability Act* tools. These tools may present different opportunities, advantages, and limitations that vary depending on the situations they are applied to and how they are designed.

The highly enabling nature of the WSA means that the new tools it allows for are optional. So, I offer recommendations the BC Government could undertake to support themselves and Indigenous peoples to uptake the tools enabled through the WSA. To guide my exploration into these recommendations, I identify five key components needed for resilient Indigenous water governance, recognizing that there is not a one-size fits-all model of what resilient Indigenous water governance looks like. These components are capacity, self-determination, cooperation and coordination, a whole-of-watershed perspective, and respect for Indigenous rights. I categorize my recommendations into six broad areas of action with composite short run, medium run, and long run actions.

The challenges involved in supporting Indigenous water governance should not be underestimated. Ultimately, to achieve sustained progress on water and Indigenous peoples' place in governing these waters, the BC Government needs to make this topic a priority. Watershed security needs to be recognized as urgent and important, and Indigenous peoples need to be recognized as critical partners in this matter. Yet, with commitment and investment on behalf of the BC Government, there is great opportunity to move forward on reconciliation and protect our watersheds as we enter ever scarcer freshwater conditions.

Chapter 1.

Introduction

Water is a complicated matter to discuss because it touches on everything. It is the backbone of life, economic development, ecosystems, and our societies. Yet across Canada, governance systems treat it as an atomized, separable entity to the detriment of water itself. This by extension harms watersheds, living creatures, climate and weather systems, and more. British Columbia (BC) is no exception. This paper focuses on water governance in BC.

Indigenous peoples have understood the important, holistic, and complicated nature of water for millennia. It has immense spiritual, cultural, and relational significance and is meant to be treated with respect across Indigenous cultures (Arsenault et al., 2018). However, over the past two hundred years in BC, settler water governance systems have tried to sideline, subjugate, and delegitimize Indigenous sovereignty over water.

As climate change, urbanization, industrial activity, and resource extraction continue to alter the hydrological conditions in BC, the province finds itself in a context of increasing water scarcity and conflict. Approximately 63% of BC's population live in water-stressed areas (Gower & Barroso, 2019). In the Okanagan watershed, 235 out of 300 streams are overallocated (Curran, 2017). Many watersheds have permanently altered environmental flow regimes and this has severely disrupted ecosystems. The situation is further complicated by a lack of understanding of the state of BC's watersheds. The province has 291,000 unique watersheds, but surface water quality status and trends are only regularly monitored at 40 locations (Simms & Brandes, 2016). It is past time to face what many Indigenous people and water advocates have been saying for decades: our current water governance systems do not reflect hydrological, ecological, and sociological realities, and this is unsustainable (Curran & Mascher, 2016).

Today in BC, Indigenous peoples are excluded from most decision-making processes that control the waters that sustain them. At the same time, they often bear the greatest impacts of these water issues. For, water is fundamental to the cultural survival of Indigenous peoples (McGregor, 2009). It is crucial for salmon and other aquatic species integral to many Indigenous cultures, economies, and livelihoods. Water and watersheds are also connected to their languages, governance structures, and knowledge systems (Wilson-Raybould & Raybould, 2014).

This paper explores Indigenous water governance and opportunities for the BC Government to support the expansion of Indigenous sovereignty over water. This is a pressing issue because building effective water governance in the province will require the renewal of Indigenous sovereignty and leadership over water (Brandes et al., 2016; POLIS, 2021). More importantly, Indigenous peoples have articulated that water and water governance is a priority for them (Simms, 2014). Ultimately, revitalizing Indigenous water governance is a crucial undertaking for reconciliation, because to deny a people sovereignty over their waters is to deny them sovereignty over their lifeblood.

This paper approaches this topic by first outlining the water governance landscape in BC and ways in which Indigenous rights and relationships to water are undermined in this landscape. It then looks to the *Water Sustainability Act* (WSA) as legislation that may be leveraged to give Indigenous peoples greater agency in water governance. I use expert interviews, a literature review, and case studies to analyze how select tools in the WSA could support relationship-building and Indigenous decision-making in water governance. The policy focus and recommendations of this paper are just one of the multiple avenues that could help revitalize Indigenous water governance and build better governance relationships to protect one of our most vital resources. Undeniably, all efforts to move the needle on Indigenous water governance will take time, focus, and cooperation across watershed users.

Chapter 2.

Background: Water Governance in BC

2.1. Indigenous Water Rights in BC

Several legal scholars have analyzed the case for unextinguished Indigenous water rights in Canada and concluded there are multiple sources substantiating these rights (McFarlane, 2019; Phare, 2009; Sam, 2013).

One source of Indigenous water rights is through constitutionally protected section 35 Aboriginal rights. Water has not been explicitly acknowledged by the courts as an Aboriginal right. However, Aboriginal rights are found to “lie in the practices, customs, and traditions integral to the distinctive cultures of Aboriginal peoples” (*R. v. Van der Peet*, (1996)). Given the centrality of water to Indigenous peoples’ traditional and contemporary ways of life, water is an essential component of several Aboriginal rights held by Indigenous peoples in Canada. This includes the right to water for domestic, social, spiritual, and ceremonial purposes, and the right to water incidental to the right to fish, hunt, and trap (FNFC, 2018a; McFarlane, 2019; Nowlan, 2004). Some court cases related to section 35 Aboriginal rights have supported the legal case that water is a section 35 right.

The Supreme Court of Canada recognized Aboriginal title to land for the first time in *Calder v. Attorney General for British Columbia* (1973). Indigenous peoples consider water an aspect of Aboriginal title even though the *Calder* case did not specifically address water. For, to Indigenous peoples, the land, water, and resources are inseparable. (Nowlan, 2004; Sam, 2013). Some Indigenous peoples also argue that “lands reserved for Indians” should include sufficient water entitlements to meet domestic and other community needs (Wilson-Raybould & Raybould, 2014). First Nations may hold water entitlements through historical and modern treaties, though this is rarer in BC.

Indigenous peoples also hold inherent rights that do not originate in Canadian law. They are given by the Creator’s laws and stem from the fact of Indigenous peoples’ existence and occupation of their traditional lands. Indigenous peoples have maintained that these inherent rights include the right to use and govern their waters (AFN, 2013; Cowichan Tribes, 2013, 2013; FNFC, 2013; Gullason, 2018).

Despite the multiple potential sources for the legal existence of Indigenous water rights, there is no recognition or reflection of these rights in formal water governance practices, policies, or laws (apart from some water rights in treaties). The boundaries of these water rights remain undefined and most Indigenous peoples' reliance on water and water flows for food, social, ceremonial, and commercial purposes are not factored into the hydrological balance of watersheds (Curran & M. Brandes, 2019). The broad consensus from Indigenous people, the literature, and policymakers is that the existing legal regimes and policy frameworks provide insufficient safeguards to ensure water security for Indigenous peoples, let alone to enable the holistic relationships with water that many Indigenous customs and cultures call for (Askew et al., 2017; P. Wilson, 2009).

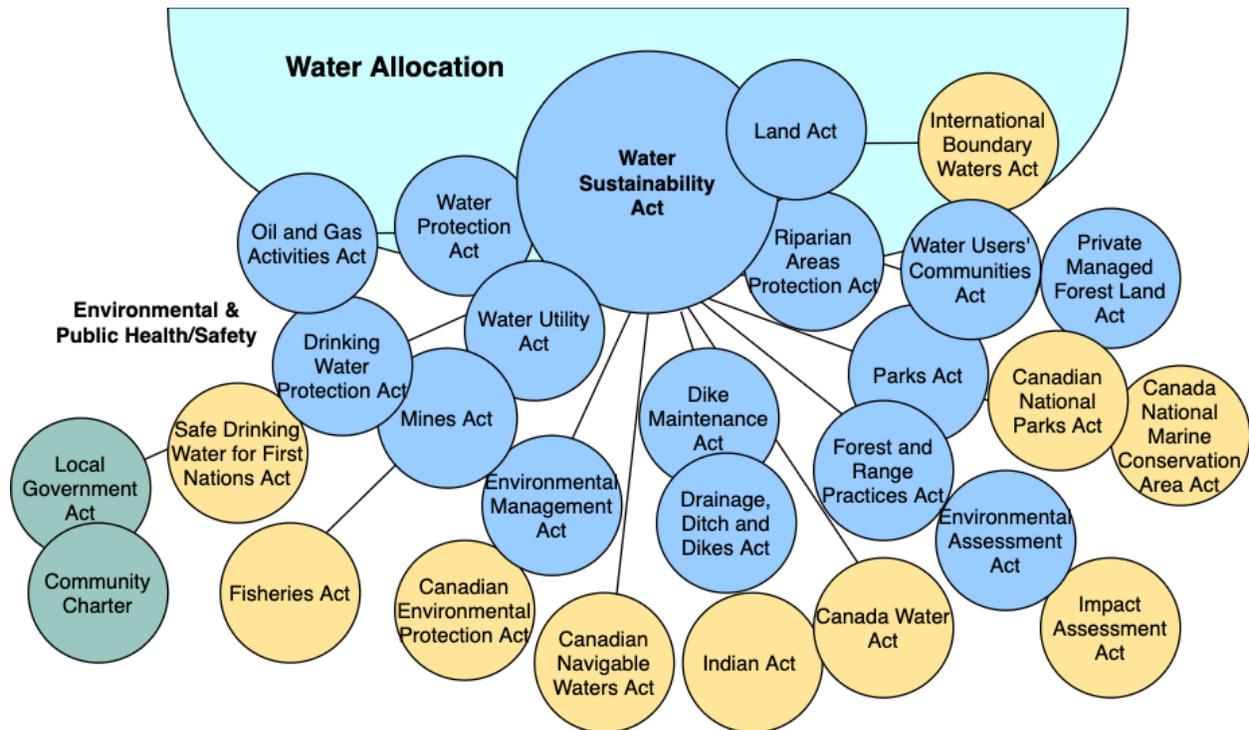
2.2. Jurisdictional Context of Water in BC

Water criss-crosses borders and is integral to several major components of the social and ecological landscape. As a result, watershed governance is a jurisdictionally complicated matter with fragmented governance structures. Figure 2.1 is an adaptation of a figure originally found in Simms' (2014) work. It gives a non-exhaustive list of legislation impacting water in BC and shows how no single piece of legislation or jurisdiction has complete influence over water. Most water allocation powers fall to the BC Government but this is further complicated by the fact that the BC Government splits this responsibility across departments (Phare, 2009).¹ Figure 2.1 also illustrates the limited formal powers Indigenous peoples have over water governance within the existing federalist framework.²

¹ BC's two main departments involved in water allocation are the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), and the Ministry of Environment and Climate Change Strategy (MOE). FLNRORD issues most water licenses, however the Oil and Gas commission issues short-term water use approvals. MOE is responsible for the protection, management, and conservation of BC's waters and have been the main department drafting and developing the Water Sustainability Act (McFarlane, 2019).

² The *Indian Act* allows First Nations under that act to make by-laws around on-reserve water and wastewater infrastructure. Furthermore, First Nations with modern treaties have some legislative and decision-making powers over water governance. This will be touched on in Chapter 5.

Figure 2.1 Legislation Influencing Water in BC



Adapted from Simms, 2014. Provincial legislation is represented in blue, federal legislation in yellow, and the provincial legislation that enables municipalities to make decisions around water are in green.

The complications in water governance are augmented for Indigenous peoples who often find themselves in a jurisdictional quagmire between federal and provincial responsibilities. BC is mostly responsible for water allocation and plays a role in ensuring its residents have access to clean freshwater, yet most Indigenous communities are still under the *Indian Act* and thus fall under federal obligation. This jurisdictional overlap results in confusion, contestation, and neglect from both levels of government while Indigenous peoples are often left with little to no control over their waters. Certain contexts may be further complicated by overlaps in the territory of different Indigenous peoples.

2.3. Water Sustainability Act and the Water Allocation System in BC

Despite these jurisdictional complications, BC's *Water Sustainability Act* (WSA) can be characterized as the legislation that most comprehensively sets out the province's water allocation system. Most water licenses in BC are given out under a prior allocation system known as the First in Time, First-in-Right (FITFIR) which was established over a hundred years

ago and retained in the WSA. Under FITFIR, the date that a license holder receives their license determines the seniority of that license. In times of water scarcity, licensees with more seniority are entitled to take their full allocation of water over junior licensees (BC Government, 2021).³

Another key principle of BC's water allocation system is the Crown's claim to control over surface and groundwater which is also asserted in the WSA.⁴ Licenses may be cancelled if BC decides that water under the license has not been used for more than three years or is being used for an improper purpose (Curran & Mascher, 2016).

Administrators acting under the legislated authority of the WSA have wide-ranging powers and discretion to direct water use behaviour, as they can alter licensee behaviour in low flow seasons and suspend the license rights if they deem licensees are not adhering to their license conditions. Thus, it is a system with flexible authority and inflexible water licence conditions (Curran, 2017).

2.4. Dispossession of Indigenous Rights Through BC's Water Allocation System

Several scholars have documented how the history of BC's water allocation system is also a history of colonial dispossession of Indigenous water rights (Matsui, 2009; McFarlane, 2019; Sam, 2013). When BC became a Crown Colony in 1858, water rights were administered under the common law rules of riparian rights. This was a continuation of the rights system from when the area of BC was under the administration of the Hudson's Bay Company. Water is not administered separately from land under riparian rights. Rather, water access rights are attached to land rights, with the caveat that landowners cannot impair the rights of downstream water users (Wilson-Raybould & Raybould, 2014).

BC adopted a prior allocation system in 1865 as the impetus to explore the land for gold grew. A FITFIR system facilitated development by providing more certainty around water access rights and security (Curran & Mascher, 2016). BC unilaterally asserted ownership over surface water

³ If two licensees hold the same priority date, priority is based on water use purposes ranked in the WSA from highest to lowest as follows: Domestic, waterworks, irrigation, mineralized water, mining, industrial, oil and gas, power, storage, conservation, land improvement.

⁴ Section 5 of the WSA vests the property in and the right to the use and flow of all the water and groundwater in BC, except insofar as private rights have been established under authorizations (WSA, 2016).

and started licensing water. However, Indigenous peoples were barred from applying for water licenses until 1888. Then for decades afterwards, Indigenous peoples could only acquire licenses for domestic use and irrigation, reflecting colonial desires to force agriculture upon Indigenous communities. With the establishment of the Indian Reserve Commission in 1876, Reserve Commissioners were instructed to allot water alongside the lands they set aside to create reserves in BC. As early as 1877, the Indian Reserve Commission has acknowledged prior water rights of Indigenous communities (Sam, 2013). However, the BC Government disputed (and continues to dispute) the authority of Reserve Commissioners to allot water rights. In the early years, the BC Government did not recognize several water licenses given out to Indigenous peoples because of these jurisdictional contestations (McFarlane, 2019; Wilson-Raybould & Raybould, 2014).

In 1909, the BC Government introduced the *Water Act* to set up a centralized water licensing system and create a Board of Investigation for water claims disputes. A very high proportion of water disputes first raised with the Board of Investigation related to water rights on reserves and dispossessions of Indigenous water entitlements have continued since the *Water Act* came into force. 27% of First Nations with water licenses have had their licenses cancelled and from 1920-2000, 55 First Nations had water license substitutions that reduced their water entitlements.⁵ Furthermore, the BC Government did not recognize the legal capacity of First Nations to hold their water licenses under their own names until the 1980s. Today, only 126 out of 203 BC First Nations hold water licenses (McFarlane, 2019).

2.5. Shortcomings in BC's Water Governance System

The gaps in the BC Government's water management regime as they pertain to water security and the environment are numerous and well-documented (M. Brandes et al., 2015; McFarlane, 2019; Nowlan & Muter, 2015). This paper focuses on the separate but related ways in which the BC Government's water governance system fails to address Indigenous interests and rights. On top of the systematic marginalization of Indigenous peoples' water entitlements throughout the creation of FITFIR, the BC Government's water governance system has the following key shortcomings:

⁵ In contrast, only 5 First Nations got improved water entitlements through a water license substitution (McFarlane, 2019).

- **Failure to recognize Indigenous rights** – FITFIR is fundamentally based on a denial of Indigenous peoples' inherent rights, and it has never addressed the inextricable link between water and Aboriginal rights. Even within the logic of FITFIR, Indigenous water rights are ignored because they are not recognized or given seniority despite Indigenous peoples being the earliest water users in BC (FNFC, 2020b).
- **Contested control over jurisdiction** – The BC Government's water governance system is premised on Crown control over water, but many Indigenous peoples take issue with this. The Union of BC Indian Chiefs (UBCIC) has said that where Aboriginal title and rights are not ceded, the BC Government has no jurisdiction to assert ownership over water (Gullason, 2018).
- **Exclusion of Indigenous peoples in decision-making** – As illustrated in Figure 2.1, Indigenous peoples are excluded from most formal water governance processes. The formal decision-making processes also do not provide a venue within which Indigenous peoples can practice their own water laws and governance practices (Curran, 2019).
- **Ignores Indigenous understandings of water** – Indigenous Knowledge (IK) and Indigenous relations to water are rarely considered in water management (FNFC, 2019).

2.6. Recent Changes in Modernizing the Statutory Water Law Regime

In 2009, the BC Government began modernizing the *Water Act* to develop the WSA. The WSA came into force in 2016 and some key changes include (BC Government, 2016):

- **Licensing non-domestic groundwater use** – Before the WSA, BC was one of the last jurisdictions in North America that did not regulate groundwater. This was a major weakness in the water allocation system because applicants who were denied a surface water license could use groundwater instead. Yet, surface water and groundwater are intrinsically connected (Nowlan & Muter, 2015). Now, non-domestic groundwater use is managed under the same system as surface water.⁶

⁶ The BC Government says they will consider the hydraulic connection between surface and groundwater when licensing water use and regulating water during shortages. In reality, this can be hard to do

- **Higher water fees and rentals** – The WSA increased water fees and rentals and groundwater users will be charged the same fees as surface water users. However, BC’s rates remain among the lowest in the country (Carr-Wilson & Brandes, 2015).⁷ Many Indigenous organizations, governments, and individuals have said that BC’s new water fees and rentals are too low to encourage conservation (Joe et al., 2017).
- **Stronger protection for aquatic ecosystems** – The WSA introduced the requirement to consider environmental flow needs (EFNs)⁸ in water allocation decisions. BC can also now order temporary protection orders during water shortages to protect critical environmental flow thresholds (CEFTs)⁹. If flows are so low that the survival of fish populations are threatened, the minister can issue fish protection orders to restrict all use of water from streams, tributaries, and connected aquifers.

The WSA improves on the previous water allocation system by bringing ecology and groundwater into decision-making, tying land use to its impacts on water and riparian habitat, and introducing provisions for ecological needs and EFNs. Most Indigenous responses have been supportive of the high-level aims of the WSA to promote sustainability and improve water conservation (Joe et al., 2017). However, these objectives are hindered in part because the water governance system remains based on a structure of legal rigidity that is unreflective of changing hydrological and socio-ecological conditions and relies extensively on administrative discretion (Curran & Mascher, 2016).

Above all, the changes to the WSA do nothing to address the dispossession of Indigenous rights. FITFIR remains intact and the WSA hardly mentions Indigenous peoples except to recognize that nations with modern treaties may have water reservations specified in their final agreements (WSA, 2016). Furthermore, the fundamental structure of Indigenous dispossession is extended as the BC Government claims ownership over groundwater. (McFarlane, 2019). As

accurately as the connection between surface and groundwater is poorly understood in most BC watersheds (Simms & Brandes, 2016).

⁷ Fees are based on quantity and water use purpose. BC’s new rental rates range from \$0.02 to \$2.25 per million liters of water while the Quebec charges up to \$70 for the same amount and Nova Scotia charges up to \$140 for the same amount for some purposes. First Nations are exempt from fees for water licenses on their reserve or Treaty lands, but they still require licenses for surface and groundwater use (Carr-Wilson & Brandes, 2015).

⁸ In relation to a stream, EFNs are formally defined in the WSA as “the volume and timing of water flow required for the proper functioning of an aquatic ecosystem of the stream” (WSA, 2016).

⁹ In relation to the flow of water in a stream, CEFTs are defined as “the volume of water flow below which significant or irreversible harm to the aquatic ecosystem of the stream is likely to occur” (WSA, 2016).

the UBCIC said in a submission to the modernization process, “the proposed Water Act Amendments continue with the province’s history of denial, which is damaging both to Indigenous Peoples and cultures, and also to waters and all life that depends upon the water” (Gullason, 2018).

The process of developing the WSA was also flawed in its engagement with Indigenous peoples. They were treated as stakeholders with limited opportunities to provide input, and many responses provided by a number of Indigenous voices were ignored (FNFC & CIER, 2016; Joe et al., 2017).

However, the WSA introduces a range of tools that Indigenous governments and other bodies may develop to advance water protection and Indigenous participation in water governance. This paper assesses the ways in which select WSA tools could support Indigenous water governance and the strengths and weaknesses across these tools. There is a particular impetus for the BC Government to support Indigenous water governance right now because WSA tools are just being developed (Brandes & Rosie, 2018). So, there is a lot of opportunity for Indigenous peoples to co-design new water governance arrangements. Furthermore, in 2019 the BC Government enshrined the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) into legislation when it passed *Bill 41 – The Declaration on the Rights of Indigenous Peoples Act* (DRIPA). DRIPA affirms the application of UNDRIP to BC’s laws and requires the BC Government ensure its laws are aligned with UNDRIP. Thus, DRIPA presents the opportunity and the obligation for the BC Government to reassess and reshape the colonial legacy of its water laws, promote new approaches to water governance, and reconceptualize the relationship between Western law and Indigenous legal orders (Askew et al., 2017).¹⁰

¹⁰ Water is only specifically mentioned throughout UNDRIP twice, however the framework contains approximately 14 articles with relevance to water. These include articles that affirm Indigenous self-determination, enshrine free, prior, and informed consent as a consultation standard in resource development, and protect a myriad of rights around Indigenous peoples’ traditional lands, territories, and resources. For example, Article 25 gives protects Indigenous peoples’ right to maintain distinctive spiritual relationships with their traditional territories and resources. Article 26 affirms the right of Indigenous peoples to use, own, develop and control their traditional territories, and Article 29 affirms their right to protect and conserve their territories. The conversation about the precise meaning of each UNDRIP article in the BC context can be a complicated one, nevertheless UNDRIP clearly affirms Indigenous rights to water use and governance (Askew et al., 2017; DRIPA, 2019; FNFC, 2018a).

Chapter 3.

Background: Indigenous Water Governance

3.1. Defining Water Governance

There are multiple interpretations of water governance, but it can be broadly defined as the social functions that help regulate and provide guidance on the development and management of water resources and services. It may include political, social, economic, and administrative systems. It is distinct from water management, which are the activities that analyse and monitor the water resources along with the measures developed and implemented to keep the resources in a desirable condition. However, good water governance is widely acknowledged as a pre-requisite to good water management. Water management is often hindered because of governance gaps. The World Water Forum has stated that the global water crisis is in large part a governance crisis. (Jiménez et al., 2020; P. Wilson, 2013).

As laid out earlier, the jurisdictional context of water governance in BC is fractured and FITFIR prioritizes certainty for existing licensees and administrative ease typically at the expense of efficient water use, making it an ecologically unsustainable system (Bradford, 2016). Current water governance practices are also often exclusively framed, governed, and enacted by state agents or market participation, thus reflecting and reproducing power imbalances between the BC Government and Indigenous peoples (Jackson, 2018). If Indigenous voices are included, they are often engaged as stakeholders and rarely on a nation-to-nation basis as peoples with pre-existing rights to the water (Simms et al., 2016; N. Wilson et al., 2018).

3.2. Indigenous vs. Western Approaches to Water

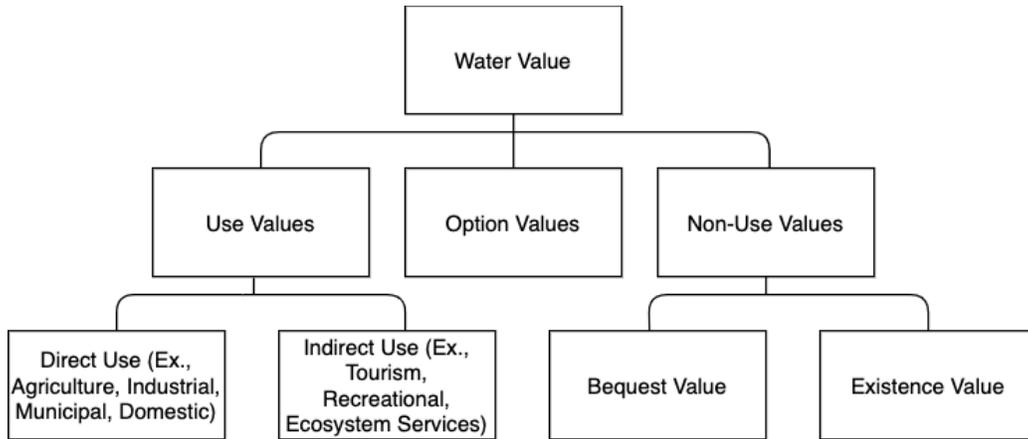
In Canada, there is a heavy reliance on Western methods of science in water governance and the issue is often treated as a technical matter. Indigenous people and their place-based knowledge systems have historically been ignored (Castleden et al., 2017). Recently there has been growing recognition of the importance of applying Indigenous approaches to water in water governance both to challenge colonial norms and revitalize Indigenous cultures, and because incorporating Indigenous approaches to water may improve environmental decision-making.

Indigenous cultures in BC can vary significantly, but most Indigenous peoples maintain that their inherent rights which stem from the Creator's laws include laws around stewardship and reciprocity with nature (Gullason, 2018). Most Indigenous laws embrace the notion of interconnectedness (P. Wilson, 2009), and water is often seen as a "sacred" or living entity that requires respect (Joe et al., 2017).

Yet, in Western water governance frameworks, common law and statutory law rarely recognize the integrity of nature. These legal frameworks have a culturally exclusive notion of space and time which allows for appropriation and the separation of resources from the natural ecosystem, and there is a denial of the connection between all things (Borrows, 1997).

Figure 3.1 and figure 3.2 illustrate differences between Indigenous and Western approaches to water. In Western approaches, there is a big (but not exclusive) emphasis on water for its value as a resource, as figure 3.1 delineates. The history of FITFIR in BC further reinforces how BC's Western understanding of water as a resource underpin the existing water governance system.

Figure 3.1 Western Conceptions of Water Value



Adapted from Candlish-Rutherford (2016). This figure displays the total economic value of water, a concept that comes from environmental economics.

In contrast, figure 3.2 is a recreation of a diagram from Awume et. al. (2020) which consolidates water security notions based on interviews with Indigenous people in Northern Saskatchewan. It does not represent all the worldviews of Indigenous peoples in BC, but it conveys the common fact that water is important to Indigenous peoples as a resource, but also as a life form, a source of spiritual strength, and a centerpiece in Indigenous cultures. Figure 3.2 encourages us to interact with water in a holistic way (Awume et al., 2020).

Figure 3.2 Indigenous Notions of Water Security

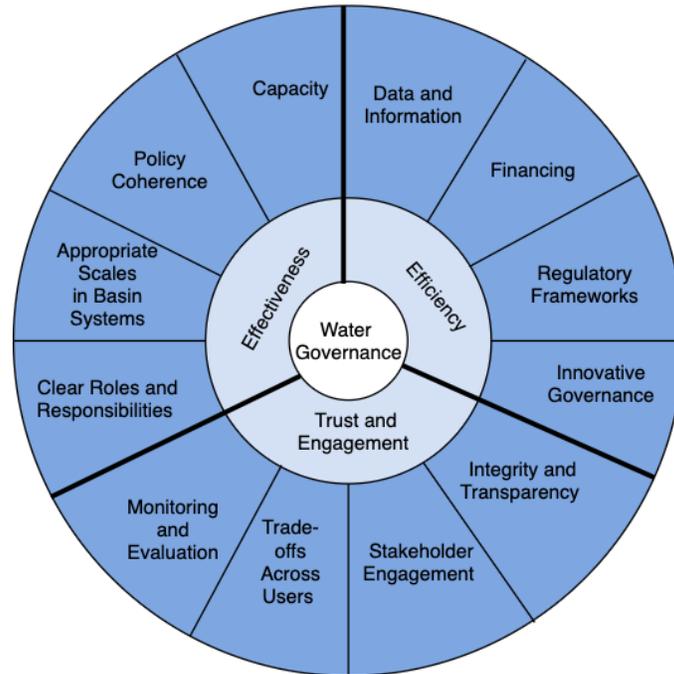


Adapted from Awume et. al. (2020).

3.3. Convergences in Water Governance

Figure 3.3 illustrates the 12 principles on water governance deemed by the Organization for Economic Co-operation and Development (OECD) as key to “good” water governance.

Figure 3.3 OECD Principles on Water Governance



Adapted from the OECD (2015).¹¹

Figure 3.3 cannot guide the renewal of Indigenous water governance. The diagram emerges from an institution that upholds the settler-state and does not centre Indigenous sovereignty in its thinking. The three OECD objectives (efficiency, trust and engagement, and effectiveness) are likely not what Indigenous peoples hold as their primary water governance objectives. Furthermore, the principles listed do not touch on the relational element of water found in many Indigenous approaches to water (Taylor et al., 2019).

Nevertheless, many of the OECD principles have relevance for Indigenous water governance. Figure 3.3 converges with Indigenous notions of water security (ex., figure 3.2) more than traditional Western conceptions of water value (ex., figure 3.1) by embracing a broader view of how to interact with water. These principles capture how non-Indigenous water experts are

¹¹ The three core objectives of water governance as prescribed by the OECD are listed in the middle circle. Each objective has four connected principles illustrated on the outer circle.

calling for adaptive, holistic, and evidence-based water governance systems that include social learning and are informed by integrated water models (Bradford, 2016).

Herein lies opportunity to expand Indigenous sovereignty over water. Many Indigenous peoples and organizations in BC and across the country have asserted the importance of being able to govern and make decisions over their waters (AFN, 2013; FNFC, 2018b; Simms, 2014; Wilson-Raybould & Raybould, 2014). There is also appetite across water practitioners in BC for Indigenous peoples to lead in watershed governance. A 2016 poll of 500 water practitioners in BC found that 77% agreed co-governance with Indigenous peoples is necessary for effective watershed governance (Brandes et al., 2016). In a 2020 survey of water experts, Indigenous peoples were also most cited as the best positioned to lead watershed governance (POLIS, 2021).¹²

This paper looks at water governance mechanisms that may support Indigenous voices in decision-making, improve Indigenous control over water, and recognize Indigenous rights to water. It does not explicitly examine water delivery services or transboundary water governance. The persistent and significant inequity in water service provisions in Indigenous communities along with the complicated issue of transboundary water governance are major challenges for Indigenous peoples in BC. These issues are omitted due to scoping limitations, not for their lack of importance.

Ultimately, revitalizing Indigenous water governance means to give Indigenous peoples decision-making powers over their waters. Yet, a tension arises with water governance. Because water is hard to contain and touches on everything, unlike with land, it is difficult to talk about unalienable rights to water. As the Royal Commission on Aboriginal Peoples said “of all the natural resources, water is perhaps the best suited to shared management because, even under western property law, no one can “own” water. Instead, people and jurisdictions have specific rights of use” (Nowlan, 2004). Thus, this paper recognizes that a lot of the work around empowering Indigenous peoples in water governance will relate to building better, more collaborative water governance relationships and decision-making venues.

¹² 27% of water experts cited Indigenous nations as the best positioned to initiate and be involved in ongoing leadership of watershed governance, ahead of the provincial government (18%), local governments (17%), and local water groups (15%) (POLIS, 2021).

Chapter 4.

Research Process

4.1. Research Objectives

This paper uses a mixed methods qualitative research approach to explore existing initiatives that renew Indigenous water governance and understand how select tools enabled through the WSA may be used to support Indigenous water governance. Key guiding questions for this paper are:

- 1) What are common water governance initiatives taken up by Indigenous peoples in BC?
- 2) What are examples of governance arrangements that have improved Indigenous water governance or water rights?
- 3) How can select WSA tools be used to improve Indigenous water governance?
- 4) What should the BC Government do to enable the uptake and prepare for the implementation of WSA tools to support Indigenous water governance?

4.2. Methodology

4.2.1. Literature Review

I conducted a literature review of BC Government websites, legislation, academic articles, and publications from Indigenous organizations and governments. As part of the literature review, I explored the shortcomings and potential within the WSA to support Indigenous water governance. My broader understanding of the subject matter was supplemented by informal conversations with water and Indigenous governance experts.

4.2.2. Expert Interviews

I conducted 13 interviews with experts working in academia, the BC Government, First Nation governments and Indigenous organizations, and environmental organizations. Interviews were semi-structured, and the questions varied according to the background of each interviewee. Interviewees are not quoted throughout this paper, but their insights inform my writing, particularly around the case studies, the advantages and disadvantages of different WSA tools,

and the challenges and opportunities to revitalize Indigenous water governance in BC. A more detailed breakdown of the interviewees can be found in Appendix A.

4.2.3. Case Studies

To gain insight on existing governance arrangements that give Indigenous peoples more control over their waters, I examined five case studies across three settler-state nations. My case studies can be sorted into three types of governance arrangements: watershed boards, negotiated water settlements, and conferring legal personhood.

Table 4.1 Overview of Cases

Case Study	Indigenous Nation(s) Involved	Watershed, River, or Region Covered	Governance Arrangement
Cowichan Watershed Board	Cowichan Tribes	Cowichan watershed, BC, Canada	Watershed board
Yukon River Inter-Tribal Watershed Council	74 tribes and First Nations across Alaska, Yukon, BC	Yukon River watershed across Alaska/Yukon/BC (Canada and USA)	Watershed board
Nisga'a Final Agreement	Nisga'a Nation	Nass River and other streams within Nisga'a Lands, BC, Canada	Negotiated water settlements
San Juan River Settlement of 2005	Navajo Nation	New Mexico Portion of the San Juan River, USA	Negotiated water settlements
Te Awa Tupua Act	Whanganui Iwi	Whanganui River, New Zealand	Conferring legal personhood

Chapter 5.

Existing Initiatives, Tools, and Challenges

5.1. Common Avenues for Indigenous Peoples to Assert Water Sovereignty

Many Indigenous peoples in BC have already developed water and watershed-related governance mechanisms. Table 5.1 gives an overview of the common types of initiatives to help demonstrate the diversity of ways in which Indigenous peoples are currently asserting their sovereignty over water. The table draws from a systematic review of Indigenous watershed initiatives and co-governance arrangements done by a partnership between the Centre for Indigenous Environmental Resources and the First Nations Fisheries Council (FNFC & CIER, 2016), as well as findings from the literature review and input from interviewees.

Table 5.1 Common Types of Indigenous Water Governance Initiatives in BC

Type of Initiative	Details	Examples
<i>Water and/or Land Use Plans, Strategies, Visions, Declarations, Policies, and Translated Traditional Laws</i>	These documents are developed by Indigenous peoples to protect water in their territories. They often define Indigenous peoples' current and historical relationship to water, along with their expectations for how their waters should be treated. They may include policy standards, planning methods, consultation requirements, and more.	<ul style="list-style-type: none"> • Yinka Dene 'Uza'hné Surface Water Management Policy • Syilx Nation Siwtkw (Water) Declaration and Syilx Water Planning Methodology • Haida Gwaii Strategic Land Use Agreement • Gitanyow Lax'yip Land Use Plan
<i>Water Bylaws</i>	All water bylaws enacted by Indigenous governments under the <i>Indian Act</i> relate to water infrastructure and services, not water as a resource. This includes bylaws about wells, waterworks systems, wastewater systems, and water rates.	<ul style="list-style-type: none"> • BCAFN's Governance Toolkit lists 51 water-related bylaws in force across BC First Nations under the <i>Indian Act</i> but none govern water as a resource. It lists Tsawwassen First Nation as the only self-governing Indigenous government with laws about water as a resource¹³
<i>Water Monitoring</i>	Water monitoring is a crucial component of water governance. It also expands Indigenous sovereignty and control over their waters by empowering Indigenous community members to generate the data needed for environmental decision-making. Some Indigenous nations have begun network monitoring across larger areas.	<ul style="list-style-type: none"> • Gitanyow Nation monitors flow to mitigate forestry, beaver and climate change impacts • Wet'suwet'en establishes baseline water quality data to detect and tackle changes • Central and northern coast Indigenous peoples developed the Coastal Stewardship Network Monitoring System
<i>Taking Legal and Political Actions to Protect Water</i>	Indigenous peoples across BC and Canada demand for their water rights and their sovereignty over water in the political and legal realm.	<ul style="list-style-type: none"> • <i>Halalt First Nation v. BC (Environment)</i>, tied constitutionally affirmed Aboriginal rights to interests in groundwater and flows
<i>Watershed Committees and River Groups</i>	Indigenous peoples may participate in watershed boards, committees, or other types of groups.	<ul style="list-style-type: none"> • Cowichan Watershed Board • Coastal First Nations Great Bear Initiative
<i>Environmental Flow Needs and Critical Environmental Flow Thresholds</i>	Some Indigenous peoples have partnered with FLNRORD to co-develop EFNs and CEFT for water management in the region.	<ul style="list-style-type: none"> • Okanagan Nation Alliance, FLNRORD, and the Okanagan Basin Water Board are setting EFNs and CEFTs for multiple streams in the region
<i>Government-to-Government Treaties and Agreements</i>	Indigenous peoples have signed Reconciliation Agreements, Memoranda of Understanding (MOUs), comprehensive treaties, and other agreements. In many cases, these agreements enable initiatives listed above (ex., water monitoring, co-development of EFNs).	<ul style="list-style-type: none"> • Nicola Watershed Pilot MOU • Gwets'en Nilt'l Pathway Agreement • shíshálh (Sechelt) Foundation Agreement

Source: Information for this table was taken from the following sources: Associated Environmental, 2020; FNFC, 2018a; FNFC & CIER, 2016; Nicola Bands-BC, 2018; Wilson-Raybould & Raybould, 2014.

¹³ The Tsawwassen First Nation laws in question are the Water Shortage Response Plan Regulation and the Reclaimed Water Reuse Regulation.

The first initiative listed encompasses several commonly used mechanisms that help communities assert their vision for how to govern their waters. However, these initiatives are often under-resourced. The Centre for Indigenous Environmental Resources and the First Nations Fisheries Council's systematic review of Indigenous watershed initiatives and co-governance arrangements across BC found that 53% of respondents had a document protecting freshwater in their territories written by their community, and 75% of respondents with these documents in place reported they reflect their traditional values, laws, and/or customs.¹⁴ Yet, most communities had less than \$30,000 in their annual budget dedicated to water management (FNFC & CIER, 2016). First Nations also do not have responsibilities over watershed governance under the *Indian Act* and the paternalistic setup of the legislation makes it so that the funding a community receives from the Crown for specific activities cannot be reallocated towards different community priorities. Furthermore, BC rarely supports community-derived water documents by giving them the force of regulation. The formal water governance powers afforded to Indigenous peoples are often limited to by-laws related to water services and infrastructure.

The Nicola Watershed Pilot MOU example from table 5.1 was co-signed between the five First Nation bands in the Nicola Valley and the BC Government. It commits the parties to take a new approach to water stewardship and emphasizes the need to ensure decision-making is informed by Nlaka'pamux and Syilx laws. The goal is to inform the development and recognition of a governance approach for the Nicola Watershed that could include but are not limited to taking up delegating authority under section 126 of the WSA, developing a WSP, or establishing water objectives (Nicola Bands-BC, 2018).

5.2. Priorities for Indigenous Water Governance

The BC First Nations Water Governance Roundtable¹⁵ listed the following strategic priority areas in their 2018/2019 Strategy (BC First Nations Water Governance Roundtable, 2018):

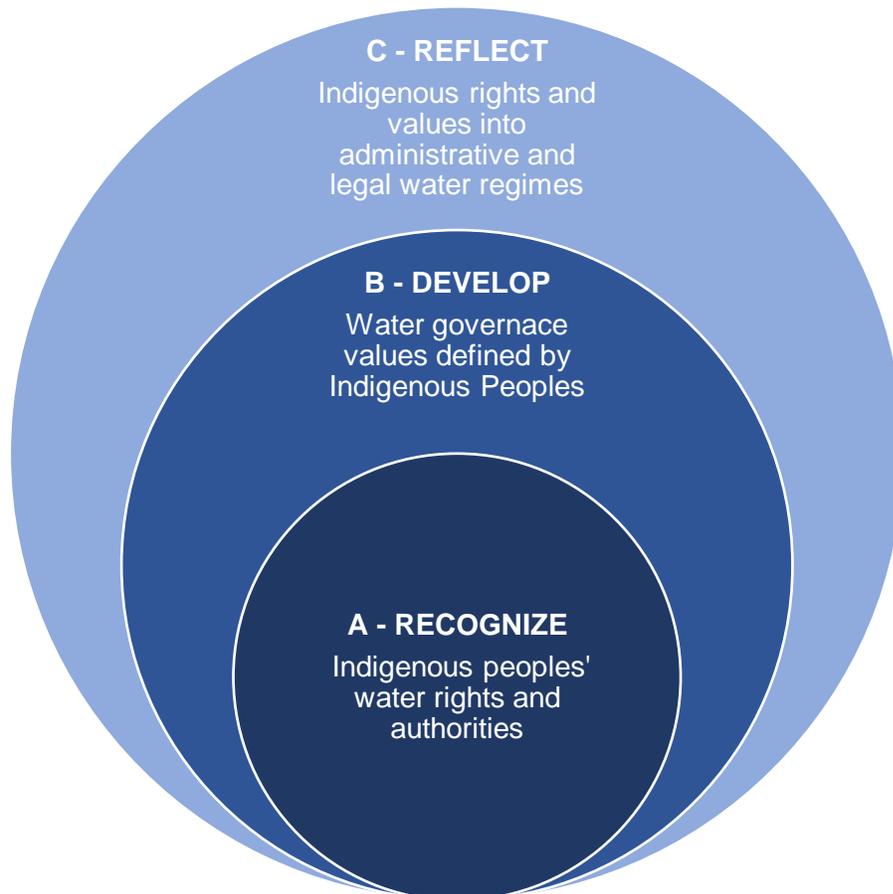
¹⁴ This survey was circulated to 200 First Nations communities and 27 First Nations' organizations. There were 63 submissions in total.

¹⁵ The BC First Nations Water Governance Roundtable is an organization established in 2017 to advance First Nations engagement in water governance. The roundtable came out of the systematic review of Indigenous watershed initiatives and co-governance arrangements which found that First Nations overwhelmingly wanted a space to share information and knowledge. 55 First Nations across BC participate in the roundtable and it is not a decision-making body. It is valued as a First Nations-only

1. Identify **collective strategies** to advance First Nations engagement in freshwater management and planning
2. Support **Indigenous-led water governance** (ex., the development and application of Indigenous laws)
3. Support First Nations capacity and strategies for meaningful **engagement in Crown policies, laws, and institutions** on existing and future freshwater governance initiatives
4. **Inform** First Nations leadership and communities about freshwater management and governance initiatives

Figure 5.1 draws from these priorities and the literature to construct a roadmap of efforts the BC Government could use to frame and guide their support to renew Indigenous water governance.

Figure 5.1 Roadmap to Renewal of Indigenous Water Governance



space for nations to connect with each other, learn from each other, and share insights and best practices on water governance from their communities (BC First Nations Water Governance Roundtable, 2018).

A – Recognize Indigenous Peoples’ Water Rights and Authorities

Indigenous peoples, organizations, and watershed organizations have called on the BC Government to recognize Indigenous peoples’ water rights¹⁶ and jurisdiction over their waters. This would help create a common understanding between Indigenous peoples and the BC Government, and it may help bridge the gap between Indigenous and non-Indigenous understandings of water. Part of recognizing and respecting Indigenous peoples’ water rights includes respecting free, prior, and informed consent (FPIC) as defined in terms that Indigenous peoples accept.¹⁷

B – Develop Water Governance Values Defined by Indigenous Peoples

Renewing Indigenous water governance may also require Indigenous peoples to engage in nation-building and self-determination by revitalizing their water laws and governance processes. Key laws and processes could be translated into English and paired with thinking around how to implement them in contemporary contexts to develop water governance values. This work should be carried out by Indigenous peoples, but the BC Government could provide financial and technical support. The BC Government and its civil servants should also educate themselves and accept these laws, processes, and values as they are revitalized and developed.

C – Reflect Indigenous rights and values into administrative and legal water regimes

After recognizing Indigenous rights to water and developing water governance values based on Indigenous water laws and processes, the BC Government should reflect and enshrine these rights and values into Western legal and administrative water regimes.

¹⁶ This includes Indigenous rights to water for domestic, agricultural, cultural, domestic, and commercial uses, but it also extends to respect for Indigenous interests in water by virtue of being water connected to their rights to fish and hunt, to the land, to practice their own cultures and customs, and more.

¹⁷ The need to adopt FPIC from Indigenous peoples when dealing with lands and resources was a big reason why Canada originally did not endorse UNDRIP. Subsequent government endorsements included caveats on how to interpret this principle (Hudson, 2020). The debate around defining FPIC is a legalistic conversation that is beyond the scope of this paper. However, if done in a way that respects the spirit of FPIC, some say FPIC would be both a process and a destination. It is a process because it would involve ongoing and early participation from the affected Indigenous peoples. It is a destination, because it would involve obtaining the agreement of the affected Indigenous peoples (Mitchell et al., 2019; Tockman, 2017). A powerful tool that would help restore Indigenous sovereignty over water would be a commitment from the BC Government to follow FPIC in watershed issues above and beyond how it is currently operationalized.

The components in Figure 5.1 do not need to be addressed in order from A to B to C. However, strong legal and administrative regimes that support Indigenous water governance are best developed when they are rooted in a recognition of Indigenous water rights and have built-in alignment with Indigenous water governance values. Otherwise, the legal and administrative structures created may not be as durable or meaningful as they could be in supporting Indigenous water governance. I focus on component C in this paper, acknowledging that while examining the ways BC can alter its legal or administrative regimes to support Indigenous water governance is by itself valuable, these efforts will only become more so as we recognize Indigenous water rights and values within our frameworks.

5.3. Opportunities for Indigenous Water Governance Enabled in the Water Sustainability Act

Despite all its flaws outlined at the beginning of this paper, the WSA enables new tools that show potential to bolster Indigenous water governance. Three of these new tools include water sustainability plans (WSPs), delegated authority, and advisory boards. None of these three tools have been implemented yet but the WSA gives a high-level outline of how they might function. These three tools are focused on because they seem like they would relate relatively more to water governance than other WSA tools.¹⁸

Water Sustainability Plans (Section 64-85)

WSPs result from area-based processes where parties develop plans and protocols to handle conflicts over water allocation, environmental health, and water conservation. They are the main way to deal with conflicts around existing water licenses, as WSPs may cancel or amend existing water licenses (section 74, section 79).¹⁹

The formal process to create a WSP begins when the minister designates an area as in need of a WSP. This presumably occurs after the community decides they want to address an issue in

¹⁸ Within the WSA, there are many other tools that could help revitalize Indigenous sovereignty over water and/or protect the watershed. Appendix B describes some of these other tools. My decision to focus on WSPs, delegated authority, and advisory boards is not because these governance mechanisms are necessarily more effective than other WSA tools. Rather, it is because they seem like they would generally relate more to water governance than water management.

¹⁹ Section 79 enables the cancellation or amendment of existing water licenses. Section 74 clarifies that proposed plans that recommends significant changes to licenses or drilling authorizations must be accompanied by a statement or proposal regarding compensation measures for the significant changes.

their watershed. However, the minister can only order the development of a WSP in an area to address the following issues (section 65):²⁰

- Conflicts between water users
- Conflicts between needs of water users and EFNs
- Risks to water quality
- Risks to aquatic ecosystem health
- Identification of restoration measures for a damaged aquatic ecosystem
- Other prescribed circumstances

The minister can designate the government or another person as responsible for preparing the WSP. The government or person responsible must prepare the terms of reference (subject to approval by the minister) and establish at least one technical advisory committee for the development of the plan (section 66). The contents of the terms of reference for a proposed WSP²¹ sets the process and scope of the WSP (section 68). Public engagement, stakeholder engagement, data collection, analysis, and reviews of potential recommendations take place. Then, a proposed WSP is submitted to the minister. If it is not legally binding, the minister accepts it entirely or in part. If there are proposed regulations or orders, the proposed WSP goes before Cabinet to accept entirely or in part (section 75). If the minister rejects the plan, they may require it to go back to the planning team and be resubmitted (section 74).

Mandatory contents of a WSP include a description of the plan area, issues considered by the plan, and public and stakeholder communications and consultations undertaken in the planning process (section 73).²²

²⁰ For a more detailed outline of the steps in creating a WSP, see Appendix C in Brandes et al., (2015).

²¹ Section 68 lays out that the terms of reference must include the a) purpose of the plan, b) scope of the plan, c) issues addressed in the plan, d) a description of the organizational structure supporting the development of the plan, e) an estimate of the financial, human, and other resources required for the plan development process and a description of the funding commitments and committed sources of other resources identified in the estimate, f) a process for public and stakeholder communications and consultations, g) if the responsible person is a person other than the government, a process for consultations with the government throughout the plan development process, h) a time limit for completing the proposed plan, i) any other prescribed information.

²² Section 73 says that a proposed water sustainability plan must include a) a description of the plan area, b) a description of the issues considered in the planning process, c) description of the public and stakeholder communications and consultations undertaken during the planning process, d) a description of any notifications provided to potentially affected person, e) the recommendations for measures to address the issues considered in the planning process and the rationale for the recommendations, f) a description of the implications of, and who is responsible for, implementing the plan recommendations, g)

Delegated Authority (Section 126)

This tool allows Cabinet to delegating the decision-making powers of the Comptroller of Water Rights, a water manager, an engineer, or an officer to another person or entity.²³ This could include compliance and enforcement powers and the ability to reject or accept water license applications and approvals.

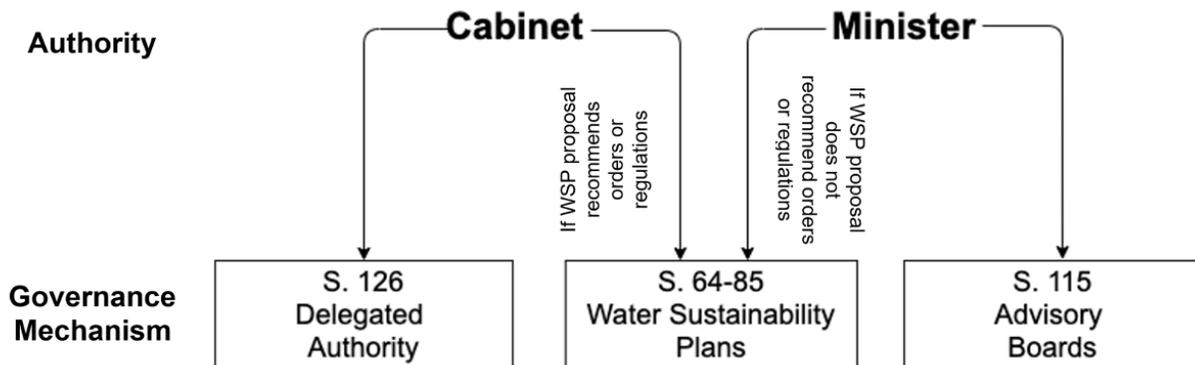
Advisory Boards (Section 115)

The minister can establish a formal advisory board to inform decision-makers on critical aspects of the WSA. This may include advising on the establishment of water objectives, methods to determine EFNs, standards, and best practices for diversion and water use (Phare et al., 2018).

Figure 5.2 Governance Mechanisms and Regulatory Tools Enabled by the WSA

Legend

→ = Governance mechanism is authorized by the connecting authority



Generally, there are many ways to change water governance and these tools are just a few of the avenues that can be pursued. Multiple avenues almost always need to be pursued at once to achieve progress. Some actions can change the water governance landscape in cross-cutting

an estimate of the financial, human and other resources required for implementation of the plan and the possible sources of the resources identified in the estimate, including funding commitments, if any, h) prescribed information.

²³ The Comptroller of Water Rights has powers that include those of a water manager, an engineer, or an officer. A water manager powers that include those of an engineer or an officer. An engineer has powers that include those of an officer.

ways.²⁴ These three tools will likely have impacts more confined to the areas and they are applied to.

5.4. Challenges in Renewing Indigenous Water Governance

There are a number of challenges to renewing Indigenous water governance. Some of these challenges are exclusive to Indigenous water governance, but many are also challenges facing water governance more broadly. Figure 5.3 lists some common challenges identified in the literature and through expert interviews. The layout of Figure 5.3 is adapted from a diagram originally found in Bowers, 2021.

Figure 5.3 Types of Challenges in Renewing Indigenous Water Governance



Adapted from Bowers, 2021.

²⁴ Some examples of cross-cutting changes to improve Indigenous water governance could include adding a section to all provincial laws recognizing and affirming Indigenous rights or requiring consultation with the appropriate First Nations before issuing water licenses. As another example, the BC Government could take a co-drafting approach to water policy as Indigenous Governments and the Government of the Northwest Territories did with the Water Stewardship Strategy (Castleden et al., 2017).

The categories of challenges are listed from easier to very difficult to address. The degree of difficulty in addressing each issue does not necessarily reflect how large or widespread of a barrier it may be. Many Indigenous peoples in BC want to take on watershed governance activities but one of the biggest hurdles in doing so are resource gaps (BC First Nations Water Governance Roundtable, 2018; FNFC & CIER, 2016).²⁵ Nevertheless, solutions to resource challenges are relatively simple to implement. In contrast, persistent legacies of colonialism are multi-faceted and deep-rooted issues that do not have straightforward solutions.

²⁵ In a survey of First Nations communities and organizations in BC with 63 submissions, “capacity/resources” was the most cited challenge facing Indigenous peoples. 45 submissions cited it as a barrier (FNFC & CIER, 2016).

Chapter 6.

Case Studies

In this section, I outline five cases of Indigenous peoples pursuing their water objectives. Then, I analyze the cases to draw insight into how tools enabled through the WSA could help further Indigenous water governance in BC. The case studies examined were all created under different ecological, historical, and cultural circumstances to address different objectives and scopes. However, to varying degrees, they all vest more autonomy over the watershed to Indigenous peoples and further Indigenous water governance or water rights.

6.1. Cowichan Watershed Board

The Cowichan Watershed Board (CWB) is a collaborative watershed board created to promote water and watershed sustainability in the Cowichan watershed. It guides the implementation of the *Cowichan Basin Water Management Plan* and improves water management decisions by working with decision-makers and regulatory agencies in an advisory capacity (CWB, 2018). The organization is an equal partnership between the local Indigenous and non-Indigenous governments and is co-chaired by the Cowichan Tribes and the Cowichan Valley Regional District (CVRD).

Cowichan Tribes and the Cowichan Watershed

Cowichan Tribes is part of the historic Cowichan Nations who trace their ancestry to the peoples with winter villages on the Cowichan River, Koksilah River, and Cowichan Bay. They are Hul'qumi'num speakers and are part of the larger Coast Salish peoples. Today, they are the largest First Nation community in BC with over 5000 members and nine reserves on the east end of Vancouver Island. They are under the *Indian Act* and are not under a treaty with the Crown, though they are part of the Hul'qumi'num Treaty Group in stage 5 out of 6 of BC Treaty Commission negotiations for a modern treaty (Morales, 2014).

The Cowichan River originates in Cowichan Lake, the second largest lake on Vancouver Island, and flows east towards Duncan and the Salish Sea. The Cowichan River runs 32km long and the watershed covers 1000km² of area. The Cowichan watershed is home to 50,000 people and is covered with silvicultural openings and second growth forests with a mixture of forest,

agriculture, residential, and urban landscapes. The watershed supports a rapidly growing population, a recreation and tourism industry, and a logging industry (Robin et al., 2017).²⁶

To Cowichan Tribes, their watershed is interconnected with their land, history, and culture. Their ability to govern and live with some semblance according to their traditional teachings requires sustaining the watershed. Yet, the Cowichan watershed faces a host of issues including water quality issues, winter flooding and summer droughts and water scarcity.²⁷ There have been 11 droughts in the Cowichan basin since 1998 due to climate change and declining precipitation, increasingly impermeable surfaces, and increasing human water consumption. Chronically low water levels in the Cowichan River over the past two decades has led to dwindling fish stocks and salmon are critically important to Cowichan Tribes. To complicate matters more, Cowichan Tribes assert authority over the watershed but most of the basin is held as fee-simple private forest land. So, the privatization of the lands further inhibits the ability for Cowichan Tribes to engage in watershed decision-making (CWB, 2018)

Conditions Surrounding the Creation of the CWB

In 2003, there was a severe drought in the Cowichan watershed. Water flows were so low that this created impassable sections preventing Chinook from migrating upstream to their spawning grounds. In response to this wakeup call, the CVRD, Cowichan Tribes, BC Ministry of the Environment, Department of Fisheries and Oceans, Pacific Salmon Commission, and Catalyst Paper commissioned the *Cowichan Basin Water Management Plan*. The plan was completed in 2007 (FNFC, 2018a). However, diffuse and diverse accountabilities for watershed management meant that there lacked the leadership needed to implement the plan. So, the groups commissioned a report to recommend a watershed governance model. Experts stressed that respect for Indigenous rights and co-governance were necessary for the governance model to

²⁶ A unique element of the Cowichan watershed is the presence of a weir at the outlet of Cowichan Lake. The weir has been in operation since 1957 to moderate summer low flows and redistribute flows between months. It is licensed and operated by Catalyst Paper. In recent years with changing consumption needs and weather patterns, the weir has been less effective in moderating the summer droughts and winter flooding. Thus, a key issue in the local watershed management discussions that the CWB has weighed in on has been the question of replacing or upgrading the weir (Curran & Mascher, 2016).

²⁷ In August 2019, the water flow in the Koksilah River dropped so low that the minister of FLNRORD issued a Fish Population Protection Order under the WSA to temporarily suspend industrial water use and limit groundwater use (Baker, 2020). That same month, for the first time ever water had to be pumped from the Cowichan Lake into the Cowichan River to keep the river flowing (CBC News, 2019).

be successful (Urban Systems Ltd., 2014). The CWB was created in 2010 to implement the plan and support collaborative decision-making at the watershed level (Hunter et al., 2014).

Organizational Structure and Funding Mechanisms of the CWB

The CWB is co-chaired by the Chief of Cowichan Tribes First Nation and the Chair of the CVRD. There are 12 other members appointed by the Cowichan Tribes, CVRD, federal government, and BC Government. The CWB is assisted by a Technical Advisory Committee which provides expertise and technical advice. The CWB invites selected organizations to designate a representative to the Technical Advisory Committees. The CWB also has an executive director and a coordinator (Fraser Basin Council, 2016). The annual operating budget for the CWB is financed by CVRD and Cowichan Tribes. They also receive project funding and grants from private and public partners (CWB, 2018).²⁸

The core principles of the CWB are: Partnership, Representation, “Whole of watershed thinking” and “Nutsamat kws yaay’us tth qa”, an ancient Cowichan Tribes’ principle which means “we come together as a whole to work together to be stronger as partners for the watershed”. The organization strives to produce consensus-based recommendations, a governing style consistent with Cowichan Tribes’ worldview. For, the CWB recognizes that decisions with narrow majorities do not have the wisdom of the group and may not be durable (CWB, 2018).

Functions

The CWB is currently an advisory body that makes recommendations to government agencies about water management decisions. They also:

- Developed targets linked to *Cowichan Basin Water Management Plan*
- Provide advice to senior, local, and First Nation government authorities
- Secure stable funding sources to support water management activities and assist other entities with securing funding
- Engage local stakeholders in water management decisions
- Gather data and monitor the health of the watershed
- Develop programs to engage the public with the watershed

²⁸ For example, in 2019, the organization secured over \$4 million to conduct an impact study on replacing the Cowichan Lake weir.

The CWB has also explored options to extend their decision-making authority. In 2014, the CWB received a grant from BC to develop a proposal to enhance their role in watershed governance through tools enabled in the WSA. The CWB proposed taking up a formal advisory board status through section 115 and incrementally implementing several tools including water objectives, environmental flow thresholds, and a WSP (CWB, 2016). BC did not accept the proposal, in part because many aspects of the WSA were still being developed and thought through. However, in 2020 Cowichan Tribes and BC signed an interim letter of agreement to explore stewardship options for the Koksilah watershed. As a first step, Cowichan Tribes and BC are co-chairing a WSP scoping exercise. This agreement is a government-to-government initiative, so the CWB plays a less central role on the Steering Committee (*WSP Scoping Initiative*, 2020).

6.2. Yukon River Inter-Tribal Watershed Council

The Yukon River Inter-Tribal Watershed Council (YRITWC) is an international, Indigenous-led grassroots organization that aims to protect and restore the aquatic ecosystem of the Yukon River and preserve the culture, health, and vitality of the Indigenous communities living within the watershed. The organization spans across Canada and the USA with 74 out of 76 Indigenous governments in the watershed participating (Norman, 2015). Their mission statement says: “We, the Indigenous Tribes/First Nations from the headwaters to the mouth of the Yukon River, having been placed here by our Creator, do hereby agree to initiate and continue the clean up and preservation of the Yukon River for the protection of our own and future generations of our Tribes/First Nations and for the continuation of our traditional Native way of life.” (YRITWC, 2021).

The Yukon River Watershed

The Yukon River is the third longest river in North America, stretching 3,185km from its easternmost headwaters in the Yukon territory to its westernmost draining basin in Alaska and the Pacific Ocean (Norman, 2015). This immense geographical scope translates into a complex governance landscape. At least 11 federal, state, and provincial agencies across Canada, the US, BC, Yukon, and Alaska have some regulatory responsibility for managing the river. The Yukon River watershed spans across two types of Indigenous land claims: the Alaska Native Claims Settlement Act (1971) which covers all of Alaska, and the Yukon Umbrella Final Agreement (1993) which consists of comprehensive land claims and self-government

agreements with 11 First Nations in the Yukon. The watershed is also on unceded territory in the Yukon and BC (N. Wilson et al., 2018).

The Yukon River has been portrayed in the media as one of the last untouched rivers on earth. However, the ecological reality of the Yukon River is that it is threatened by commercial fishing, pollution from resource extraction, deforestation, and climate change (Norman, 2015). Climate change is bringing worrying consequences for water security, the ecosystem, salmon, and by extension the food security and cultural connection of Indigenous communities.

Conditions Surrounding the Creation of the YRITWC

Despite the vast scope of the Yukon River watershed or perhaps in part because of its scope, no single group advocated for or helped manage the watershed until the YRITWC was founded in 1997. That year, in a gathering that led to the formation of the YRITWC, 56 chiefs and elders discussed their concerns about increased cancer rates and other health problems in their communities and in game species within the watershed (YRITWC, 2021). A central shared goal was to be able to directly drink water from the Yukon River as their ancestors did for thousands of years before them, a goal which remains the long-term vision of the organization (JFK School of Government, 2008).

Organizational Structure and Funding Mechanisms of the YRITWC

The YRITWC is an Indigenous grassroots non-profit organization that relies on staff, volunteers, and partner agencies. Its executive committee is selected through a process of consensus at their biennial summits. Members represent a geographic area²⁹ rather than individual First Nations or Tribes. The executive committee sets the direction for staff and volunteers (Norman, 2015).

The YRITWC's operational procedures are grounded in Indigenous customs common across the member nations. Decision-making is based on a consensus-based model (P. Wilson, 2013) and they strive to include listening, patience, knowledge, wisdom, and tenacity in all activities (JFK School of Government, 2008).

²⁹ The watershed is broken up into the following regions: Yukon Flats, Tanana River, Innoko Confluence, Middle Yukon, Innoko Confluence, Dahka Tlingit, Vuntut Gwich'in/Tr'ondek Hwech'in, Northern Tutchone, Kaska, and Southern Tutchone.

Functions

The YRITWC's currently has four departments delivering the following programs (Norman, 2015; N. Wilson et al., 2018; P. Wilson, 2013):

- *Science*³⁰ – This department runs the Indigenous Observation Network, an Indigenous-led community-based-monitoring program that applies Traditional Ecological Knowledge and the Western science to monitor the health of the watershed. They apply an Indigenous Research Paradigm and rely on community members to produce high-quality field samples that are then processed by the US Geological Society. The Indigenous Observation Network program is the largest Indigenous water quality network in the world.
- *Brownfields* – The YRITWC helps clean and redevelop sites with hazardous substances.
- *Solid Waste* – This program helps with the disposal and backhaul of solid waste.
- *Drinking Water Improvement Program* – This department provides technical assistance and educational outreach on drinking water quality and operations across communities.

Since 2007, the YRITWC has also coordinated annual Healing Journeys to paddle across different sections of the river, connect people to the river, visit elders along the river, and continue oral tradition. Certain canoes also have a multi probe data sonde which collects readings on water quality parameters to allow for ongoing, real-time water quality data collection during the journey. The US Geological Society then helps with the scientific assessment of water quality readings. So, this annual event blends the objectives of environmental protection with cultural preservation (Norman, 2015).

6.3. Nisga'a Final Agreement

Nisga'a and Conditions Surrounding the Negotiation of the Final Agreement

The Nisga'a Nation's traditional territory is in the Nass River watershed in northwestern BC. The Nisga'a people have fought for their land rights and self-governance for over a century, beginning in 1887 when a delegation travelled over 1000km by water to make the case that they have ownership over their traditional territories to the BC government in Victoria, and ending in

³⁰ This department is the only program that operates in the Yukon and Alaska. All other departments operate exclusively in Alaska.

2000 when they gained self-governance through the *Nisga'a Final Agreement*. They are no longer under the *Indian Act* and were the first to negotiate a modern treaty in BC (Hoffman & Robinson, 2010).

The Nass area has an ample supply of water and limited demand, so securing enough water for the community to use is less of a problem for the Nisga'a. However, climate change and its impacts to water quality, volume, and flow patterns is a big and growing challenge. The Nass River watershed is one of the most important salmon watersheds in Canada. Changes brought on by climate change could significantly impact the Nisga'a Nation's cultural and spiritual needs, predominantly as they relate to fish and wildlife.

Water Provisions in the Nisga'a Final Agreement

Under the *Nisga'a Final Agreement*, the BC Government retains full ownership and regulatory authority over water.³¹ There is no recognition of inherent or Aboriginal rights to water in the treaty, but the treaty provides the Nisga'a the following water provisions:

- A Nisga'a Water Reservation of 300,000 cubic decameters of water per year (roughly 1% of the annual average flow from the Nass Valley watershed) converted to water licenses with a priority date of 1996 for domestic, industrial, and agricultural purposes
 - The Nisga'a Nation, a Nisga'a Village, a Nisga'a Corporation, or a Nisga'a citizen may, with consent of the Nisga'a Nation, apply to BC for a water licence (not subject to any fees) for volumes of flow to be applied against the Nisga'a water reservation.³²
- BC established a 20-year "Nisga'a Hydro Power Reservation" that ended in 2020. The Nisga'a were able to investigate the suitability of all unrecorded waters of streams (not including the Nass River) wholly or partially within Nisga'a Lands for hydro power purposes (Wilson-Raybould & Raybould, 2014).

³¹ In fact, Article 137 of the *Nisga'a Final Agreement* reads: "This Agreement is not intended to grant the Nisga'a Nation any property in water." (Simms, 2014)

³² Statutory decision-makers still adjudicate these applications and may reject them if they will harm the watershed or public safety. In the case of the Nisga'a Nation, such an application would likely need to be for a very large amount of water.

Subsequent treaty negotiations in BC were heavily influenced by the *Nisga'a Final Agreement* (Wilson-Raybould & Raybould, 2014).³³

While the WSA protects all water reservations accorded in a modern treaty, only the Nisga'a's surface water reservations are explicitly referenced in the WSA (WSA, 2016).

6.4. Navajo Nation and the San Juan River Settlement of 2005

Winters Rights and the Western USA

In the USA, like in Canada, historical treaties with Indigenous peoples typically did not explicitly guarantee Indigenous rights to water. Western states in the USA use a FITFIR system and over a hundred years ago, the US Supreme Court ruled in the *Winters v. United States* (1908) decision that Indigenous peoples held water rights that implicitly came with their reservations. These tribal water claims have a priority date of when the reservation was created, making them the most senior rights in many watersheds. Tribal water rights also cannot be lost through non-use (Jackson, 2018).

Winters rights are not a recognition of inherent or Aboriginal rights to water. Rather, they are limited to “purposes” of the reservation as defined by the settler-state. The ruling did not quantify Winters rights and most remain unquantified today. Furthermore, state and federal governments largely ignored the Winters doctrine until recent decades (Curley, 2019).³⁴

The *Arizona v. California* (1963) decision recognized that inter-state apportionments of water entitlements needed to integrate the unquantified rights of federally recognized reservations. This led to the “Practicably Irrigable Acreage” policy which quantifies Indigenous water rights based on the amount of water needed to irrigate all irrigable lands on the reservation. This

³³ Today, all comprehensive treaties in BC apart from the *Tsawwassen Final Agreement* have a water reservations and hydro power reservation. This includes the Maa-nulth, Tla'amin, and Yale final agreements. The Yale Final Agreement remains unratified. The Maa-nulth and Tla'amin final agreements also contain provisions that BC must negotiate with the treaty First Nations if the province ever brings into force laws regulating groundwater under their lands, which they did under the WSA. The Nisga'a Final Agreement does not have this provision. The Tsawwassen Final Agreement does not directly accord Tsawwassen First Nation with any water licenses, however it allows Tsawwassen to participate on the board of the Greater Vancouver Water District

³⁴ For example, in the 1920s, seven western states unilaterally allocated the entire Colorado River and its tributaries amongst themselves through the Colorado Compact of 1922 and purposefully ignored all Indigenous rights to water (Curley, 2019).

policy remains the standard used in settlements to quantify water rights (Chief et al., 2016). Since the late 1970s, the Winters Doctrine has become a popular legal-political mechanism through which Indigenous nations can secure water rights (Curley, 2019).

Winters rights can be converted to specific surface and groundwater quantities through litigation, general stream adjudications,³⁵ and negotiated water rights settlements, though tribes often pursue multiple strategies simultaneously (Bark et al., 2012). Many Indigenous nations have set up water rights units to advocate for these rights, and there have been 29 successful Indigenous water rights settlements enacted into law by Congress between 1978-2014 (Jackson, 2018).

The Navajo Nation

The Navajo Nation is the largest tribe in the US with a population of over 173,000 living on the reservation and nearly 400,000 citizens in total. Their reservation is also the largest in the US, covering 71,000km² of land in Arizona, Utah, and New Mexico. It was set up in 1868 and has expanded since (Cheetham, 2020).

The Navajo Nation faces major water access issues. The region has experienced a drought since 1999 and many of the surface water sources are overallocated. This is expected to worsen as climate change progresses (Cheetham, 2020). Nearly 40% of homes lack running water or sanitation and in the absence of piped water many residents get their water from stores or from groundwater. Yet, the Navajo Nation also faces water quality issues including uranium contamination from old mines and spills. In recent decades, this has impacted peoples' ability to rely on groundwater (Lazaro, 2018).

Settlement Provisions

In 2005, the Navajo Nation Council and the Governor of New Mexico approved a settlement of the Navajo Nation's water claims to the San Juan River in New Mexico. Four years later in 2009, President Obama brought the settlement into law as part of an omnibus bill.

³⁵ General stream adjudications are comprehensive judicial proceedings that determine and catalogue the extent and priority of all water rights in an entire river system.

Even with this settlement, most water rights across the Navajo Nation remained unquantified. Nevertheless, some major provisions of this agreement include:

- Setting up the Navajo-Gallup Water Supply Project, an infrastructure project that would allow the Navajo Nation to use 27,000 acrefeet/year for municipal, industrial, commercial, domestic, and stock-watering purposes
 - The project was granted US\$870 million for its development
 - Funds can also be used to restore the water supply or improve other environmental conditions in the basin
- Quantifying some groundwater rights in San Juan River Basin, Little Colorado, and Rio Grande River Basins
- Quantifying irrigation-related water rights in the San Juan River Basin in New Mexico (up to 508,000 acrefeet/year from the San Juan River)
- Creating a \$50 million water development trust fund for the Navajo Nation to address water project needs and water conservation

6.5. Whanganui River and the Te Awa Tupua Act

Whanganui Iwi and the Whanganui River

The Whanganui River is the longest navigable river in New Zealand and the third-longest overall, flowing 290 km starting on Mount Tongariro in the North Island and draining into the Tasman Sea. The Māori people of the Whanganui River, the Whanganui Iwi, rely on the river for transportation, food, and spiritual wellbeing. They recognize it as an ancestor and describe it as a living whole that runs from the mountains to the sea. An enduring concept to Whanganui Iwi is that the river and the people are inseparable and the people have a common expression, “*Ko au te Awa, ko te Awa ko au*” (I am the River, and the River is me) (Salmond, 2014).

In 2017, the Whanganui Iwi and the Crown settled the longest legal battle in New Zealand history by enacting the *Te Awa Tupua (Whanganui River Claims Settlement) Act*. The legislation made the Whanganui River the first-ever river with legal personhood and set up a collaborative management structure between Māori and the Crown to carry out this legal personhood. This settlement came out of centuries of struggle by the Whanganui Iwi against colonial control of the river (Collins & Esterling, 2017).

Conditions Surrounding the Te Awa Tupua Act

In New Zealand, water is governed under common law, a system under which water cannot be owned. However, as European settlement intensified, the Crown claimed control of all navigable rivers and lakes on the grounds that it was necessary to protect the national interest in drainage, food control, and town water supplies.³⁶ Whanganui Iwi have continually resisted this and tried to maintain their rights and relationships to this body of water as their extended kin (Salmond, 2014).

In 1975, the Waitangi Tribunal was set up as a permanent inquiry commission to investigate claims brought by Māori relating to actions of the Crown and breaches to the Treaty of Waitangi, New Zealand's treaty that frames the relationship between the Crown and Māori chiefs. In 1999, the Tribunal released the Whanganui River Report and found that the Whanganui Iwi had never surrendered ownership of the Whanganui River. Their principal recommendation was to immediately begin negotiations with the Māori. Furthermore, they recommended that at the very least, any settlement should recognize Whanganui Iwi ownership and authority in respect of the river as well as the need for collaboration in modern river management (Waitangi Tribunal, 1999).

Negotiations began in 2002 but the Crown was unwilling to accept a settlement that gave Whanganui Iwi ownership in respect of the river. They pressed that "no one owns the water" (Salmond, 2014). Instead of granting Whanganui Iwi their longstanding claims to control of the Whanganui River, the *Te Awa Tupua Act* makes the river a co-responsibility of the Crown and Whanganui Iwi to act in its best interests (Collins & Esterling, 2017).

Administrative Structure of the Te Awa Tupua

The Te Awa Tupua Act declares the river an indivisible and living whole from the mountains to the sea, holding "the rights, powers, duties and liabilities of a legal person" under a new framework known as the Te Pā Auroa nā Te Awa Tupua. As part of conferring legal personhood, the previously Crown-owned riverbed is vested in fee simple ownership in the Te Awa Tupua in what is called Kia Matara Rawa. The water, aquatic life, and minerals in the river (apart from the sand, gravel and subsoil) are separated from the Te Awa Tupua and are not

³⁶ However, the Crown did not claim to own the water itself. They still claimed this was part of the commons (Salmond, 2014).

vested in the river (Strack & Goodwin, 2017). Two people, one nominated by Crown and one by Whanganui tribes, are established as Te Pou Tupua (the human face and voice of the river). They act collectively on behalf of the river and its interest, not on behalf of their nominators. Their key function is to enter into relationships and agreements with governments on topics of mutual interest, especially around granting consent on behalf of the river. The legislation also creates a NZ\$30 million Awa Tupua Fund, also known as Te Korotete, to support the health and wellbeing of the river, administered by the Te Pou Tupua. The Whanganui iwi also received NZ\$80 million as redress for breaching their rights in relation to the river under the Treaty of Waitangi. The river has an advisory group and a strategy group respectively called the Te Karewao and Te Kōpuka to support the Te Pou Tupua. The strategy group collaboratively creates the Te Heke Ngahuru, or strategy for the river (Te Aho, 2014). Four intrinsic values which represent the essence of the river known as Tupua te Kawa are identified to guide the Te Pou Tupua.³⁷ Decision-makers and the Crown must pay particular regards to the river's status and its intrinsic values (Te Aho, 2014).

Some caveats to this tenure system are that while the Crown released their rights in the river, they still hold on to mineral rights in the riverbed. Personhood also does not interfere with existing private property rights in the river, and Te Pou Tupua's consent is not required for use of water from the river or its tributaries. The river also cannot exclude public access or alienate or transfer interests (Salmond, 2014).

³⁷ The four intrinsic values are: 1) Ko te Awa te mātāpuna o te ora - the River is the source of spiritual and physical sustenance; 2) E rere kau mai te Awa nui mai te Kahui Maunga ki Tangaroa - the great River flows from the mountains to the sea; 3) Ko au te Awa ko te Awa ko au - I am the River and the River is me; 4) Ngā manga iti, ngā manga nui e honohono kau ana, ka tupu hei Awa Tupua - the small and the large streams that flow into one another and form one River.

Figure 6.1 Te Pā Auroa nā Te Awa Tupua, The New Legal Framework for the Te Awa Tupua³⁸



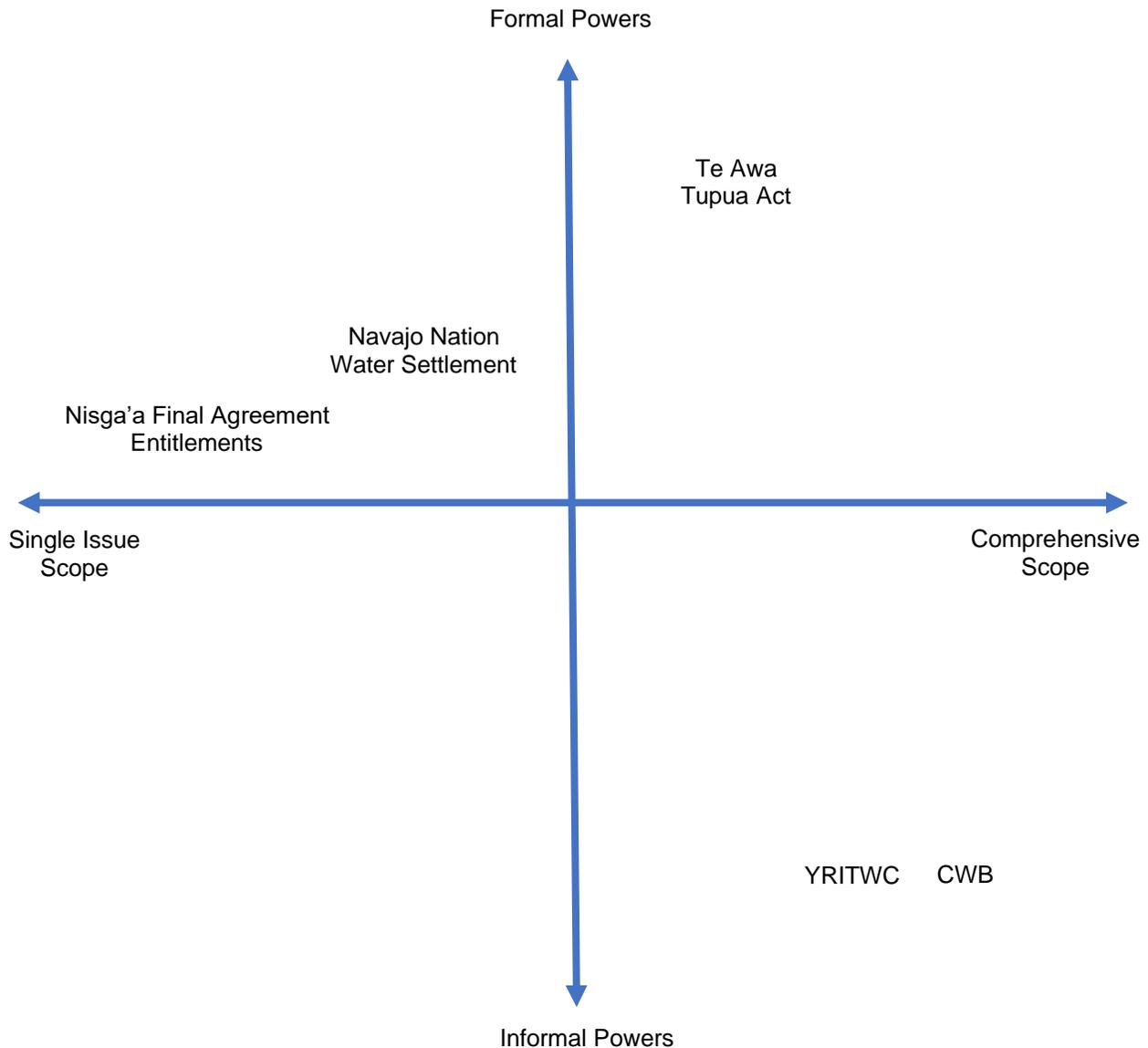
Adapted from the Ngā Tāngata Tiaki o Whanganui webpage (2020), the Post Settlement Governance Entity for Whanganui Iwi for the Purpose of the Whanganui River Settlement.

³⁸ All components of the Te Pā Auroa nā Te Awa Tupua except the “legal recognition of the Te Awa Tupua” have Maori name. Recall, these names are: Kia Matara Rawa (vesting Crown-owned parts of the river bed in Te Awa Tupua), Te Pou Tupua (human face of the Te Awa Tupua), Te Kōpuka nā Te Awa Tupua (strategy group), Te Heke Ngahuru ki Te Awa Tupua (Te Awa Tupua Strategy), Te Korotete o Te Awa Tupua (Te Awa Tupua Fund), Tupua te Kawa (Te Awa Tupua values).

6.6. Commentary on Case Studies

The rest of this chapter draws from the literature and expert interviews to analyze the five case studies and their strengths and weaknesses in supporting Indigenous water governance. Figure 6.1 maps the case studies according to the formality of the powers and decision-making abilities they give to Indigenous peoples, and the scope of water and watershed issues they address.³⁹

Figure 6.2 Case Studies Categorized According to Formality of Powers and Scope



³⁹ Neither the formality of powers nor the scope of issues addressed indicate the effectiveness of the case in supporting Indigenous water governance. The cases are mapped along these axes merely as a way to think about some differences between the governance arrangements.

Cowichan Watershed Board

There is an appetite to listen to Indigenous voices in the Cowichan region because there is widespread acknowledgement across watershed users that major water issues must be addressed. Different groups accept that the current approaches to watershed governance do not work, and Indigenous voices have been calling for changes to watershed governance for decades. This broad-based desire to address the region's watershed issues provides a helpful backdrop to the CWB.

One of the biggest strengths of the CWB is the collaboration it facilitates. The organization's co-governance structure balances federal, provincial, local, and Indigenous voices. This has helped different groups develop clear watershed goals together and improve their communications. This collaboration is further reinforced by the CWB's consensus-based approach to decision-making. Groups understand they must cooperate to develop decisions. When there is not an immediate consensus, they must work together to better understand or define the problem and its potential outcomes.

This collaboration has helped the groups create a common language. It has educated local governments on Indigenous views on water and nationhood, and its "whole-of-watershed thinking" encourages an ecosystem-based approach to watershed management consistent with how Cowichan Tribes interacts with water. At the same time, it has helped Cowichan Tribes develop its own views on water governance. This common language facilitates more balanced dialogues and helps the groups better debate and understand controversial and complex issues (von der Porten & de Loë, 2014).

However, this collaboration is only possible because of underlying relationships that took years to develop (Hunter et. al, 2014). Much of the workability of the CWB boils down to the time invested in building relationships, and the fact that there are dedicated participants who recognize common watershed issues and can work together well.

Additionally, building a governance mechanism and integrating new mandates into an already jurisdictionally fragmented environment is a challenging task. This is especially true given that the CWB does not have any formal powers. For now, the CWB is more of a medium or platform for groups to convene than a jurisdictional authority. There are also big data gaps around the watershed which makes it hard to assess its objectives, and the CWB does not have stable resourcing (FNFC, 2018a).

Yukon River Inter-Tribal Watershed Council

The YRITWC helps create a unified voice across Indigenous peoples in the watershed. This is especially important because the immense scale of the watershed means groups are most likely to make a difference if there is collaboration behind their efforts and concerns. The YRITWC has also helped relationship-building between Indigenous and non-Indigenous governments in Canada and the USA. These linkages allow programs to be delivered across regions, cultures, and jurisdictions while staying responsive to local needs. Ultimately, the YRITWC is a bridging organization that facilitates trust and coordination across watershed users (N. Wilson et al., 2018).

One of the organization's biggest successes has been the Indigenous Observation Network. Through this program, they have established 15 years of baseline data for the transboundary watershed. The program also empowers Indigenous people to generate high-quality data used in federal government decision-making. Participants view their work as an assertion of their sovereignty through the practice of stewardship and data-generation (N. Wilson et al., 2018).

However, the YRITWC faces several limitations by virtue of working in a transboundary watershed. Funding is a major issue for all non-profit organizations, but it is even more difficult to fund work across two countries. There is value in addressing regional watershed issues, but ideally the organization would be able to address more whole-of-watershed issues. Securing and aligning political support across jurisdictions is also challenging. The large size of the watershed and number of Indigenous government signatories means that different Indigenous communities have different watershed priorities. This can make it difficult for the YRITWC to focus on and develop watershed-wide governance guidelines. On top of this, the YRITWC does not have regulatory or enforcement abilities.

Despite these limitations, the durability of the YRITWC stems from Indigenous peoples' commitment to watershed stewardship and the organization's ability to remain relevant to the signatory Indigenous peoples.

General Comments on Watershed Boards

The YRITWC and CWB show that watershed boards can be effective at coordinating watershed protection and liaising between jurisdictions. Most governance boundaries do not line up with watershed boundaries, so watershed boards can help bridge silos and set watershed-wide objectives and projects. They can also help collect data and monitor cumulative impacts.

Watershed boards can be relatively easy to start if they are informal or semi-formal partnerships. However, we should be cautious to not always stop at low-burden governance mechanisms out of convenience. Formal watershed boards may be more reliably funded and may enable regulatory or enforcement powers.⁴⁰ At the same time, the formality of a watershed board does not necessarily improve Indigenous control over water governance. Generally, Indigenous people must have significant and influential decision-making power in a watershed board for their perspectives to be well-represented.

Nisga'a Nation and Modern Treaties in BC

The *Nisga'a Final Agreement* helped the Nisga'a Nation secure a significant amount of water entitlements, but this model of water allocation only works in areas with water licenses to give out. It might not be possible in urban or water-scarce regions. In fact, the only modern treaty in an urban area, the *Tsawwassen Final Agreement*, is also the only comprehensive agreement in BC that does not include a water reservation. Yet, it is precisely in the regions where water is scarce that it is more important for Indigenous peoples to secure water entitlements. Another limitation of this case is that the *Nisga'a Final Agreement* limits water license uses to domestic, industrial, and agricultural purposes. There is no mention of water for environmental or cultural flow needs, which may be among the more important water needs for the Nisga'a Nation.

Navajo Nation and Water Rights Settlements in the US

Water settlements may allow some flexibility to meet Indigenous water needs because settlements patch together multiple water allocation and watershed protections tools (Chief et al., 2016). Settlements based on Winter's rights also gives licenses older priority dates than BC comprehensive treaties by setting priority dates to when reservations were established, not when the agreements were signed.

However, non-Indigenous governments must be willing to negotiate with Indigenous peoples and the settlements are vulnerable to political manoeuvring.⁴¹ These issues link back to the

⁴⁰ For example, in Ontario the *Conservation Authorities Act* passed in 1946 created formal watershed management institutions with semi-consistent revenue streams (Baltutis et al., 2014).

⁴¹ For example, the *Navajo-Hopi Little Colorado River Settlement* of 2012 was attached to a renewal of a coal fire power plant and put restrictions on land and economic growth for the Navajo Nation. This settlement never passed and was rejected by the Navajo Nation. As another example, though the Navajo Nation and the state of New Mexico signed the *San Juan River Settlement* in 2005, the settlement had to come with legislation that would authorize a series of water infrastructure projects (Navajo Nation, 2010).

limitations of pushing for Indigenous rights through colonial governance structures. Winters' rights can be seen as minimizations of Indigenous water rights because they are limited to the "purpose" of the reservation as defined by the settler-state. By quantifying water rights through the Practicably Irrigable Acreage policy, Indigenous peoples' water rights are reduced to water for the purposes of agriculture and subsistence-based activities, the very activities colonial interests historically sought to promote among Indigenous communities (Curley, 2019). In fact, the *San Juan River Settlement* imposes limitations on Navajo Nation water use for the expansion of communities or establishment of new industries (Curley, 2021).

General Comments on Negotiating Water Rights

In Canada and the USA, water rights settlements and modern treaties are currently one of the few ways to secure Indigenous entitlements to water. The drawbacks to these processes are that they are slow,⁴² require a lot of resources, and may be threatened by changes in governments, priorities, or other conditions. Neither mechanism can take away or alter existing licenses, making them more suitable for water-rich regions. Additionally, the water licenses given are recognized on the non-Indigenous governments' terms. In BC, water rights are still vested in the Crown. With Winters' rights, non-Indigenous governments controls and define these rights. In return for these rights, the non-Indigenous governments receive certainty.⁴³ Some view this as an asymmetrical exchange between Indigenous and non-Indigenous governments that play into familiar dynamics of the politics of recognition, where the act of recognition works to mitigate potential for transformative change in the power relations between the parties. Rather than being a way to improve Indigenous sovereignty over water, some view existing settlement and treaty processes as a way to limit Indigenous sovereignty over water (Coulthard, 2014; Strack & Goodwin, 2017; Yazzie, 2013).

Legal Personhood

The *Te Awa Tupua Act* reflects Indigenous worldviews by acknowledging the indivisibility of the river, the interconnectedness of beings, and enshrining Māori relationships with the river in

The Bush administration was unwilling to sign off on this legislation because of the cost of the settlement. So, the settlement was stalled until President Obama signed the necessary legislation in 2009.

⁴² The *San Juan River Settlement* resolved more than 20 years of efforts (Navajo Nation, 2010) while the *Nisga'a Final Agreement* was ratified after 22 years of negotiation (Hoffman & Robinson, 2010).

⁴³ With water rights settlements, states are no longer threatened by the uncertainty of unquantified water rights. With modern treaties, the certainty that non-Indigenous governments gain relates to question of Aboriginal title and land ownership.

legislation. It contrasts traditional Western conceptions of property and may help non-Indigenous people understand Maori approaches to the river (Collins & Esterling, 2017). Furthermore, it achieves this without forcing the Whanganui Iwi into what Salmond calls the “double bind” of recognition, wherein their ancestral relations can only be protected if they are redefined as property interests under the language of ownership (Salmond, 2014).

However, the case does not interfere with existing property rights in river and the Te Awa Tupua’s consent is not required for water use in the river or its tributaries (Jackson, 2018). Additionally, while personhood for a river is an innovation in legal tools, the mechanics of the settlement are fundamentally based on English property law arrangements.⁴⁴ The *Te Awa Tupua Act* is a negotiated settlement, so issues described in the preceding section around the politics of recognition also apply to this case. By starting from a point where Indigenous peoples must seek recognition of their rights and status under the Crown’s authority, the Crown can reject outcomes they find unacceptable. In fact, some have characterized this settlement as a symbolic act used by the Crown to evade the question of sovereignty and ownership (Strack & Goodwin, 2017). The Waitangi Tribunal proposed two decision-making options in its Whanganui River Report and both would have required the Whanganui Iwi consent on all resource applications (Hsiao, 2012).⁴⁵ Being unwilling to accept this, the Crown instead endorsed a legal arrangement wherein the Te Awa Tupua’s consent is not needed for water applications. This case feeds into a broader pattern where non-Indigenous governments do not always respect the full FPIC of Indigenous peoples around resource decisions, even though this may be their legal obligation or recommended course of action.

The powers of the Whanganui Iwi and the Te Awa Tupua under legal personhood are still being explored. Thus, the settlement to the longest legal battle in New Zealand history will bring new struggles around how to manage a natural system that is also a legal entity. In the short-term, the conferring legal personhood onto the Te Awa Tupua has created a new form of collaborative watershed governance that has helped translate intercultural ontologies, but the long-term

⁴⁴ As explained in chapter 6.5, the Crown-owned riverbed is vested in fee simple ownership in the Te Awa Tupua (Strack & Goodwin, 2017).

⁴⁵ Specifically, the Waitangi Tribunal recommended the river be entirely vested in the Whanganui Iwi thus any resource consent application would require their approval, or they recommended the Whanganui River Maori Trust Board would be added as a “consent authority” under the Resource Management Act of 1991. This would require Whanganui Iwi approval in decision-making (Hsiao, 2012).

impacts of this case remain to be seen. Ultimately, this case will only empower Whanganui Iwi and the river to the extent that the Crown devolves real rights to the Te Awa Tupua.

Table 6.1 Summary of Case Studies and Their Implications for Indigenous Water Governance

	Achievements	Considerations and Limitations	Strengths of this Governance Arrangement Type
Watershed Board: CWB	<ul style="list-style-type: none"> Facilitates collaboration, relationships, and trust Improves communication between Cowichan Tribes, other local interests, BC, and Canada Coordinates watershed strategies and visions Promotes whole-of-watershed, ecosystem-based approach to watershed management Has been successful at securing funds Cowichan Tribes would not have capacity to undertake many initiatives without help of CVRD 	<ul style="list-style-type: none"> Data gaps impede watershed protection efforts Lacks stable funding source Lacks formal powers Took several years to develop trust and good relationships 	<ul style="list-style-type: none"> Can set visions, long-term objectives, and coordinate action across watershed Can act as a venue for multiple actors to discuss complex issues and develop a common language Helps set whole-of-watershed thinking Can be good at monitoring cumulative impacts and gathering data Most suitable when different groups have shared goals
Watershed Board: YRITWC	<ul style="list-style-type: none"> Unites Indigenous voices and concerns Improves collaboration between Indigenous peoples and non-Indigenous governments Helps protect watershed across vast distances Has been successful at securing funds Empowers Indigenous people via monitoring 	<ul style="list-style-type: none"> Lacks formal powers Lacks stable funding source Difficult to secure transboundary funding and align political support across multiple jurisdictions May be difficult to develop common water governance guidelines for the entire watershed 	
Negotiated Water Rights: Nisga'a Nation	<ul style="list-style-type: none"> Creates a large water reservation for surface water licenses with a priority date of 1996 Water licenses are exempt from provincial fees Water reservation is protected under treaty and in the WSA 	<ul style="list-style-type: none"> Slow process to negotiate treaty Licenses have recent priority date Authority over water still rests with the Crown BC still approves Nisga'a license applications Water license uses are limited to domestic, industrial, and agricultural purposes, reflecting historical colonial priorities for Indigenous peoples Does not cover groundwater 	<ul style="list-style-type: none"> Secures water entitlements under existing water allocation systems Some settlements may establish limited measures to protect the watershed Easiest to create in watersheds that are not overallocated or water-scarce
Negotiated Water Rights: Navajo Nation	<ul style="list-style-type: none"> Quantifies surface and groundwater allocations in parts of San Juan River, priority date of 1863 Creates infrastructure to treat/distribute water Includes funding to restore water supply or improve other environmental conditions Includes a water development trust fund 	<ul style="list-style-type: none"> Slow process to negotiate settlement State governments must want to negotiate Process vulnerable to political maneuvering Winters rights do not recognize aboriginal rights to water beyond purposes of a reservation, reflecting historical colonial priorities for Indigenous peoples Does not cover entire reservation 	
Legal Personhood: Whanganui River	<ul style="list-style-type: none"> Reflects Māori relations with the river in legislation May help non-Indigenous people understand Indigenous perspectives on water Legal development that can challenge Western governments to adopt a plurality of laws and normative frameworks 	<ul style="list-style-type: none"> Vague implications; only empowers to the extent that it devolves real rights to the Te Awa Tupua Te Awa Tupua's consent not required for use of water from the river or its tributaries Based on mechanics of Western property rights Water remains common property, most minerals remain Crown property, does not interfere with existing private property rights in the river Arrangement falls short of Waitangi Tribunal's findings that Iwi have ownership over river 	<ul style="list-style-type: none"> Suitability and strengths of this governance arrangement remain to be seen, particularly as "legal personhood" can vary a lot depending on how it is set up and there is yet to be standard ways to set up legal personhood for watersheds

Chapter 7.

Analysis of Water Governance Tools

Chapter 6 demonstrated a variety of governance arrangements that can help renew Indigenous water governance. In theory, several tools enabled through the WSA also have the potential to improve Indigenous water governance. In practice, the implementation of these tools is just beginning. Chapter 5 outlined how WSPs, delegated authority, and advisory boards, are set up under the WSA. This chapter expands on those outlines by drawing on expert interviews, the literature, and insights from case studies to envision how the BC Government could make use of WSPs, delegated authority, and advisory boards to support Indigenous water governance.

Because revitalizing Indigenous water governance is so complex and there are diverse on-the-ground realities in BC, we need to push beyond standard policy evaluation frameworks to think about this topic. Different contexts will require different solutions. So, my analysis approaches the topic with flexibility and considers a broader and diverse set of criteria and objectives when assessing the WSA tools.

7.1. Opportunities Within the Water Governance Tools

7.1.1. Considering the Context

It is crucial to note that the efficacy of the three tools evaluated (WSPs, delegated authority, and advisory boards) depends on the situation they are applied to and how they are designed and implemented. When a community wants to address a watershed issue, there needs to be careful problem analysis and an exploration of all potential options within and beyond the WSA. The tool and its design need to fit with the context, in particular the community characteristics, watershed issues, and objectives of the Indigenous community. Figure 7.2 lists some considerations that may guide the selection and design of a WSA tool.

Figure 7.1 Examples of Considerations to Guide the Selection and Design of a Water Governance Tool for an Indigenous Community



7.1.2. Common Advantages and Limitations of WSA Tools

One common advantage across WSPs, delegated authority, and advisory boards is that they may help shift the locus of decision-making closer to local communities. This may lead to better, place-based decisions, especially considering the BC Government often does not have the capacity to make the best-informed decisions across all regions of the province.

However, with all three tools, water governance authority ultimately remains with the BC Government, so they decide how much authority they want to allocate in the design and implementation of these tools. As stated earlier, one of the biggest challenges across Indigenous water initiatives is the Crown’s assertion of jurisdiction over water (FNFC & CIER, 2016). WSA tools are unable to challenge this. Furthermore, WSA tools can only fit Indigenous water governance into non-Indigenous water governance structure, not vice versa. In using these tools, Indigenous peoples are asked to speak the BC Government’s language and use their knowledge systems (Simms et al., 2016). The inherent limitations to advancing Indigenous water governance through tools nested in colonial governance mechanisms hearken back to limitations from the negotiated water rights cases. Additionally, WSA tools remain grounded in FITFIR, yet FITFIR is antithetical to most Indigenous perspectives on water. Oftentimes, watershed issues cannot be addressed by handling the incremental burden of future licenses.

They must be addressed by managing water licenses that have already been given out, but FITFIR does not allow for this.

Consideration Around Making Hard Choices

Addressing a watershed issue often requires watershed users to make hard decisions and sacrifices. These hard decisions may be arrived at more easily when there is collaboration and trust between watershed users. Creating a plan beforehand and codifying the approaches before a crisis hits may make people more willing to make sacrifices. This plan should create a sense that the impacts are shared evenly. It may also be important to provide compensation when some difficult decisions are made. The plan does not need to be a WSP, but a consideration for delegated authority or advisory boards is that these tools are best complemented with some sort of plan if they are to help make hard decisions.

7.1.3. Preconditions Across the Water Governance Tools

There are common preconditions that must be in place for WSPs, delegated authority, and advisory boards to help further Indigenous water governance. UNDRIP, my interviews, the literature and my cases suggest that all three governance tools should have:

- *Meaningful Indigenous Participation.* Indigenous peoples must be fully engaged as partners, preferably through co-governance. Otherwise, these governance tools may perpetuate the power imbalances between Indigenous and non-Indigenous watershed users. This means Indigenous peoples must play a meaningful part designing WSPs, have some control through the delegated authority, and sit on the advisory boards.
- *Sufficient Capacity.* This refers to sufficient funding, staffing, and technical expertise.
- *Political will.* None of the WSA tools evaluated can be developed without a minister and/or Cabinet's approval. See figure 5.2 for an illustration of who approves each tool.
- *Good Data.* Good baseline data, regular monitoring, and a strong understanding of the connections between groundwater, surface water, and land use across watersheds helps create better WSPs. It helps decision-makers with delegated authority make better decisions, and helps advisory boards give better advice. Unfortunately, there are many gaps data on watersheds across BC (Gower & Barroso, 2019).

7.1.4. Water Sustainability Plans: Opportunities

WSPs can recommend a broad and powerful range of enforceable regulations and orders to protect the watershed. The power of other instruments may be restricted (section 76) and provincial or local government authorities may be required to consider WSPs in other planning processes (section 81). A WSP could set out areas of ecological or cultural importance to Indigenous peoples and enhance licensing measures in those areas or completely prohibit ministries from issuing additional water licenses in those areas. WSPs can also amend the terms and conditions of existing water licenses or cancel them entirely (section 79). This could protect environmental or cultural flows by changing the terms of licenses to prohibit the diversion of water if the flow or water temperature is below or above a certain threshold, to decrease the overall amount of water licensed, or to require all licensees adopt water conservation technologies (Curran & Brandes, 2019).⁴⁶

The process of creating a WSP could also help establish baseline data (Curran & Brandes, 2019). People who divert water within a plan's area or who engage in land or resource activity that may impact the quality or quantity of the water may be required to divulge information about water-related activities (section 72).

7.1.5. Delegated Authority: Opportunities

If First Nations are given delegated authority or the delegated decision-maker is a collaborative body that includes Indigenous representation, then this tool could empower First Nations as decision-makers in water governance. This stands in stark contrast to the current situation of most First Nations under the *Indian Act* where their powers over water primarily relate to regulating the construction and operation of water infrastructure.

7.1.6. Advisory Board: Opportunities

If Indigenous people are included on an advisory board, this could be a way to elevate Indigenous voices as high up as the minister or premier. Indigenous communities, Indigenous organizations, or Indigenous individuals could also issue joint statements with an advisory board. Advisory boards could be venues to integrate IK with science on watershed issues. They

⁴⁶ With the caveat that significant changes in existing licenses would need to consider factors such as compensation for rights holders in the amendments have a financial impact.

could also function as pilot projects or transition stages before a group or person takes on delegated authority or joint decision-making powers.

7.2. Assessment of the Water Governance Tools

Guiding Objectives and Outcomes

The specifics of what revitalized Indigenous water governance will look like differs depending on the Indigenous community and their traditional laws. However, on a broader level across the province, an ultimate objective is to have nations co-governing their waters together. Recall from figure 5.1 that much of this work begins with BC recognizing and respecting Indigenous water rights and with Indigenous peoples developing and defining their own water governance values. The three WSA tools assessed can only touch on part of what is needed to renew Indigenous water governance. Nevertheless, they can reshape legal and administrative water regimes in ways that are co-designed and co-led by Indigenous peoples. These tools have the potential to help bring the following core outcomes:

- A reflection Indigenous laws, perspectives, and IK in Western water governance
- The creation of sustainable and life-sustaining water governance practices
- Meaningful collaboration with Indigenous peoples in water governance

With these outcomes in mind, I discuss key advantages and disadvantages for each tool and describe scenarios they may be suitable for, recognizing that the specific design and application of the tools could lead to different outcomes. Furthermore, my assessments are preliminary in part because the BC Government has yet to release details or guidelines on how the WSA tools would operate.

7.2.1. Water Sustainability Plans: Assessment

Advantages and Disadvantages

WSPs may facilitate high levels of cooperation between Indigenous and non-Indigenous governments, and between other watershed users. Creating a WSP would take years of cooperation across watershed users to define watershed objectives and prescribe management practices together. Implementing a WSP would require continued collaboration. So, from a

relational perspective, WSPs may improve government-to-government relationships and allow Indigenous peoples to participate in watershed governance from a place of equal standing, especially if WSPs are co-developed.⁴⁷

The flip side to this is that developing and implementing a WSP is an enormous undertaking. The extensive, expensive, and extremely technical nature of creating and implementing a plan should not be underestimated, and Indigenous peoples need to be given sufficient resources to meaningfully participate. The estimated cost to create a WSP depends on the scope of the WSP, the watershed, and the issues addressed however most will require at least hundreds of thousands of dollars. In 2016, the CWB estimated that developing a WSP for the Cowichan/Koksilah watershed would cost \$800,000 over three years, and the WSP implementation support would cost around \$200,000 annually (CWB, 2016). Beyond the technical and resourcing difficulties, developing a WSP that has buy-in from all watershed users is challenging. Another disadvantage to WSPs is that under the current legislation, they can only be created in areas where there is conflict and cannot be made proactively, which is a great hinderance in a time of climate change crisis.

On the other hand, WSPs enable wide-ranging possibilities, therefore bringing opportunities to create innovative agreements. Many Indigenous peoples are concerned about how land use interacts with water; WSPs are one of the few tools that can set whole-of-watershed thinking by connecting interactions between land use, water, and water flows (Curran & Brandes, 2019).⁴⁸ They are the only WSA tool that can cancel or amend existing licenses.⁴⁹ They can also lead to a suite of formal regulations and orders, though the actual force behind a WSP depends on the plan itself. If the proposed plan does not contain recommendations that regulations or orders be made or if these regulations or orders are rejected by Cabinet, the WSP can only be a voluntary

⁴⁷ To best support Indigenous agency in water governance, Indigenous peoples should be involved throughout the WSP planning process before establishing the terms of reference, all the way to the implementation and enforcement of the WSP. The scoping initiative co-chaired by the Cowichan Tribes and FLNRORD described in chapter 6.1 is an example of how even discussions around the creation of a process to create a WSP can be co-developed. (*WSP Scoping Initiative, 2020*).

⁴⁸ Recall, they can recommend that a regulation or order under the WSA or another Act be made in relation to the plan (section 75), they can restrict use of land or natural resources or specific activities on the land (section 78), they can amend or cancel licenses (section 79), require Provincial government or local authorities consider the WSP in their operations (section 81), and more.

⁴⁹ The caveat to this is that the actual work of deciding how to alter existing licenses is very difficult.

plan that sets directions and priorities (Curran & M. Brandes, 2019). Yet even as a voluntary document, WSPs can be influential by setting long-term visions.

Table 7.1 Advantages and Limitations of WSPs

Advantages	Limitations
<ul style="list-style-type: none"> • May support cooperation across Indigenous peoples, BC Government, and other watershed users • Can enable wide-ranging possibilities and innovative agreements • May be designed as having formal powers • Only WSA tool that can alter existing water licenses and handle legacy allocation issues • Can legally set whole-of-watershed thinking and integrate land use decisions with water considerations • Good for setting long-term objectives 	<ul style="list-style-type: none"> • Extensive, expensive, and resource-intensive to create and implement • Requires extremely technical expertise • Requires great buy-in, cooperation and communication from key watershed users • There must be a problem in an area before a plan can be created for that area

Suitable Contexts

WSPs may be suitable for situations where there is widespread recognition that there is a problem in the watershed and multiple different groups want to address the problem.

Undertaking the big task of creating a WSP is much easier when people do not need to be convinced there is an issue. The creation of the CWB is a testament to this.

The collaboration needed to create a WSP also means there must be workable relationships between the relevant Indigenous peoples, the BC Government, and other watershed groups. By virtue of being one of the few ways to alter existing licenses, WSPs may also be suitable for watersheds where there is a scarcity or overallocation of water licenses. Overall, WSPs are suitable where there is the need and the readiness to address a conflict.

7.2.2. Delegated Authority: Assessment

Advantages and Limitations

The major advantage of delegated authority is that it confers formal water governance powers. However, this tool cannot delegate a minister's or Cabinet's decision-making powers, so it cannot enable people or entities to set powerful mechanisms such as water objectives or environmental flows (see Appendix B for a description of these tools). It would be limited to more administrative decisions.⁵⁰

Section 126 in the WSA also does not allow shared decision-making. This is a flaw, especially given the growing interest in collaborative watershed governance. Unless authority is delegated to a co-governed entity or unless this section is amended, it could be more productive to delegate formal powers through section 7 agreements under DRIPA⁵¹ rather than through section 126 under the WSA (FNFC, 2020b).

Delegated authority should not be an excuse to download responsibility without providing sufficient capacity. The decision-maker may need compensation for carrying out new responsibilities. They also may need technical support and the cost for this varies. However, conferring delegated authority will likely cost less than creating and implementing a WSP.

There may be implementation difficulties related to the logistics of this tool. There is little clarity on how delegated authority would interact with Indigenous law and authorities (Brandes & Rosie, 2018). The consultation obligations of the decision-maker with Indigenous peoples are also unclear.⁵² BC has not released guidelines on which actors could be delegated authority, whether resources would be diverted to the decision-maker, and what accountability mechanisms the decision-maker would be subject to. This tool would also leave the delegated decision-maker exposed to the risks (including legal risks) associated with their new powers.

⁵⁰ Recall, section 126 allows Cabinet to delegate the powers and duties of the Comptroller of Water Rights, water managers, engineers, and officers administering the WSA.

⁵¹ Section 7 of DRIPA allows Indigenous governing bodies to enter joint statutory decision-making agreements.

⁵² Consultation and obligation duties of the Crown cannot be delegated to third parties. The Crown may delegate procedural aspects of consultations, but the ultimate legal responsibility lies with the Crown.

Table 7.2 Advantages and Limitations of Delegated Authority

Advantages	Limitations
<ul style="list-style-type: none"> • Indigenous people, governments, or organizations could receive more formal decision-making powers in water governance 	<ul style="list-style-type: none"> • Limited in the powers that can be delegated (primarily administrative) • Does not allow for shared decision-making • Major details on how delegated authority would operate are not finalized

Suitable Contexts

Delegated authority may be most suitable for situations where there are demands for more local control, and local knowledge and expertise would improve decision-making (M. Brandes & Rosie, 2018). For example, it could help account for cumulative impacts by empowering local experts to monitor the on-the-ground situation and issue licenses with a better awareness of the cumulative impacts in mind. It may be best to give delegated authority to organizations co-governed by Indigenous peoples to ensure Indigenous peoples are represented in the decision-making.

7.2.3. Advisory Boards: Assessment

Advantages and Limitations

An advantage of advisory boards is that they can advise on a broad range of issues including Cabinet and ministerial decisions. Thus, they may have a lot of flexibility around what they can address and who can participate, unlike with delegated authority. However, advisory boards do not have any formal powers, so the impact of an advisory board depends on how their advice feeds into final decisions. If there is a strict alignment with UNDRIP in the terms of reference and the advisory board has significant influence over final decisions, then this limitation may be lessened. As mentioned earlier, advisory boards may allow different watershed users to convene, exchange viewpoints, and integrate IK with science.

There are fewer unanswered questions around how an advisory board would work compared to WSPs and delegated authority because advisory boards are used in other contexts, so advisory boards may be relatively easier to implement. The cost of the board would depend on the structure of the board, its support, and whether there are additional activities it takes on. For example, if the creation of the board also came with efforts to inventory existing environmental

data and inventory the IK in the area, each of tasks may cost around \$100,000.⁵³ The advisory board would presumably have administrative costs and there would be costs to develop a terms of reference (Urban Systems Ltd., 2014). If the advisory board was only tasked to advise on specific issues and did not need to meet frequently, there may be minimal costs. Even if a board had an expansive scope, the costs would likely be less than the cost to develop a WSP.

Table 7.3 Advantages and Limitations of Advisory Boards

Advantages	Limitations
<ul style="list-style-type: none"> • Potential venue to integrate IK with science • May be relatively easy to implement • May have broad scope on issues addressed 	<ul style="list-style-type: none"> • Completely voluntary, no formal powers

Suitable Contexts

Advisory boards may be suitable for contexts where there are complex decisions that would benefit from IK and/or local knowledge. For example, an advisory board could work well to advise on drought levels and responses. However, advisory boards can only further Indigenous water governance if Indigenous voices play a meaningful part on of the board rather than a tokenistic presence.

⁵³ The 2014 report prepared for CVRD that explores water management and governance options for the area estimated that initiating an inventory of existing environmental data for the area would cost \$85,000 and initiating an inventory of Traditional Ecological Knowledge for the area would cost \$125,000.

Chapter 8.

Recommendations to Enable Uptake of WSA Tools

Indigenous peoples are increasingly revitalizing their water laws, undertaking community processes according to their traditional laws, and structuring their own review process for development plans, and more. As table 5.1 indicates, Indigenous peoples have been busy in their roles articulating their water principles, priorities, and objectives, but their initiatives often do not come with formal powers. The BC Government can play a role supporting these initiatives. As Chapter 7 showed, some tools in the WSA have the potential to add force to community priorities and objectives. Yet five years after the WSA came into force in 2016, there has not been a WSP, delegated authority, or advisory board implemented under the WSA.

The highly enabling nature of the WSA means that the new tools it allows for are optional. In a sense, the legislation remains incomplete, and it is in the implementation of the WSA that there are opportunities for things to be done in a government-to-government way that expands Indigenous sovereignty over water. This chapter offers examples of groundwork for the BC Government to prepare and support themselves and Indigenous peoples to uptake tools enabled through the WSA⁵⁴ in ways that will help revitalize Indigenous water governance.

8.1. Components of Resilient Indigenous Water Governance

It is important to understand what key components are needed in resilient Indigenous water governance in order to guide my exploration into recommendations. My analysis of the WSA tools, expert interviews, the literature, cases studies, and the BC First Nations Water Governance Roundtable's *Statement of Requirements for Water Governance in British Columbia According to Crown Commitments to Reconciliation* (see Appendix C) provide the basis for the components in figure 8.1 (FNFC, 2018b).

⁵⁴ Including but not limited to WSPs, delegated authority, and advisory boards.

Figure 8.1 Components of Resilient Indigenous Water Governance



Indigenous communities may require different things to achieve and sustain the components in figure 8.1. The form that these components take may also differ across Indigenous communities. This figure is designed to enable inclusive ways of thinking about Indigenous water governance. At the heart of its design lies the recognition that there is no one-size-fits-all model of what resilient Indigenous water governance looks like. Nevertheless, bearing all this in mind, I broadly define the components below.

Capacity: Having adequate capacity is crucial to pursuing Indigenous water governance. This refers to having appropriate funding, staff levels, and expertise to conduct the activities necessary to take on meaningful water governance activities. Ideally, there is a match between capacity and responsibilities taken on.

Self-Determination: Self-determination means Indigenous peoples have autonomy over watershed governance in their traditional territories or are meaningfully involved as nations in a collaborative governance or co-governance arrangement (von der Porten & de Loë, 2013). Self-determination also entails reclaiming Indigenous water governance processes. Indigenous peoples should be able to define their water and land use laws and govern in ways aligned with

these laws. IK should be incorporated in decision-making while respecting Indigenous data sovereignty,⁵⁵ and First Nations should be able to protect their culturally important places and resources.

Cooperation and Coordination: Water connects people, places, governments, and sectors. So, any form of resilient water governance needs to bridge silos across interested parties and work with the impacted communities. Fostering this cooperation and coordination will require good communication and working relationships across watershed users.

Whole-of-Watershed Perspective: For most Indigenous peoples, good water governance includes a responsibility to protect the watershed and adopting a whole-of-watershed perspective. Water governance informed by a whole-of-watershed perspective would pay attention to the cumulative impacts on the watershed. It would balance multiple uses in the watershed and adopt longer timeframes when evaluating impacts. It would also consider impacts from multiple ecologically relevant scales (FNFC, 2018b).

Respect for Indigenous Rights: Resilient Indigenous water governance must be based on a recognition and respect for Indigenous rights. As described at the beginning of this paper, these rights include but are not limited to rights to water, fishing rights, and the associated watershed conditions necessary to sustain fish and other cultural elements (Baltutis et al., 2014).

8.2. Description of Recommendations

The key components of resilient Indigenous water governance from Figure 8.1 will guide my exploration into actions the BC Government should pursue to enable the uptake of WSA tools.

Capacity

A lack of sufficient funds, staff, and expertise is the most immediate barrier to greater uptake of WSA tools. In some ways, as figure 5.3 indicates, the solution to addressing the capacity gap is relatively straightforward. Yet, this may be a difficult gap to overcome because this lack of capacity is connected to a lack of political will. To close the capacity gap, the BC Government

⁵⁵ Indigenous data sovereignty is a topic of growing relevance that fits in the broader issue of self-determination. It recognizes that as nations, Indigenous peoples have the right to ownership, control, access, and possession of their data, though the specifics of what this looks like in practice needs to be defined by Indigenous communities (Oguamanam, 2019).

must make the uptake of these WSA tools a priority and resource these efforts appropriately. This entails supporting Indigenous peoples with adequate financial and human resources so they can properly participate in the development of these tools and take on new powers. As mentioned throughout this paper, resourcing gaps are frequently cited by Indigenous peoples as their biggest barrier to revitalizing Indigenous water governance.⁵⁶ Furthermore, there is a conception that water governance is beyond Indigenous governments' responsibilities. This conception needs to change. In September 2020, the BC Government committed \$27 million to watershed security initiatives and wetland projects as part of its BC Economic Recovery Plan (Crawford, 2020). Building on this investment and developing a permanent watershed security fund could help reduce barriers in the funding cycle and allow Indigenous peoples to lead long-term water projects and hire staff (POLIS et al., 2019).

For WSPs, the BC Government should create a mandate to implement WSPs where there is readiness and include Indigenous peoples as co-creators. Without a mandate that makes this a priority, civil servants may not be able to commit to doing something as big as co-developing WSPs. The BC Government should help Indigenous communities work through technical components of the plan rather than expect the communities to have fully articulated their priorities in the precise terms suitable for a WSP. The BC Government should also help engage other water users in the watershed and set watershed goals collaboratively. The BC Government will need to assess whether they have sufficient capacity and skills within the relevant ministries to support this large undertaking and fill the gaps as they are identified.

Self-Determination

The first step the BC Government must take to support Indigenous self-determination is to treat Indigenous nations as nations and honour the government-to-government relationship. The BC Government could also acknowledge Indigenous peoples as full partners in water governance by writing this into WSA tools under development or by incorporating this into the WSA through an amendment. Part of the work on self-determination will also include the BC Government and Indigenous peoples figuring out what co-governance looks like together.

⁵⁶ Even Cowichan Tribes, the largest First Nation in BC and a community that has made protecting its watershed a priority for decades, was only very recently able to hire a permanent staff member for watershed management.

Where Indigenous peoples have translated their water laws into English, the BC Government must respect these laws upon entering their territory and in all dealings with that nation. Where Indigenous peoples have yet to revitalize and translate their water laws into English, the BC Government must account for the time and resources needed by Indigenous peoples to define their water priorities when collaborating with them on designing WSA tools. This revitalization work will benefit all projects in the area, not just the immediate task of developing WSA tools.

Cooperation and Coordination

Before implementing new WSA tools, the BC Government needs to invest the time and resources to develop relationships with the impacted and partnering Indigenous peoples and seek a common language and understanding. This will position the BC Government and Indigenous peoples to create something with greater potential to protect the watershed and revitalize Indigenous water governance. Decisions must be developed with Indigenous peoples to create buy-in from both sides.

All discussions need to take place in a way that fosters respect and a genuine commitment to building cooperation. Part of this ties into the broader project of building cultural sensitivity and anti-racism awareness within the BC Government.

Transparency helps improve coordination and cooperation. Indigenous peoples need to see how their collaborative efforts are substantively considered and addressed by the province, (FNFC, 2019). Transparency also builds trust and encourages open conversations which allows for governments to collaboratively address the hard questions as they come up.

Coordination and cooperation also need to extend beyond the government-to-government relationship. There are not many venues in BC that allow different groups to make decisions about watershed visions, priorities, and trade-offs together, so there needs to be more thinking on how to create collaboration across multiple watershed users.

At the same time, while coordination is crucial, the BC Government must be conscious of the engagement demands placed on Indigenous peoples who are already handling a lot of issues with limited resources. Creating a formal First Nations water caucus may streamline

engagement requests and make the BC Government a better partner by alleviating some of the burdens they place on First Nations (FNFC, 2019).⁵⁷

Whole-of-watershed approach

Data deficits in watersheds interfere with carrying out the whole-of-watershed approaches necessary for resilient Indigenous water governance. The BC Government can address this by directing more resources and placing a greater emphasis on learning about the province's watersheds, building up IK around watersheds, and supporting community-based monitoring. The BC Government could start publishing annual State of the Waters reports, as they promised to do by 2012 in their *Living Water Smart* commitment (Simms & Brandes, 2018).⁵⁸ In areas designated for WSPs, the BC Government could place more stringent data collection and monitoring requirements on water users.⁵⁹

Respect for Indigenous Rights

As discussed earlier, the WSA is almost entirely silent on Indigenous rights except to recognize water allocations from modern treaties. Honouring Indigenous entitlements to water may be trickier to do through most tools in the WSA including WSPs, delegated authority, or advisory boards.⁶⁰ Rather, Indigenous water rights would likely be better secured through other avenues such as treaties or other agreements. A quick comparison between the Nisga'a Nation case and the Navajo Nation case lends insight into how the Crown could improve its water provisions in

⁵⁷ The First Nations Fisheries Council in collaboration with staff and leadership from several BC First Nations and First Nations organizations has proposed a First Nations engagement framework to guide the development and implementation of regulations and tools in the WSA. One of their recommendations is the creation of a First Nations water caucus that would act as a collaborative hub for First Nations to work with the BC Government throughout the development and drafting of regulations, policies, and tools under the WSA (FNFC, 2019). An outline of their First Nation water caucus proposal and broader engagement framework can be found online at: https://www.fnfisheriescouncil.ca/wp-content/uploads/2019/11/Letter-FNFC-to-BC_July-2019.pdf

⁵⁸ Living Water Smart is BC's official water plan written in 2008.

⁵⁹ For example, they could require licensees to report on actual water use so that the province knows how much water is being used, not just how much water is licensed to be used. They could also require users to report on certain water quality measures.

⁶⁰ Water reservations (section 39) could be used to retain unreserved surface or groundwater for future allocations to Indigenous peoples. WSPs could be used to amend or cancel existing water licenses to make room for allocations to Indigenous peoples. Several other tools including water objectives (section 43) and critical environmental flow protection orders (section 86-87) could be used to protect flows for fish and other ecological, cultural, economic, and social uses necessary to Indigenous rights, but they are not able to give water allocations (Brandes & Rosie, 2018).

comprehensive treaty negotiations with Indigenous peoples. For example, the water licenses from Indigenous water reservations could be set to the earliest date in the watershed, and treaties could include funding and broader provisions for watershed protection.

Part of building respect for Indigenous rights also relates to expediting the work set out in DRIPA. The First Nations Fisheries Council released a direction paper on key areas that should be reformed in the WSA to align with UNDRIP. Implementing DRIPA presents an opportunity to fix the silences in the WSA around Indigenous water rights (FNFC, 2020b).

Other Actions

As my analysis of select WSA tools has indicated, there are currently few details on how most WSA tools could function and the BC Government needs to do more policy development around this. Most communities can only know if a tool may be suitable for their situation once these tools are better outlined. The POLIS Water Sustainability Project has released briefings around how WSPs (Curran & Brandes, 2019) and other tools in the WSA (Brandes & Rosie, 2018) might be used. This paper has also tried to show how WSPs, delegated authority, and advisory boards could advance Indigenous water governance. However, the province is the ultimate penholder on the parameters of these tools, so the BC Government needs to clearly define their thinking on these tools and partner with Indigenous peoples throughout this process. This could involve releasing their own publicly accessible guidelines around which tools might be suitable for different contexts, based on similar considerations as those listed in figure 7.1. This could be complemented with guidelines around how other statutes and tools outside the WSA may help Indigenous (and non-Indigenous) communities achieve their water governance objectives. The BC Government should also stay up-to-date on what Indigenous peoples are doing to implement their own water governance initiatives and what their water priorities are (von der Porten & de Loë, 2013)

In general, successful water governance partnerships with Indigenous peoples need plenty of time to develop. The BC Government must accept this and understand that large time investments are a crucial to building the respectful government-to-government relationships necessary for strong watershed partnerships.

8.3. Summary of Recommendations

Figure 8.2 draws from the preceding section to list key recommendations on what the BC Government can do to better position itself and Indigenous peoples to take up and implement WSA tools in ways that will revitalize Indigenous water governance. All the recommendations are situated in the broader context of the need to repair relations between the Indigenous peoples and the Crown. The recommendations can be broadly categorized into six areas of action:

- Develop guidelines and protocols for WSA tools
- Engage and build government-to-government relationships
- Bridge data gaps with science and IK
- Ensure sufficient capacity and training within government
- Continue and expand work to develop and implement regional watershed projects
- Provide capacity for Indigenous peoples

Figure 8.2 Recommendations to the BC Government

Areas of Action	Short Run	Medium Run	Long Run
Develop Guidelines & Protocols for WSA Tools	Develop guidelines and details around how new tools enabled by the WSA function	Develop best practices guides for WSA tool based on existing cases as they develop (ex., include guidelines on which tools to use for different contexts)	Update best practices guides and details around how WSA tools may function as needed
Engage and Build Government-to-Government Relationships	Encourage Indigenous peoples to share info and converse about WSA tools and community water priorities Develop new tables to engage with Indigenous peoples on water (ex., a First Nations water caucus that works with BC to discuss water issues and develop policies related to the WSA) Engage individual First Nations on water in government-to-government relationships and as part of the duty to consult (not replaced by water caucus)	Regularize engagement points for Indigenous peoples to contribute to the WSA policy and regulation cycle	Continue engagement and relationship-building
Bridge Data Gaps with Science and IK	Publish annual, publicly accessible state of the watershed reports Support pilot projects for community-based monitoring and IK revitalization efforts; apply data and IK to decision-making Require water monitoring and reporting from users in areas designated for WSPs	Establish more groundwater observation wells and implement more climactic and hydrologic instrumentation and monitoring across BC Help collect data on aquifer capacity, recharge rate, ground water extraction rate, and relationship between groundwater and surface water in watersheds across BC Support and build up network of community-based monitoring and IK revitalization efforts, integrate IK with science, and apply data and IK to watershed decision-making	
Ensure Sufficient Capacity & Training in Government	Create mandates to co-develop WSPs Educate the civil service on impacts of colonialism, cultural sensitivity, and Indigenous perspectives	Develop teams within the civil service mandated to engage Indigenous peoples, co-develop WSPs, implement other tools within the WSA, and develop other collaborative watershed governance/management initiatives	
Develop & Implement Regional Projects	Continue and expand work at the local level with Indigenous peoples to protect watersheds and develop WSA tools as pilot projects	Continue and expand work at the local level with Indigenous peoples to protect watersheds and develop WSA tools (building on the lessons and insights from the pilot projects) Develop regional and/or provincial plans and projects with Indigenous peoples to protect watersheds across BC	
Capacity for Indigenous Peoples	Build a watershed security fund to provide stable, long-term funding for Indigenous peoples to revitalize their laws, hire water managers, and engage with the province in developing WSA tools and making decisions about water Provide technical support to Indigenous peoples as needed and as requested		

Chapter 9.

Conclusion

While Indigenous peoples have been governing their waters for millennia, Indigenous water governance is a relatively new topic of discussion in public policy. This paper has argued that this development is long overdue – it is necessary to start supporting Indigenous peoples' decision-making abilities in their waters. The WSA has opened the door to potential for movement on this topic, though what this undertaking should look like in practice will vary across Indigenous nations and watersheds.

This paper has outlined some of the challenges involved in supporting Indigenous water governance. These challenges should not be underestimated. Ultimately, to achieve sustained progress on water and Indigenous peoples' place in governing these waters, the BC Government needs to make this topic a priority. Watershed security needs to be recognized as urgent and important, and Indigenous peoples need to be recognized as critical partners in this matter.

The BC Government has already committed to respecting Indigenous rights and renewing relationships with Indigenous peoples. It has passed DRIPA, integrated strong reconciliation principles throughout its ministerial mandate letters, and created the 10 Principles that guide on how provincial representatives should engage with Indigenous peoples. The spirit of all these commitments would have the BC Government acting to support Indigenous sovereignty over water. Thus, in a way, for the BC Government, supporting Indigenous water governance is about living up to its promises.

Not only is this topic important for respecting Indigenous peoples' rights and the repairing relations between Indigenous peoples and the Crown, it is also important for our watersheds as we enter ever scarcer freshwater conditions and other climate changes. It can be difficult to focus on long-term issues like watershed security in any political climate, but the competing priorities brought on by the current COVID-19 crisis can make this task even more difficult.

Yet, seen under a different light, watershed security can be understood as a way to achieve other goals like job creation, moving forward on reconciliation, supporting investment certainty, and building community resiliency. In other words, watershed security should not be seen as

one of several different priorities, but a priority that is necessary and connected to a lot of other objectives. It is time we refocus on what sustains us, and don't lose the opportunity a crisis brings.

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Appendix A.

Interviewee Profiles

Some experts formally interviewed for this paper consented to have their name and professional affiliation included in this report while others consented to be included as a deidentified interviewee. The following experts were interviewed:

- Dr. Andrew Curley – Diné scholar and geographer, Assistant Professor in the School of Geography, Development and Environment at The University of Arizona
- Dr. Edda Mutter – Science Director, Yukon River Inter-Tribal Watershed Council
- Dr. Marlowe Sam – Wenatchi scholar researching Indigenous water rights, Lecturer in Indigenous Studies at the University of British Columbia Okanagan Campus
- Dr. Mick Strack – Surveyor, Senior Lecturer in the School of Surveying/Te Kura Kairūri at the University of Otago
- Dr. Nicole J. Wilson – Scholar researching Indigenous water governance, Assistant Professor in the Department of Environment and Geography at the University of Manitoba
- Susi Porter Bopp – Water policy expert, Project Manager of the Water for Fish freshwater initiative at the First Nations Fisheries Council of British Columbia
- Tim Kulchyski – Cowichan Tribes member and fisheries biologist and resource consultant, Cowichan Watershed Board member
- Three water governance researchers/consultants
- Two civil servants working in the BC Government
- One Métis lawyer working at the junction of Indigenous rights and environmental protection

Appendix B.

Other Tools in the WSA

Apart from WSPs, delegated authority, and water objectives, several other tools enabled through the WSA could be used to improve Indigenous participation in water governance and protect watersheds. Some water and watershed organizations have released briefing note on some of these tools and the opportunities they bring (FNFC, 2020; Brandes & Rosie, 2018).

These tools include:

- *Environmental Flows Needs (Section 15)* – This section requires decision-makers to consider EFNs when making decisions about water authorizations. As mentioned in table 5.1, Indigenous peoples in BC are already partnering with the BC Government to set EFNs in some streams.
- *Declarations of Significant Water Shortage and Critical Environmental Flow Protection Orders (Section 86-87)* – If the minister considers that one or more streams in an area are at risk of falling or have fallen below their CEFT, the minister can make a temporary protection order for up to 90 days. This tool can help with short-term problems during times of water shortage or droughts. Like with EFNs as mentioned in table 5.1, Indigenous peoples in BC are working with the BC Government to set CEFTs in some streams.
- *Fish Protection Flows (Section 88)* – The minister may issue a Fish Population Protection Order when low flows threaten the survival of a fish population. As mentioned in a footnote earlier in this paper, a Fish Population Protection Order was issued for the Koksilah River in August 2019 to suspend industrial water use and limit groundwater use (Baker, 2020).
- *Water Reservations (Section 39)* – Unrecorded water in a stream or aquifer may be reserved by Cabinet for a specific purpose, including future or ongoing treaty negotiations and agreements, environmental protection, and power production. This prohibits diversion of the water reservation for other purposes. This tool could be used to reserve Indigenous entitlements to water across BC for treaties and other agreements.
- *Water Objectives (Section 43)* – Water Objectives would set water and watershed thresholds for water quality, quantity, and aquatic ecosystem health into regulation. Decision-makers and local governments would need to consider Water Objectives in

land-use plans, land-based license applications, growth strategies, and more. Thus, Water Objectives provide the potential for a more integrated water management system that acknowledges cumulative impacts from land and water decisions. Cabinet must set the Water Objectives. Indigenous organizations and Indigenous peoples have expressed interest in this tool because many have great concerns around how land use decisions impact water and water flows. This tool provides the opportunity to connect land use decisions with water considerations.

- *Sensitive Stream Designation (Section 128)* – This tool provides additional protection for streams designated as “sensitive streams”. These protections could include additional terms and conditions related to licensing, diversions, mitigation measures, monitoring, and more. Cabinet can designate a stream a sensitive stream (and its connecting tributaries and aquifers) if the designation will protect a fish population whose sustainability is at risk because of damage to the aquatic ecosystem.

Appendix C.

Statement of Requirements for Water Governance in BC According to Crown Commitments to Reconciliation

The BC First Nations Water Governance Roundtable drafted 16 principles to provide the BC Government direction on implementing UNDRIP, the Truth and Reconciliation Calls to Action, and the *Draft Principles that Guide the Province of BC's Relationship with Indigenous Peoples* in relation to the use, stewardship, and protection of all fresh water (FNFC, 2018). The principles are described more in-depth in the submission to the BC Government. The submission also lists all the sections and obligations from the guiding documents (UNDRIP, Truth and Reconciliation Calls to Action, the *Draft Principles that Guide the Province of BC's Relationship with Indigenous Peoples*) that uphold the different principles. These 16 principles are:

1. Sacred Responsibility to Water
2. Recognition of Inherent Water Jurisdictions, Authorities, Laws and Traditional Knowledge Systems
3. Nothing about Us without Us
4. First Nation and Government Processes
5. Resourcing
6. Water and Traditional Knowledge
7. All Generations of All
8. Reflecting Our Water Values
9. Building Collaborative Institutions, Processes, and Approaches
10. Taking a Precautionary Approach
11. Prioritizing Conservation and Restoration

12. Ecosystem-Based Approach
13. Water at the Centre of Land-Use Decision-Making
14. Transparency and Information-Sharing
15. Communications and Education
16. Stakeholders