

Wilson, N.J. 2020. Querying water co-governance: Yukon First Nations and water governance in the context of modern land claim agreements. *Water Alternatives* 13(1): 93-118



Querying Water Co-Governance: Yukon First Nations and Water Governance in the Context of Modern Land Claim Agreements

Nicole J. Wilson

University of British Columbia, Vancouver, BC, Canada; n.wilson@alumni.ubc.ca

ABSTRACT: There exist few examples of functioning water co-governance systems where Indigenous and settler colonial governments work together to share authority for water on a nation-to-nation basis. In this paper I examine the multiple barriers to achieving water co-governance, highlighted by a multidimensional framework including distributional, procedural and recognitional (in)justices. I apply this framework to a case study in the Yukon, Canada, which is based on research conducted in partnership with four out of fourteen Yukon First Nations (Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in and White River First Nations); all are in areas where the water governance system is shaped by Indigenous water rights and authorities that are acknowledged in modern land claim and self-government agreements. Despite the many substantive and positive changes resulting from the explicit acknowledgement of Yukon First Nation water rights, I find that this system falls short of achieving co-governance. In particular, Yukon First Nations critiques highlight the limitations imposed by the continued assertion of 'Crown' jurisdiction over water and by the marginalisation of Indigenous legal orders that follows from the privileging of settler worldviews and forms of governance. Thus, co-governance arrangements depend not only on the distributional justice of shared jurisdiction; Indigenous legal orders and relationships to water must also be reflected in the procedural and recognitional justices of the decision-making processes and institutions that are developed.

KEYWORDS: Co-governance, environmental justice, Indigenous law, Indigenous water governance, modern land claims, Yukon, Canada

INTRODUCTION

Indigenous peoples,¹ for whom water is a priority, are frequently excluded from settler colonial water governance frameworks² (Barbera-Hernandez, 2005; Boelens et al., 2012; McGregor, 2012; Sam and Armstrong, 2013; von der Porten and de Loë, 2014; Wilson, 2014a; Babidge, 2016; Montoya, 2017; Arsenault et al., 2018; Bakker et al., 2018; Berry et al., 2018; Daigle, 2018; Yazzie and Baldy, 2018; Curley, 2019a, 2019b; Diver et al., 2019). Collaborative water governance arrangements are frequently promoted as a method for including Indigenous peoples in decision-making processes about water (Cf. Simms et al., 2016; von der Porten and de Loë, 2013b). While collaborative governance approaches, developed to

¹ The term Indigenous refers to those communities that claim historical continuity with their Traditional Territories (Corntassel, 2003). It is used as an inclusive term to refer to Canada's First People, including First Nations, Inuit and Métis peoples.

² Water governance refers to the set of regulatory processes, mechanisms and institutions through which political actors – including communities – influence environmental decisions, actions and outcomes (Bakker, 2003). Settler colonialism refers to a form of colonialism in which colonisers dispossess Indigenous peoples of their land for settlement and resource development. Dispossession is initially carried out through physical force, but a variety of technologies are used to maintain this state, for example maps, numbers and laws. Both processes are legitimised, justified and reinforced through mechanisms that include policy, ideology, and discourse about identity (Harris, 2004). Although both colonialism and settler colonialism are based on domination by an external power, only settler colonialism seeks to replace Indigenous peoples with a settler society (Wolfe, 2006). This paper examines water co-governance arrangements in settler colonial states – such as Canada – where colonialism is understood to be both an historical and an ongoing process of dispossession.

replace top-down and adversarial modes of policymaking and governance, are implemented by bringing public and private stakeholders together in shared decision-making processes (Ansell and Gash, 2008), they most often fail to substantively acknowledge Indigenous water rights and authorities. Instead, Indigenous peoples are engaged as 'stakeholders' rather than as governments that are seeking to assert their territorial sovereignty (Kotaska, 2013; von der Porten and de Loë, 2013a). In this sense, collaborative governance arrangements tend to reinforce existing colonial relationships as one jurisdiction – generally, a colonial government – holds all the decision-making power and delegates administrative tasks to the others (Simms et al., 2016). Yet, as Indigenous peoples work to assert their self-determination, co-governance is increasingly the stated goal of water governance arrangements involving Indigenous peoples and colonial states (Indigenous-state co-governance) (Wilson, 2014b; Cave et al., 2016; Rahnama, 2016; Simms et al., 2016; Phare et al., 2017).

Water governance arrangements fall on a continuum from Indigenous to colonial governance, with co-governance in the middle (Kotaska, 2013). Co-governance requires that both parties share authority or jurisdiction on a nation-to-nation basis and that Indigenous peoples have explicitly agreed to share authority with non-Indigenous people (Kotaska, 2013; Simms, 2014; Wilson, 2014b). In practice, there are relatively few examples of Indigenous-state water co-governance systems (Cf. Rahnama, 2016). While the reluctance of colonial governments to share authority with Indigenous peoples is frequently noted as a barrier to achieving co-governance (Simms et al., 2016; Bakker et al., 2018) current power imbalances also sideline Indigenous legal and governance systems by privileging and normalising settler worldviews and forms of governance (Goetze, 2005; Tipa and Welch, 2006; Kotaska, 2013; Simms et al., 2016). In this paper, I examine the multiple barriers to achieving Indigenous-state water co-governance, highlighted through a multidimensional justice framework that includes distributional, procedural and recognitional (in)justices. I then apply this framework to a case study of water governance in the Yukon Territory, Canada, where modern Indigenous-state treaties make it one of the few systems in Canada – and globally – to explicitly acknowledge Indigenous water rights and authorities.³ Based on research conducted in partnership with four Yukon First Nations (Carcross/Tagish First Nation, Kluane First Nation, Tr'ondëk Hwëch'in and White River First Nation), I find that the system falls short of achieving co-governance despite the introduction of many substantive and positive changes following from the explicit acknowledgement of Yukon First Nation water rights and authority. Reflecting on the multidimensional justice framework, I note that jurisdictional inequalities, illustrated through the continued assertion of 'Crown' jurisdiction over water, most visibly point to issues of distributive justice; however, Yukon First Nation critiques about the implementation of their water rights and the processes and institutions through which decisions are made highlight the importance of together considering distributional, procedural and recognitional justices. Finally, I examine how attention to Indigenous legal orders can address present injustices in Indigenous-state water co-governance.

THEORISING JUSTICE IN INDIGENOUS-STATE WATER CO-GOVERNANCE

Indigenous water governance scholarship highlights Indigenous peoples' inherent rights to self-determination, which includes the power to make decisions based on Indigenous law, epistemologies and ontologies, to protect water for all forms of life as well as present and future generations (Barbera-Hernandez, 2005; Boelens et al., 2012; Sam and Armstrong, 2013; Yazzie, 2013; McGregor, 2014; Wilson, 2014a; Daigle, 2018; Todd, 2018; Yazzie and Baldy, 2018; Chiblow (Ogamauh annag qwe), 2019). While the failure of colonial states to recognise Indigenous water rights, responsibilities and jurisdiction is central to the water injustices experienced by Indigenous peoples (Simms et al., 2016; Phare et al., 2017),

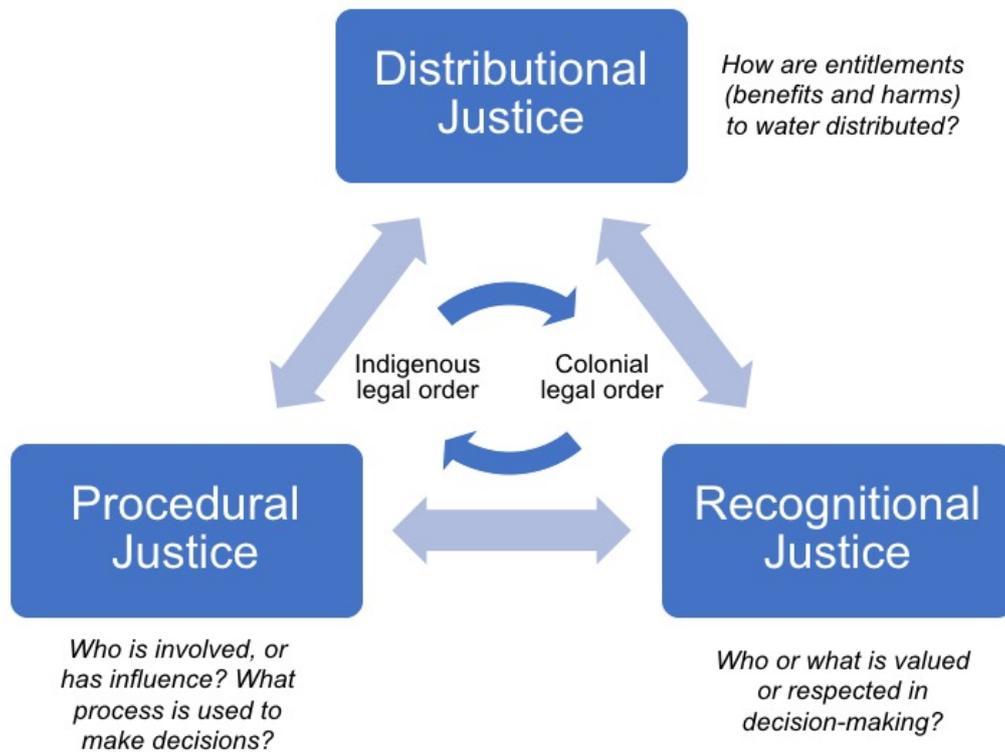
³ The Canadian context is no different, in that settler governments have been slow to acknowledge Indigenous water rights and to share substantive decision-making power and jurisdiction (Phare, 2009; Simms et al., 2016). The question of whether water rights are part of Aboriginal title to land has not yet been settled in Canadian courts, and Aboriginal rights to water have never been explicitly recognised or disproven through the courts in Canada (Phare, 2009; Laidlaw and Passelac-Ross, 2010).

further examination is needed to appreciate the many material and non-material consequences that flow from the power imbalances that privilege and normalise settler ontologies, epistemologies and forms of governance in co-governance arrangements (Goetze, 2005; Tipa and Welch, 2006; Kotaska, 2013; Simms et al., 2016). Indeed, Indigenous water relationships are diverse, multifaceted, structured by protocols, and encompass practices and knowledge about the relationships between humans and the other-than-human world that are the basis of Indigenous systems of governance and law (Borrows, 2002; Napoleon, 2013; McGregor, 2014; Craft, 2017). Unlike colonial legal frameworks that focus on rights to water, Indigenous legal and governance systems tend to emphasise that people have a responsibility to water as a living entity (McGregor, 2014; Craft, 2017; Wilson and Inkster, 2018; Chiblow (Ogamauh annag qwe), 2019). Scholars who engage with the ontological politics of water governance highlight the injustices that are associated with the constant imposition of colonial understandings of water as a material resource that is available for human exploitation, ownership and management (see, for example, McGregor, 2014; Craft, 2017; Wilson and Inkster, 2018). This ontological and epistemological violence sidelines Indigenous self-determination and the expression of Indigenous governance and legal systems in ways that affect the spiritual, cultural and physical health of Indigenous peoples (Basdeo and Bharadwaj, 2013; Wilson et al., 2019). Engaging with the literature on Indigenous water governance and politics highlights the many challenges facing Indigenous-state water co-governance.

Indigenous-state water co-governance can also benefit from linking scholarship on environmental justice with scholarship on the injustices experienced by Indigenous peoples in environmental governance and management (see, for example, Schlosberg and Carruthers, 2010; Whyte, 2011; Mascarenhas, 2016; McGregor, 2018; Williams and Doyon, 2019). Environmental justice scholarship offers a multidimensional framework that can be used to better understand (in)justice in Indigenous-state water co-governance. In particular, Schlosberg (2004: 521) develops a "trivalent conception of justice"⁴ which includes three types of justice: distributive (the allocation of entitlements); procedural (consideration of who is involved or has influence, and what process is used to make decisions); and recognitional (who or what is or is not valued or respected). Each of these dimensions of justice is interrelated or "tied together in political and social processes" (ibid: 528). For example, participation (procedural justice) in decision-making processes about water is often contingent on the extent to which a party is considered to have water rights and authorities (distributive justice) and the recognition that a party is an important actor (recognitional justice). Roth et al. (2018) have applied this framework to make explicit the often implicit assumptions about (in)justice in water governance; however, as Indigenous scholars such as Whyte (2011, 2016) and McGregor (2009, 2018) caution, environmental justice for Indigenous peoples involves a unique set of considerations that require us to acknowledge Indigenous self-determination and Indigenous legal and governance systems. Linking environmental justice literature to debates and challenges in the co-governance literature necessarily involves adapting environmental justice frameworks to acknowledge Indigenous water rights, responsibilities and authorities, as well as recognising the conflicting sources and understandings of jurisdiction in Indigenous and colonial legal orders. To this end, Figure 1 illustrates the interrelated dimensions of (in)justice in Indigenous-state water co-governance (distributive, procedural and recognitional), and highlights the need to consider differing understandings of governance and sources of authority that flow from Indigenous and colonial legal orders within such a framework. In what follows, I apply this multidimensional framework to the case study of Indigenous-state water co-governance in Yukon Territory.

⁴ Schlosberg's trivalent concept of justice was inspired by authors such as Nancy Fraser (1997, 1998, 2000).

Figure 1. Illustration of the interrelated dimensions of (in)justice in Indigenous-state water co-governance.

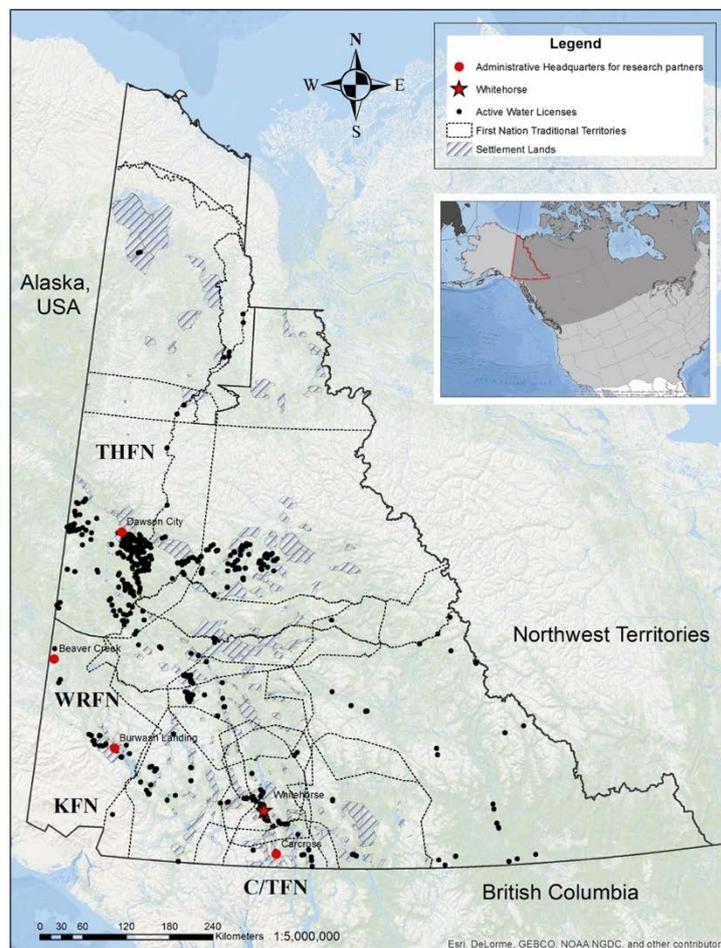


Source: Adapted from Schlosberg (2004).

RESEARCH SETTING

In 1993, following a 20-year process of treaty negotiation, First Nations agreed to retain Aboriginal rights and title to an area of Settlement Land which represents less than 10 percent (41,595 km²) of the land within their Traditional Territory; this was in exchange for partnership in the governance of all Yukon lands and resources including water (Figure 2). Modern land claim and self-government agreements are tripartite agreements between a First Nation, the Government of Canada, and the Yukon Government; these agreements were negotiated within the framework of the 1993 Umbrella Final Agreement (UFA). The purpose of these agreements is fivefold: to encourage reconciliation between Yukon First Nations and settler governments and provide a basis for lasting relationships between these governments; to promote community-level decision-making and First Nation self-determination; to protect First Nations' ways of life, based on spiritual and economic relationships with the land; to achieve certainty about ownership and use of land and resources in order to create a stable environment for investment; and to provide First Nations governments and local communities with financial benefits and economic opportunities (Mapping the Way, 2016). Three Yukon First Nations, including White River First Nation, Liard First Nation and Ross River Dena Council, ratified the UFA but ultimately opted out of land claims. These First Nations retain Aboriginal title to their Traditional Territories and remain Indian Bands under the federal 1985 *Indian Act* (Yukon Government, 2016). Since 2014, White River First Nation, Kaska Dena Council and Liard First Nation have been negotiating reconciliation agreements with the Yukon Government which are aimed at taking a proactive approach to improving relationships between these governments in the absence of comprehensive land claim agreements.

Figure 2. Map of the overlapping First Nation Traditional Territories, Settlement Lands, and active water licenses in Yukon, Canada.



Note: TH = Tr'ondëk Hwëch'in; WRFN = White River First Nation; KFN = Kluane First Nation; C/TFN = Carcross/Tagish First Nation.

Source: Esri, DeLorme, GEBCO, NOAA NGDC, and Geomatics Yukon.

Modern land claim and self-government agreements acknowledge Yukon First Nations as an order of government in Canada with jurisdiction over clearly defined territories.⁵ The agreements describe the nature of government-to-government relations among signatory governments and grant Yukon First Nations the powers of self-government, including a role – for example, through co-management boards – in the management of lands and resources upon which their people have long depended. As a result, First Nation governments in the Yukon and across the Canadian North have emerged as significant players in regional politics, including in water governance processes. Present governance arrangements represent a significant and positive change from previous arrangements which failed to acknowledge First Nation water rights; these arrangements also constitute a significant improvement from life under the colonial federal 1985 *Indian Act* which allows First Nations almost no say either in their governance

⁵ Self-governing Yukon First Nations are responsible for resource management and land use planning on Settlement Lands throughout the Yukon. Through these responsibilities, these Yukon First Nations have a range of authorities including legislative authority to enact laws about their Settlement Lands. For a more detailed account of First Nation self-government arrangements in Canada see Coates and Morrison (2008) and Morse (2008). For a discussion of the potential for Yukon First Nations to develop water legislation, see Wilson (2019).

or in the management of their lands and resources (Nadasdy, 2017). Indeed, the conclusion of land claim and self-government agreements in Yukon has been called a 'monumental achievement' (*Beckman v. Little Salmon/Carmacks First Nation*, 2010), 2010 SCC 53, [2010] 3 S.C.R. 103, 2010), and these agreements have without a doubt facilitated a significant shift in Indigenous-state relations.

Land claim agreements uniquely shape the water governance system of Yukon Territory, in that Yukon First Nations have nested degrees of rights and authorities with which to influence decision-making. Chapter 14 of the UFA – as well as individual land claim agreements – specifically addresses 'water management' and acknowledge signatory First Nations' water rights. Chapter 14 also made the Yukon Water Board into a co-management board with one-third First Nations representatives appointed by the Council of Yukon First Nations. Water also plays a substantial role in the decision-making processes of other co-management boards such as the Yukon Environmental and Socio-economic Assessment Board (YESAB).⁶ Furthermore, Yukon First Nations can assert the powers of self-government to create laws to better assert their Chapter 14 rights to protect water quality, quantity and rate of flow for waters on, or adjacent to, Settlement Lands. By explicitly acknowledging First Nation water rights, these agreements represent a clear shift in water governance and, more broadly, in Indigenous-state relations in the territory. These agreements enable First Nations to better protect the waters within their territories through the creation of co-management processes for shared decision-making about water, and through having the authority to govern waters on Settlement Lands.

Settler colonial water laws, nonetheless, remain central to water governance in the Yukon. Water governance in Canada is predicated on the assumption of 'Crown' ownership or jurisdiction over all the ground and surface water; in all cases, provincial and territorial governments also maintain control over decisions related to water use and access (Boyd, 2003).⁷ Chapter 14 of the UFA outlines the management powers of the Yukon and Federal Governments; although it may seem contradictory, it acknowledges settler water laws as 'laws of general application' that apply equally to all lands in the Yukon including Settlement Lands. A review of the history of water law in the Yukon shows that no substantial changes to water laws have been made since land claim and self-government agreements were enacted. Even through the process of devolution in 2003 – whereby the Federal Government transferred authority for lands and resources to the Yukon Government through the Yukon Northern Affairs Program Devolution Transfer Agreement (2001) – the new territorial Yukon *Waters Act* and Water Regulation (both of 2003) only 'mirrored' previous legislative language; that is to say, there were no substantial changes introduced in the new *Waters Act*. 'Crown' jurisdiction over water was simply devolved from the Canadian Federal Government to the Yukon Territory Government. Thus, however much more explicitly First Nations' roles in water governance are defined in the Yukon than elsewhere in Canada, water conflicts abound as the impacts of resource extraction and other environmental changes encroach on First Nations' relationships to water and over their ability to assert their sovereignty.

This case study examines the ways in which modern land claim agreements have shaped water governance arrangements in Yukon Territory. I analyse the nature of water conflicts in the Yukon and the ability of Yukon First Nations to assert their Chapter 14 water rights to bring about real change in decision-making. Yukon First Nations' concerns about mining are central to water conflicts in the Yukon and therefore fundamentally motivate this research; however, it is not the purpose of this paper to provide a comprehensive overview of the biophysical impacts of mining on water in the Yukon. Rather, this

⁶ These co-management boards, created through modern land claim agreements, form part of the water governance system and have been the subject of an extensive body of research (see, for example, Nadasdy, 2003a; Natcher et al., 2005; Stevenson, 2006; Clark and Joe-Strack, 2017). This study builds on this scholarly work to examine the converging and diverging interactions between diverse actors, institutions and processes, which are shaped by varied and often conflicting understandings of authority and jurisdiction within a multiscale and multilevel governance system.

⁷ The Canadian Constitution divides responsibility for water between the Federal Government and provincial/territorial governments. Provincial governments and territorial governments which have undergone devolution, like the Yukon Government, have responsibility for most aspects of freshwater management and jurisdiction over water generally (Boyd, 2003).

analysis of Yukon First Nations' roles in decision-making over water is grounded in an examination of the decision-making processes that are specific to both water and mining; this includes First Nations' influence over decisions regarding mine approval, operation and closure. Based on this analysis, I find that Yukon First Nations have experienced significant gains in capacity as the result of modern land claim agreements which outline specific areas of legal authority and the creation of co-management institutions to implement this authority; however, I also find that these agreements do not go far enough in acknowledging First Nations' authority, in that water governance in the territory remains highly contested. Research findings suggest that water governance could be improved through expanded acknowledgement of First Nations' jurisdiction, addressing their procedural rights within water governance arrangements such that these arrangements fully reflect their ontologies, epistemologies and forms of governance and address the barriers to implementation of existing agreements.

RESEARCH METHODS AND APPROACH

This study draws on community-based research, which is defined as research designed and conducted in collaboration with community members, with the goal of bringing about positive change (Minkler and Wallerstein, 2010). This is particularly important for Indigenous peoples given the negative histories of research involving university researchers (Smith, 1999). Community-based research is one step towards 'decolonizing' conventional research relationships by ensuring that research reflects Indigenous peoples and their research priorities (Castleden et al., 2012). First Nation partners in this research participated in such a way as to address their research needs concerning decision-making about water and the implementation of Chapter 14. This research was conducted between 2012 and 2017 with four Yukon First Nations (Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in and White River). During this period, interviews were conducted with 33 Yukon First Nations government employees and nine other water experts from the Yukon Government, the Yukon Water Board (YWB), and the Yukon Environmental and Socio-economic Assessment Board (YESAB) (Table 1). Working closely with First Nation governments and their staff, 33 Elders were recruited to participate in interviews.⁸ Following the First Nations' research protocols, Elders were given honoraria to acknowledge their expertise and to thank them for sharing their time and knowledge. Although using the names of Elders and other experts can be understood as a form of citation the names of Elders are not used in this work, following the Yukon First Nations' Traditional Knowledge Policies' requirements for confidentiality (Carcross/Tagish First Nation, 2009; Kluane First Nation, 2012; Tr'ondëk Hwëch'in, 2012).

Several participants were interviewed more than once to gain insight on how things had changed over time. Interviews were transcribed and coded both deductively (based on predetermined concepts derived from the literature) and inductively (based on emergent themes); they were coded thematically using Nvivo (Saldaña, 2013). Research methods included interviews with multiple actors (Elders, First Nation Governments, the Yukon Government and co-management boards) and analysis of policy documents; these were used to triangulate research findings in ways that looked for points of convergence, complementarity and divergence or dissonance (Nightingale, 2009). In 2017, research results were shared with, and validated by, members of participating First Nations through discussions at community presentations and discussions of plain-language reports; finally, all interview audio and transcriptions were returned to First Nation archives. This research was designed to more broadly address research partners' questions about the implementation of Chapter 14 and decision-making about water in the Yukon. Insights from this work are intended to support their participation in these decision-making processes.

⁸ Although the definition of what it means to be an Elder differs between communities (Stiegelbauer, 1996), for this study Elders were identified by their age – approximately 60 years or older – and the extent to which others considered them to be knowledgeable and respected community members.

Table 1. Overview of interviews conducted with Elders, representatives from four Yukon First Nation Governments, and other water experts.

First Nation	C/TFN	KFN	TH	WRFN
Agreements	Final (2005a) and Self-Government (2005b) Agreements	Final (2003a) and Self-Government (2003b) Agreements	Final (1998a) and Self-Government (1998b) Agreements	No treaty Reconciliation agreement in progress
Languages spoken*	Tlingit and Tagish	Southern Tutchone	Hän Hwëch'in 'People of the River'	Northern Tutchone and Upper Tanana
Citizens**	633	154	770	247
Elders	7	6	9	5
Total Elders	27	6	9	5
First Nation Government	5	13	8	7
Total First Nations	33			
Other experts				
Total				

Notes: * = all partner Yukon First Nations, except Carcross/Tagish First Nation (C/TFN), belong to the Athabaskan language group. Tagish Athabaskan peoples were the original inhabitants of the area; this region later became home to Inland Tlingit peoples who traveled to the area from Southeast Alaska for reasons of trade, about 200 to 300 years before contact.

** = statistics compiled by the Council of Yukon First Nations Self-Government Secretariat, based on 2011 National Health Service data; White River First Nation (WRFN) recognizes 247 members, while only 149 of these are registered under the *Indian Act* (Government of Canada, 2013).

Source: Author's research.

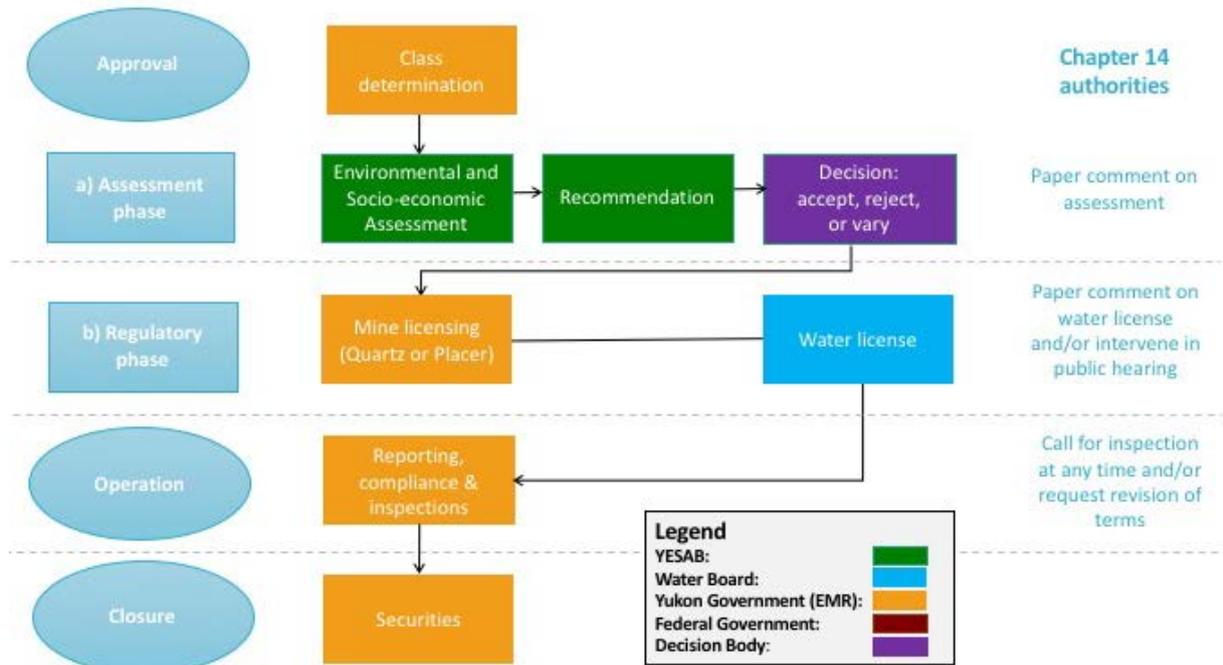
RESEARCH FINDINGS

A close examination of decision-making processes in the Yukon is critical for tracing the ways that Yukon First Nations have been able to assert real power as the result of changes to water governance arrangements brought about by land claim agreements. What is also made clear in the course of this examination, however, are the limitations of the Indigenous water rights that are acknowledged in these agreements, including in the authority to make decisions and in jurisdiction over the waters within their Traditional Territories. Chapter 14 explicitly structures shared decision-making for water in the Yukon; it includes a requirement, in all decision-making processes, that the designated legally binding authority over water rights must be acknowledged. It states specifically that a signatory Yukon First Nation "has the right to have water, which is on or flowing through or adjacent to its Settlement Land, remain substantially unaltered as to quantity, quality, and rate of flow, including seasonal rate of flow". Furthermore, First Nations also have the right to 'Traditional Use'⁹ of water both on and off Settlement Lands. The distinction between categories of land has meant, however, that First Nations have more authority over water on Settlement Lands than they do in their broader Traditional Territories.

⁹ Defined in Section 14.2.0 of the Umbrella Final Agreement as "the Use of Water, without substantially altering the quality, quantity or rate of flow, including seasonal rate of flow, by a Yukon Indian Person for trapping and non-commercial Harvesting, including transportation relating to such trapping and Harvesting or for traditional heritage, cultural and spiritual purposes". (Government of Canada et al., 1993: 131).

Chapter 14 is the basis for decision-making about water in the territory; it embodies multiple stages, including assessment (conducted by YESAB) and regulatory approval (by the YWB). Together these outline the terms for water use, which are subject to monitoring and inspection during operation (Figure 3); notably, Chapter 14 rights can be exercised in distinct ways in each phase of the process. Descriptions of these stages are found below, as are examples of occasions where Chapter 14 rights have been used to influence decision-making.

Figure 3. Diagram of the multistage process of decision-making about water and mining in the Yukon.



Source: Author’s research.

Assessment phase: Yukon Environmental and Socio-economic Assessment Board

The Yukon Environmental and Socio-economic Assessment Board (YESAB) is a co-management board with one-third First Nation representation; it was created through land claim agreements (Chapter 12) to assess the potential environmental and socio-economic effects of development projects in the Yukon. Consultation on development proposals takes place through a 'paper exercise', meaning that comments are collected in a publicly available online forum. After its review, YESAB releases an assessment of the project that includes its opinion on probable impacts, suggestions for mitigation measures, and a recommendation to the relevant government decision-making body as to whether and under what conditions the project should be allowed to proceed. YESAB is not a decision-making body, but plays an advisory role as it assesses projects and makes recommendations. Decision-making authority, or the ability to 'accept', 'reject' or 'vary' YESAB recommendations rests with the relevant government(s) or the Decision Body which may set conditions for the project. Decision Bodies can include First Nations, the Federal Government and/or the Yukon Government.

Yukon First Nations exercise their Chapter 14 rights in the *Yukon Environmental and Socio-economic Assessment Act* (YESAA) process by citing impacts on water quality, quantity or rate of flow on, or adjacent to, Settlement Lands, or impacts on Traditional Use. There are many examples where

development applications for mines were approved through YESAA despite First Nation opposition, even where Chapter 14 rights are asserted; however, there are also cases where a First Nation has influenced the YESAA process by asserting their Chapter 14 rights. The YESAA assessment of Haggart Creek (Class 4 Placer Mine; License number 2015-0150) is one example: the Na-Cho Nyak Dun First Nation (NNDNFN) commented on the application and acted as a Decision Body. In their decision document, the NNDNFN stated that they were rejecting the placer mining operation as it would have significant adverse effects on the First Nation's Arctic grayling fishery and on riparian vegetation; the rerouting of the stream would also negatively affect the boundaries and access of Category B Settlement Land (Na-Cho Nyak Dun First Nation, 2014). The application for development was thus denied at all levels.

Regulatory phase: Yukon Water Board

The Yukon Water Board is responsible for issuing licenses for water use and for the deposit of waste in the Yukon. Like YESAB, the YWB is also a co-management board, with one-third of the appointees First Nation. The YWB is unique in Canada, however, because it is not just an advisory body, but has decision-making authority. Its water licensing decisions are legally binding and only reversible in a court of law, as clarified in *Western Copper Corporation v. Yukon Water Board*, YKSC 16 (2011).

First Nations can influence the YWB decision-making process through the same interventions available to others, but they do not have the authority to make water licensing decisions within their territories or even on their Settlement Lands. Chapter 14 of the land claim agreement, however, outlines several additional roles and authorities specific to Yukon First Nations in water licensing; these occur in the initial decision-making process and in the compliance monitoring and inspection that is conducted following approval (Table 2). First Nations have the right to be consulted in water licensing processes and notified of applications within their Traditional Territories; they also have the right to intervene by submitting written comments and/or through participating in public hearings. While other interested parties also have the right to intervene in water licensing decisions (for example, the Yukon Government, the Federal Government and environmental NGOs), First Nations are notified of all water licenses occurring in their Traditional Territories. One water expert from Kluane First Nation (Expert 4, 2015) discussed their experience of intervening in the YWB licensing processes:

We were responding to an application for a mine and we quoted that Chapter 14, the quantity, quality and rate of flow section and they wrote to us right away and wanted to know all of this stuff. So that's kind of our clout, is the quality, quantity, rate of flow.

In other words, some First Nations felt their concerns were taken seriously by the YWB as the result of their Chapter 14 rights; for example, the intervention by the Little Salmon Carmacks First Nation (LSCFN) in Carmacks Copper's water licensing process was key to the rejection of the water license. The YWB also denied a water license for a quartz mining operation because it was not satisfied that the waste produced by this undertaking would be treated and disposed of in an appropriate manner (QZ08-084) (Yukon Water Board, 2010).

However, water licenses are rarely denied and thus remain one indicator of a lack of influence in the licensing process. As an Elder from the Carcross/Tagish First Nation C/TFN confirmed,

And it seems like we're always on the losing end of it. That's where the Water Board is just, it doesn't really make any decisions. It's just because I know two of our members sat on there, and they said it's not really a decision-making body. And I agree that maybe there's a place for it, but it seemed like the government, both Yukon, and Canada, is more interested in the mining industry. Mining spends millions of dollars and the Water Board clears their application. And I haven't yet heard them turn down a water license because of that. (Elder 3, C/TFN, 2015)

Table 2. Yukon First Nations' Chapter 14 roles in water licensing in Yukon, Canada.

Water right	Description	Chapter 14	Examples
Intervener status (resulting in denied license)	Affected Yukon First Nations have intervener status in water board public hearings	Chapter 14	<i>Little Salmon Carmacks v. Carmacks Copper</i>
Inspection of licenses	To determine if water use complies with the terms and conditions of the license	Chapter 14.11.1.3	Little Salmon Carmacks at Tatchun Creek
Revision of terms	To establish whether the conditions of a license need to be reviewed due to unforeseen impacts on the First Nation	Chapter 14.11.1.4	Little Salmon Carmacks at Tatchun Creek Bridge
Compensation	The Yukon First Nation is entitled to compensation for provable loss or damages	Chapter 14.12.0	No payout made to date

Source: Chapter 14 on Water Management, Umbrella Final Agreement (1993) and Author's research.

According to the documentation available as of 27 June 2017 on *Waterline* (the Yukon Water Board's online database), only 14 of 2772 licenses (0.5% of all licenses) have been denied by the YWB, including four for municipal undertakings, eight for placer mining and two for quartz mining (Waterline, 2017). Of these, 786 are now active and 1986 are closed licenses (based on reviews that were completed). Such a perspective does not account for the ways in which First Nation interventions influence the terms and conditions attached to water licenses; it is significant, however, that very few water licenses are denied.

Operation: Water license compliance and inspection

Following the approval of a water license, Yukon Government becomes responsible for monitoring compliance to the terms and conditions of the license. First Nation concern about inadequate monitoring and enforcement of water licenses is particularly salient. A staff member at Tr'ondëk Hwëch'in First Nation (THFN) noted the insufficient monitoring of the extensive number of placer mines in their Traditional Territory:

My concern is there's not enough monitoring of it. Like EMR [Department of Energy, Mines, and Resources] downstairs, they go out and investigate. But there is only five of them. And they can't do all the mines. And sometimes when we're flying over and we see something discharging into the streams, killing, you know, fish bearing streams, or putting their chemical in there that's not settled, it's kind of disheartening, because there's no one there to stop it, and we have no real control over telling them, because it's not on someone's [Settlement] land (Expert 11, TH, 2015).

Several factors contribute to concerns about enforcement and compliance. First Nations have noted that the Yukon Government's approach to enforcement is too soft and violators are rarely held accountable. The 'three E policy' of the Yukon Government Department of Energy, Mines, and Resources (EMR) begins with *educating* and *encouraging* violators to correct their behaviour, before moving on to *enforcement* methods that include levying fines and laying charges. While charges are occasionally laid, they are rare; Tamarack Inc.; for example, was recently charged in the Yukon Territorial court and ordered to pay a total of CN\$31,000 in fines for violations (Croft, 2017). Adding to this sense of inadequate monitoring, First Nations shared the sentiment that there are too few inspectors and that existing inspectors do not always

understand the terms and conditions of YESAA decisions and water licenses. Large-scale quartz mines, for example, have extensive and complex terms and conditions that are not always easily understood.

Yukon First Nations are the only parties that have the additional right (under Chapter 14.11.1.3) to ask the YWB to review or inspect active licenses in order to determine whether they have complied with the conditions of their license. Similarly, Yukon First Nations have the right to recall a license in order to establish whether the conditions of a license ('revision of terms') need to be reviewed because of unforeseen impacts on the First Nation (Chapter 14.11.1.4). The right to inspect and revise water license terms and conditions is important because it provides First Nations the opportunity to have input after the licenses have been approved. Little Salmon Carmacks First Nation (LSCFN) exercised the right to both inspect and revise a water license held by the Yukon Department of Highways and Public Works (DHPW) at the Tatchun Creek Bridge (MS14-003) (Yukon Water Board, 2014). The LSCFN raised concerns about DHPW's use of mine-derived waste rock (taken from Minto Mine, a copper mine) to reinforce the creek bank around the bridge even though Tatchun Creek is an important spawning stream for Chinook salmon (Chuck, 2014). Recent studies have found that even trace (sublethal) amounts of copper in salmonid habitats can reduce the ability of fish to navigate and detect predators (McIntyre et al., 2012). The use of waste rock was examined by experts obtained by the DHPW as part of the application for a water license submitted in October 2012, and they argued that they were not in violation of their license because they were using 'zero grade' waste rock, which is non-toxic and does not leach metal. In this case, the LSCFN successfully used its powers to inspect and revise the water license; as a result the DHPW was required to conduct additional water quality monitoring at the site to ensure that there were no negative effects on the salmon habitat.

A Yukon First Nation has the right to apply for compensation for losses caused by a water license (Chapter 14.8.6), including the impacts of unlawful use on the 'Traditional Use' of water in their territory, as well as on, or adjacent to, Settlement Land (Chapter 14.12.6.1; Chapter 14.12.6.2). A Yukon First Nation, for example, can apply for compensation if a water license can be shown to have damaged a fish habitat that is critical to food security or to have inundated Settlement Lands. Any affected party, including First Nations, can also apply for compensation under Section 5 of the *Yukon Waters Act* (2003). No cases of compensation under Chapter 14 or the *Waters Act* have taken place to date in the territory; this is likely due, at least in part, to the fact that many First Nations sign Impact Benefit Agreements with the proponents which include provisions for compensation.

'Unsigned First Nations': Authorities of Yukon First Nations with unceded territories

There remain important questions about how unsigned Yukon First Nations fit into water governance in the Yukon. Yukon First Nations without final agreements (Ross River Dena Council, Liard First Nation and White River First Nation) can and do intervene in YESAB processes and water licensing decisions. Transboundary First Nations (in NWT or British Columbia) are also eligible to intervene in YWB processes; however, without land claims these First Nations sit in a regulatory grey area as Chapter 14 rights pertain primarily to Settlement Lands which these First Nations do not have. The Type B water license to Selwyn Chihong Mining Ltd. (QZ10-042) provides some insight into how the YWB views these First Nations. The Selwyn project is a proposed zinc-lead mine located within the unceded Traditional Territories of Ross River Dena Council (RRDC) and Liard First Nation; there are also interim protected lands located immediately south of the mining claim. In their 'Reasons for Decision', the YWB concluded that Chapter 14 applies to Settlement Lands and not to interim protected lands; on this basis, the YWB concluded that the undertaking would not substantially alter the quantity, quality or rate of flow of water flowing on, through, or adjacent to Settlement Land, including seasonal rate of flow (Yukon Water Board, 2011). The implications of the water rights and authorities of unsigned Yukon First Nations for water co-governance in the Yukon are discussed further below.

YUKON FIRST NATION CRITIQUES OF THE WATER CO-GOVERNANCE SYSTEM

In what follows, I examine the criticisms of my Yukon First Nations research partners of current water governance arrangements in Yukon; these criticisms exist despite the explicit acknowledgement of water rights and authorities in modern land claim agreements. Indigenous and non-Indigenous peoples in the Yukon worked hard to negotiate and implement these agreements in ways that support Yukon First Nation self-determination. While the dramatic and, in many cases, beneficial changes resulting from land claim and self-government agreements in Yukon cannot be understated, these criticisms reflect debates that are occurring among and within Yukon First Nations; they are also crucial for examining both the actual power that Indigenous peoples have exercised as the result of the water rights described in Chapter 14 on Water Management and the ways that the current system falls short of Indigenous-state water co-governance. The criticisms are organised around three main themes. First, the current water governance system is limited in its acknowledgement of Yukon First Nation water rights and responsibilities and its authority. Second, there are barriers to implementing the rights that are acknowledged in land claim agreements, including the resistance of settler colonial governments. Third, the water governance arrangements in the Yukon do not reflect Yukon First Nations epistemologies, ontologies and forms of governance.

Recognition of Yukon First Nations water rights and responsibilities and of their authority

Chapter 14 guarantees Yukon First Nations' right to have a say in water decision-making in the Yukon, but it falls short of co-governance in important ways. Most prominently, the water governance system fails to acknowledge Yukon First Nation jurisdiction over water. When asked what powers Yukon First Nations have to protect waters in the Yukon Territory, one Elder responded:

Very little, actually. (...) I know we tried to negotiate but the government wouldn't talk about water. All they talked about is quantity and quality of the water flow. So we can't restrict any of that. Because that's a federal [Sic] jurisdiction, water (Elder 3, C/TFN, 2015).

As the Elder notes, Yukon First Nations were not able to negotiate agreements that reflect the inherent jurisdictional authorities related to water that flow from the Indigenous legal order; instead, their Chapter 14 rights are subject to the 'Laws of General Application'. This includes the Yukon *Waters Act* (2003), which asserts that, "Water belongs to Government" (Section 3); in other words, water governance in the Yukon is predicated on the same settler colonial assumption of 'Crown' jurisdiction as elsewhere in Canada, that is to say the idea, set out in Canada's *Constitution Act, 1982*, that provinces, and in some cases territories or the Federal Government, 'own' the waters within their borders and have the right to make decisions about water licensing for nearly all water access and use (see Footnote 7). These limits in jurisdiction were among the reasons that First Nations like White River First Nation chose not to complete this process and have not signed a land claim agreement to date. As Elder 14 (2015) stated,

It's really important up here in our country to preserve that water and that's why, you know, one of the reasons [we didn't sign that land claim thing. We said,] nothing here gives us the power to say enough, huh? You know, because we're here to protect our land.

Here the Elder from WRFN notes that they did not ratify their land claim agreement mainly because they felt it did not go far enough in acknowledging Indigenous jurisdiction over land and water.

In analysing water co-management boards as tools for implementing Chapter 14, further nuance is added by understanding the barriers to achieving water co-governance in the context of colonial jurisdiction over water in the Yukon. The Council of Yukon First Nations (CYFN) nominates one-third of the board members to the YWB and to other co-management boards in Yukon, but these individuals do not directly represent their First Nation, or First Nation interests in general. While no water use can infringe on First Nation water rights (Chapter 14), individual Yukon First Nations delegate their decision-

making authority to these arms-length co-management boards; in this sense, the primary means by which First Nations can influence decision-making is through consultation or 'intervention' in YESAB and YWB processes. These boards also have varying levels of decision-making authority. YESAB is an 'advisory' board which makes recommendations but lacks any decision-making authority. The YWB, is unique in that, as a quasi-judicial body, it can make binding decisions, however individual First Nations are not party to YWB decisions. Co-governance, by definition, requires the acknowledgement of shared jurisdiction.

The recognition of the water rights of unsigned Yukon First Nations is also limited; indeed, without Chapter 14, unsigned First Nations including WRFN, RRD and Liard First Nation (LFN), occupy a regulatory grey area in the Yukon. In the case of Selwyn Chihong Mining Ltd. (QZ10-042), for example, the YWB argued that interim protected lands are not Settlement Lands. Such an approach fails to acknowledge that First Nations without land claim agreements have not ceded their inherent water rights within their Traditional Territories. Indeed, present approaches to unsigned Yukon First Nations' water rights are contested and will potentially be the subject of future litigation in light of a recent Supreme Court of Canada decision, *Tsilhqot'in Nation v. British Columbia 2014* (SCC 44) (2014), which reaffirmed Aboriginal land title for Tsilhqot'in First Nation. While not discussed explicitly by the Supreme Court, the decision is likely to have implications for Aboriginal title to water in terms of making claims to watercourses and sources and submerged lands (Hlevca et al., 2014).

While the present failure to acknowledge the water rights and authority of unsigned Yukon First Nations exposes the waters within their territories to harm, it can also be said that these First Nations have perhaps the most leverage to disrupt or change the system created through modern land claims by asserting their unceded rights and titles. For instance, building on the Tsilhqot'in Nation decision, a legal argument can be made that with unceded title comes corresponding water rights throughout their vast territories, which are more, rather than less, expansive than those acknowledged in Chapter 14. Echoing Low and Shaw's (2011) findings from their research in environmental governance with First Nations in the Great Bear Rainforest in British Columbia, Yukon First Nations without land claims may have the greatest ability to shape things for the better because they have not ceded title to land or their inherent rights to water. In the Yukon, this could mean negotiating changes to water governance arrangements in a way that improves the co-governance of water, for instance through the development of joint Indigenous-Crown decision-making or legislative processes.

Implementation of agreements

First Nations have experienced significant gains in capacity as a result of their agreements and, in some cases, the agreements have provided people with the language and legal authority to change things; however, these authorities are meaningless if they are not implemented in practice. Barriers to implementation are twofold. First, First Nations face challenges in capacity and funding which limit their ability to implement agreements. Roburn and Tr'ondëk Hwëch'in (2012) critique self-government agreements that expand First Nation powers but are not accompanied by the increase in funding that is needed to build their capacity to implement these powers. Core funding for self-governing First Nations is scarce and a large percentage of government revenues are obtained through specific projects or programmes, which makes First Nations substantially less financially stable than other governments (Nadasdy, 2017: 31-37). Financial stability has implications for First Nation capacity to engage in planning and governance processes (e.g. capacity building through the funding of education for First Nations citizens), making the decolonisation of financial relationships a priority. These capacity limitations can undermine First Nations' ability to intervene fully in decision-making processes about water that require substantial resources such as staff hours and the funds to hire experts. This forces First Nations to make choices about where to best invest their limited time and resources and to gauge when it is ideal to fully engage in all stages of decision-making about water. First Nations are still at a very early stage in the implementation of these agreements and a lot more will be possible down the road; however, there is no doubt that limited capacity and resources slow implementation.

Second, Yukon First Nations have criticised settler governments for failing to respect land claim agreements more broadly. The Peel Watershed dispute raises important questions for the co-governance of water in the Yukon as it relates to the duty of settler governments to respect land claims and to work towards implementing these agreements in the spirit and intent with which they were negotiated. The Peel Watershed Planning Commission developed a plan in 2011 that involved a seven-year co-management process that is outlined in Chapter 11 of the land claim agreement. The recommended plan did not meet the Yukon Government's expectations because of the degree of protection within the watershed (80% protected and 20% which remained open to oil, gas and mineral development). The Yukon Government's response was to unilaterally develop a new plan, which included new land use designations and a significant shift in the balance of protected areas (71% open for mineral exploration and 29% protected). This decision thus dramatically failed to "effectively engage and reconcile different perspectives and values through the Yukon government-led decision-making process for the Peel Watershed land use plan" (Staples et al., 2013: 4). The Yukon Government's actions then became the subject of legal action by First Nations (First Nation of Na-Cho Nyak Dun, Tr'ondëk Hwëch'in and Gwich'in Tribal Council) and environmental organisations (the Yukon Chapter of the Canadian Parks and Wilderness Society and the Yukon Conservation Society); this resulted in a series of court cases between 2014 and 2017.¹⁰

The objective of these court cases was to establish how the process for regional land use planning that is outlined in Chapter 11 of the UFA should be interpreted; this has specific implications for water governance, especially in terms of the importance of land use planning for managing cumulative effects. Perhaps more significant, however, are the broad implications related to the interpretation of modern land claim agreements. The Peel case makes clear that modern land claims, which create a framework for co-governance between First Nations and settler governments, should not be interpreted in a technical or legalistic manner; instead, the decision affirms that reconciliation is fundamental to the implementation of modern land claims, including provisions for co-management within these agreements. These processes are legally binding, and the 'Crown' must act honourably in their implementation (Langlois and Truesdale, 2015a, 2015b); in other words, settler governments have a responsibility to interpret the terms of land claim agreements generously and with the intent to achieve reconciliation.

Reflecting Yukon First Nations epistemologies, ontologies and forms of governance

Yukon First Nations also criticised current water governance arrangements for failing to adequately reflect First Nation water ontologies, epistemologies and governance systems. As one Elder from C/TFN noted,

Spiritually we are connected to everything. We are part of the land. We're part of the water. It's part of our lifestyle. We live it. We live it every day. And we thank the Creator for all those things that is natural for us to utilize. And we thank them all time and that's the thing. We don't look at just one little area and think it's not going to hurt anything. We look at the big picture, you know. For us, traditional lifestyle, it's looking at the big picture all the time. And you can't do something over here and think it's not going to affect our lifestyle because traditionally it does. (...) Everything relies on everything. We just can't look at things sectorally. (Elder 2, C/TFN, 2012)

¹⁰ In 2014 the Yukon Supreme Court ruled in their favour, stating that the Yukon Government's actions did not reflect the reconciliation that is fundamental to the "spirit and intent" of modern land claim agreements (*The First Nation of Na-Cho Nyak Dun v. Yukon*, 2014). The Yukon Government appealed this decision, and in 2015 the Yukon Court of Appeal partially reversed the Yukon Supreme Court's decision (*The First Nation of Na-Cho Nyak Dun v. Yukon*, 2015). First Nations appealed this second decision and the Supreme Court ruled in favour of the First Nations, sending the parties back to the point in the process where "Yukon can approve, reject, or modify the Final Recommended Plan" (*The First Nation of Na-Cho Nyak Dun v. Yukon*, 2017 SCC 58).

Another Elder from C/TFN, in a 2012 interview, describes this breakdown in governance as a failure to "respect water". He went on to say, "The spirit of water needs to be respected. And, I don't see that happening so much. I mean water should be celebrated daily. It's very, very important. More important than all the gold in the world, water is". Elsewhere, Wilson and Inkster (2018) detail the meaning of respect for water as a living entity, and the implications of this approach for decision-making about water in the Yukon. I build on this work to discuss the implications of the ontological politics of water for water co-governance; for instance, disrespect for water is often noted in relation to specific decision outcomes, such as water licensing decisions that prioritise industrial water use over First Nation relationships to water and over the current or projected impacts of the water licenses.

DISCUSSION

Yukon First Nations have experienced significant gains in governance capacity as the result of land claim agreements and self-government, which have provided specific language and legal authority concerning water; however, as I have shown in this paper, current water governance arrangements fall short of co-governance because of jurisdictional asymmetries. I find that water co-governance would be better achieved by adapting governance arrangements and processes in such a way as to privilege Indigenous legal orders; I feel that this shift is warranted both because of the prior existence of the Indigenous peoples and because it is necessary if current power imbalances that privilege and normalise settler worldviews and forms of governance are to be counteracted (Goetze, 2005; Tipa and Welch, 2006; Kotaska, 2013; Simms et al., 2016). By applying a multidimensional justice framework, I highlight the implications of Indigenous legal orders for addressing Yukon First Nations' concerns about current water governance arrangements in the Yukon. Table 3 summarises these insights by presenting key questions and illustrative examples for each of the three interrelated dimensions of (in)justice in water co-governance (distributional, procedural and recognitional).

Table 3. Dimensions of water justice and key questions for Indigenous-state water co-governance.

Dimension of justice	Definition	Key question	Indigenous legal order	Example
Distributional justice	Justice is defined in terms of the distribution of entitlements (benefits and harms)	Who or what has jurisdiction or authority to make decisions about water?	The recognition of water rights, and responsibilities that flow from Indigenous legal orders, as pre-existing sources of authority	Acknowledgement of joint, and in some cases Indigenous, jurisdiction over the waters within their territories
Procedural justice	Justice is defined in terms of who is involved, who has influence, and what process is used to make decisions	Whose legal traditions determine how decisions about water are made?	The development of decision-making processes that reflect Indigenous legal orders (e.g. clan-based governance structures)	Respect for clan-based governance structures that follow Indigenous protocols for decision-making about water
Recognitional justice	Justice is defined in terms of who or what is valued or respected, at both the individual and collective level	How is water valued or not valued in decision-making processes?	The recognition of water as a living entity and as an actor rather than a material resource	Indigenous peoples have the authority to act as guardians and to make decisions on behalf of water

Source: Adapted from Schlosberg (2004).

Distributional justice

Yukon First Nation critiques highlight distributional (in)justice in water governance in the Yukon that stems from the limited rights and authority acknowledged within modern land claim agreements. The colonial status quo of 'Crown' or state jurisdiction over water creates a political asymmetry that results in decisions that produce an unequal distribution of the benefits and harms. Crown jurisdiction flows from the colonial legal system – or the jurisdictional arrangements outlined in the Canadian Constitution – and ignores Indigenous legal and governance systems as a source of authority. Thus, achieving distributional justice in Indigenous-state co-governance requires rethinking jurisdictional arrangements associated with water in order to move towards acknowledging joint and, in some cases Indigenous, jurisdiction. This case study further demonstrates that distributional justice is not only related to the legal acknowledgement of rights and authority but also to the ability to exercise these rights. Yukon First Nations have faced challenges in terms of both the failure of settler colonial governments to respect modern land claim agreements and First Nations' capacity to implement the agreements given their funding and human capacity constraints.

Fundamental to co-governance is the question of who has the final authority or jurisdiction: The Indigenous nation, settler government, or both, through a consensus-based decision-making (Kotaska, 2013: 102). Examples of co-jurisdiction illustrate how this process could be improved. The *Kunst'aa guu-Kust'aayah* or Haida Protocol, for example, is a comprehensive reconciliation agreement; in addition to shared decision-making, the Haida Protocol includes joint decision-making for specific decisions. The Haida Gwaii Management Council (importantly, a body delegated by Indigenous and Crown authority to make joint decisions) engages consensus decision-making for strategic resource management decisions, including those for land use, forestry, and conservation. The Haida are particularly advantaged in their ability to negotiate joint decision-making in that they possess a uniquely strong Aboriginal title claim with no issues of territorial overlap with other First Nations (Findlay, 2010). Territorial overlap among Yukon First Nations presents a significant challenge to implementing joint decision-making for water licensing in the Yukon as not all First Nations have the same perspective on what activities should occur in their shared territories. In some areas, three or more Yukon First Nations have overlapping territory, making the achievement of consensus much more difficult, although not impossible. While distributional justice, and particularly jurisdictional issues, are the focus of much of the co-governance issues, in what follows I highlight the importance of the interrelated concepts of procedural and recognitional justices.

Procedural justice

Yukon First Nation criticisms of current water governance arrangements in the Yukon for failing to reflect their ontologies, epistemologies and legal orders can be interpreted as an issue of procedural (in)justice. While modern land claim agreements expand First Nation involvement and influence in decision-making about water, fair and equitable process in water governance is limited because current decision-making occurs via settler colonial institutions and decision-making processes. These issues of procedural (in)justice cannot be addressed by simply incorporating Indigenous knowledge into colonial water governance processes (Cf. von der Porten et al., 2016; Berry et al., 2018). Instead, understanding procedural justice requires asking how decision-making processes would be different if they better reflected Indigenous legal orders and institutions.

Other scholars have raised concerns about the procedural justice of governance arrangements that flow from land claim agreements. Indeed, in order to benefit from the powers of land claim agreements, northern Indigenous peoples have had to radically alter their way of life (Nadasdy, 2003b). As noted by Natcher and Davis (2007: 272), while the language of devolution and local control permeates Indigenous-state relations, "the new institutions that have been created via the land claims process have little resemblance to indigenous forms of governance and management". Critics also argue that the new governance arrangements developed through land claims not only obscure and reinforce existing power

relations, but can also serve to extend state power and access to water, land and other resources while thwarting meaningful change by tying First Nation communities up in bureaucratic processes (Nadasdy, 2003b, 2017). This can result in First Nations taking on increasingly 'state-like' forms of water governance which fail to reflect their relationships to water as a living entity (Wilson, 2019; see also Nadasdy, 2017).

We can look to scholarship on Indigenous law and governance for insight into how to address these procedural injustices. Indigenous legal scholars are developing methodological approaches for the articulation and implementation of Indigenous law in a contemporary context (e.g. Borrows, 2002; Napoleon and Friedland, 2014; Craft, 2017). Given the diversity of Indigenous peoples' governance traditions and relationships to water, addressing procedural (in)justice in water governance will be context dependent. This may, for instance, lead to a consideration of how clan-based governance structures of Yukon First Nations, such as the Carcross/Tagish First Nation, might be incorporated into co-governance arrangements. It should be noted that any shift in water governance systems to better address procedural justice would need to be accompanied by a shift in distributional justice to acknowledge shared or Indigenous jurisdiction over water.

Recognitional justice

Yukon First Nations also highlight the importance of recognitional justice in co-governance. Co-governance is inherently about seeking the recognition of Indigenous water rights and authority that flow from Indigenous legal orders. Indigenous resurgence scholar Glen Coulthard (2014), from the Weledeh Yellowknives Dene First Nation, argues that seeking recognition perpetuates dependent and reactionary relationships between Indigenous peoples and the state. He says that Indigenous peoples should instead turn away from the state to recognise their authority (self-recognition) through the resurgence of Indigenous traditions and practices. Heeding these concerns, I argue that recognitional justice should acknowledge that Indigenous peoples use multiple state and non-state strategies to assert their self-determination within water governance processes (Wilson, 2014a). Recognitional justice, therefore, involves both colonial-state recognition of Indigenous legal orders and continued practices that self-recognise and revitalise Indigenous traditions regardless of state recognition. We might, for instance, ask how water governance arrangements would be different if the agency of water as a more-than-human person – as conceptualised in Indigenous legal orders – were to be considered? Indeed, scholarship on the 'rights of nature' asks how non-human persons should be considered in decision-making processes (Boyd, 2017). Acknowledging the agency of water within decision-making is necessarily linked to distributional justice in that it raises questions about colonial concepts such as jurisdiction and ownership over water, which are embedded within current governance arrangements. Similarly, with procedural justice, we might ask how water as a more-than-human actor might be included in decision-making processes.

Future opportunities

Neither settler governments nor Yukon First Nations need to accept the deficiencies of the current governance arrangements; there are many opportunities for improvement that would address the concerns associated with distributional, procedural and recognitional injustices within the current system. Some of the needed changes can be brought about by implementing agreements to improve overall decision-making about water and to better assert First Nation water rights within those processes; however, Yukon First Nation critiques of present water governance arrangements are valuable for considering policy and legal reform in Yukon. Distributional, procedural, and recognitional injustices in the governance system could be addressed through modernising the 2003 Yukon *Waters Act* and Water Regulation, which are due to be revised in light of the many major changes in environmental management and governance in the territory. In the process, Indigenous legal traditions and authority could be acknowledged by using a joint Indigenous-state legislative process. A joint legislative model was applied in the three-year process of developing the *Species at Risk (NWT) Act* (2009) in Northwest

Territories, Canada where territorial and Indigenous governments co-drafted legislation. Legislation was drafted by a working group made up of high-ranking officials from the Government of Northwest Territories (GNWT) and from all Indigenous governments, along with the legal counsels of all involved parties. This legislation was subject to the regular committee and public review process, however very few changes were made to the final draft. The GNWT intends to apply this process to co-develop several more laws with Indigenous peoples (Ishkonigan Inc. et al., 2015; Phare et al., 2017).

One approach to joint legislation in Yukon could involve the 'braiding' of Indigenous and settler colonial legal traditions (Fitzgerald et al., 2017; Craft et al., 2018). Fitzgerald et al. (2017) suggest this braiding as a way to implement the United Nations Declaration on the Rights of Indigenous Peoples (2007) in Canada:

The framework for reconciliation would need to be populated with Indigenous peoples' own laws and Indigenous languages. Indigenous beliefs and perspectives must be treated with legitimacy and respect. Thus, UNDRIP and international law form one segment of the braid, with domestic constitutional law and Indigenous laws providing the other two segments to create a strong braid of legal reconciliation. (Fitzgerald et al., 2017)

A similar approach could be taken to ensure that Indigenous legal orders and governance systems are equally considered in the legislative modernisation process. Furthermore, joint legislation could circumvent the conflict between Indigenous and settler governments that is seen in other contexts; for example, recent research documents the conflict created by the inadequate consultation and engagement with First Nations in the modernisation of the water legislation in British Columbia (Simms et al., 2016; Joe et al., 2017; Jollymore et al., 2018).

Although unsigned First Nations are cast as sitting in a regulatory grey area in the Yukon, they have leverage within the system that is not available to signed First Nations. While in many ways they are treated as though they have fewer rights than signed First Nations, in fact, through the implied water rights in the Tsilhqot'in Nation decision, the WRFN, RRD and LFN arguably have much more expansive water rights because they have not ceded Aboriginal title nor water rights throughout their vast territories. At the same time, the waters within their territories also face additional risk because these unceded rights have not yet been recognised. Echoing Low and Shaw's (2011) findings from their research with First Nations in environmental governance in the Great Bear Rainforest in British Columbia, Yukon First Nations without land claims may have the greatest ability to shape things for the better because they have not ceded title to land or their inherent rights to water. In the Yukon, this could mean negotiating changes to water governance arrangements in a way that improves the co-governance of water; for example, in negotiating reconciliation agreements there is the possibility of negotiating joint decision-making over water or over specific water bodies within their territories.

CONCLUSION

This study advances the literature on Indigenous-state water co-governance in three ways. First, I draw on environmental justice scholarship to develop a multidimensional framework for understanding justice in Indigenous-state water co-governance; by linking environmental justice to literature on Indigenous water governance and politics, this work highlights how environmental justice frameworks need to be adapted to consider the legal and political dimensions of justice that are unique to Indigenous peoples. Second, I apply this framework to a case study of Indigenous-state water co-governance in Yukon, Canada, where modern land claim agreements contain some of the most explicit acknowledgements of Indigenous water rights in Canada. The evidence yielded by this study illustrates that justice in water governance is not merely about the acknowledgement of water rights and authority but also highlights the ways that water justice cannot be achieved without recognition and support for the continuation of Indigenous epistemologies, ontologies, laws and governance systems (Goetze, 2005; Tipa and Welch,

2006; Kotaska, 2013; Simms et al., 2016). I highlight, for instance, how these arrangements can be seen as a violation of Indigenous peoples' procedural rights. Put another way, requiring Indigenous peoples to constantly engage in a governance system shaped by settler understandings of water means that anything we might call 'meaningful engagement' is significantly compromised. I also note how distributional justice is not just a function of the recognition of rights but is also the ability to implement those rights. Co-governance in the Yukon is challenged by the limited capacities and resources of Indigenous and settler governments to implement the aforementioned arrangements and agreements. While too often the literature points to the capacity limitations of First Nations – who are indeed underfunded and under-resourced and so cannot respond to the many governance challenges they face – in order for co-governance arrangements to function, both Indigenous and settler governments need to engage in capacity building. Finally, I look forward to how insights from this case study can be used to improve Indigenous-state co-governance in the Yukon and beyond. In the Yukon context, my Yukon First Nation research partners are presently applying these insights in the development of strategies for implementing Chapter 14.

ACKNOWLEDGEMENTS

I am deeply indebted to my research partners, including Carcross/Tagish First Nation, Kluane First Nation, Tr'ondëk Hwëch'in and White River First Nation. This research would not have been possible without the generosity of the many Elders and other individuals who selflessly shared their time and knowledge. I would like to extend my heartfelt gratitude to Geraldine Pope, Kate Van Ballegooyen, Deborah Baerg, Darren Taylor, Jody Beaumont, Glen Stephen Sr.; Neil McGrath, and Janet Vander Meer for their logistical support. This paper was adapted from a chapter of my dissertation. I am grateful to my doctoral advisor, Terre Satterfield, and my committee members Leila M. Harris, Glen Coulthard, Jordi Honey-Rosés, for their guidance throughout the research process. I would also like to thank members of the Satterfield and EDGES labs, Heather Jirousek, and Skeeter Wright for their comments on previous versions of this manuscript. This research was funded by the Vanier Canadian Graduate Scholarship, Killam Doctoral Fellowship, UBC Four Year Doctoral Fellowship, the Northern Scientific Training Program, and the Social Sciences and Humanities Research Council Insight Grant on Environmental Meanings and Ecosystem Services (SSHRC Grant No. 435- 21032017). Finally, this research was approved by the UBC Behavioural Ethics Review Board (BREB Cert # H13-02577). Thank you. *Máhsí' cho* (Hän). *Máhsin cho* (Northern Tutchone). *Sháw níthän* (Southern Tutchone). *Tsin'jj choh* (Upper Tanana). *Gùnèlchish* (Tagish). *Gunalchísh* (Tlingit).

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