Check for updates

Article

E Nature and Space

Environment and Planning E: Nature and Space
2018, Vol. 1(4) 516–538
© The Author(s) 2018
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2514848618789378
journals.sagepub.com/home/ene
SAGE

Respecting water: Indigenous water governance, ontologies, and the politics of kinship on the ground

Nicole J Wilson
University of British Columbia, Canada

Jody Inkster
University of Alberta/Yukon College, Canada

Abstract

Indigenous peoples often view water as a living entity or a relative, to which they have a sacred responsibility. Such a perspective frequently conflicts with settler societies' view of water as a "resource" that can be owned, managed, and exploited. Although rarely articulated explicitly, water conflicts are rooted in ontological differences between Indigenous and settler views of water. Furthermore, the unequal water governance landscape created by settler colonialism has perpetuated the suppression of Indigenous ways of conceptualizing water. This paper thus examines the "political ontology" of water by drawing on insights from the fields of critical Indigenous studies, post-humanism, and water governance. Additionally, we engage a case study of four Yukon First Nations (Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in, and White River First Nations) in the Canadian North to examine their water ontologies through the lens of a politics of kinship including ideas about "respecting water." We also examine the assumptions of settler-colonial water governance in the territory, shaped by modern land claims and self-government agreements. We close by discussing the implications of Indigenous water ontologies for alternate modes of governing water.

Keywords

Indigenous law, indigenous water governance, ontological politics, Yukon First Nations, Yukon, Canada

Introduction

> We respect not only the water we utilize, we respect the land around it because it feeds into the water. Traditionally our belief is that water is sacred to us and that we should treat it as such. We should always work hard at keeping it clean. And pray to our Creator to give us strength all

Corresponding author:
Nicole J Wilson, University of British Columbia, Vancouver, British Columbia, Canada.
Email: n.wilson@alumni.ubc.ca

> the time to keep it clean. And over the years, we see industry move into our traditional territory. And everything that the industry does, which is manage water and different things. We've seen them take over. And sometimes we step aside too much with industry, so we see changing water forces. (Elder 2; CTFN, 2015)

Rarely, have we witnessed a conversation about water or water governance in Yukon, Canada, where First Nations there have not emphasized the importance of respect for water.[1] It is clear from the opening passage that respecting water is very important to the Tlingit Elder from Carcross/Tagish First Nation. Many Elders across all Yukon First Nation research partners (Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in, and White River First Nations) engaged in this study made similar comments about respecting water. It is tempting to interpret these statements in relation to settler/English language notions of respect, or the "deferential regard or esteem felt or shown towards a person, thing, or quality" (OED Online, 2015). Yet, these terms are far from interchangeable, and inaccurate assumptions about Indigenous concepts of respect often obscure fundamental ontological differences between settlers and Indigenous peoples (Nadasdy, 2003a; Natcher et al., 2005). "Respect" instead reflects Indigenous ontologies of water characterized by reciprocal relations of responsibility between people and water as a "more-than-human person." It conveys the profound differences between Yukon First Nations and settler views of water as expressed through all aspects of Canadian law and policy, and the implications this has for water conflict and governance.

Indigenous peoples are increasingly at the forefront of water conflicts as the waters within their territories are under pressure from stressors including the intensification of resource extraction and the effects of global environmental change (Babidge, 2016; Boelens, 2015; Harris et al., 2017; Perreault, 2013; Wilson et al., 2015). While these stressors have undeniable biophysical effects (Bates et al., 2008; Salvarredy-Aranguren et al., 2008), we suggest here that water conflicts are rooted in ontological differences. While Indigenous nations in the area see water as a living being, ideas about water as a "resource" that can be owned and exploited prevail in all meanings with which they must contend. This is because Indigenous ontologies and epistemologies[2] were violently suppressed and marginalized through settler colonialism (Wolfe, 2006),[3] and within contemporary practices of water governance (Anderson et al., 2013; McGregor 2014; Sam and Armstrong 2013).[4] Acknowledging this pattern and the challenges it raises, Yates et al. (2017: 2) ask what it would mean to "take seriously the possibility and politics of a multiplicity of water-related worlds, highlighting multiple water realities and ways of being-with-water, not just different perceptions of our knowledge systems tied to water's (singular) material existence." We articulate this possibility here as a need to study the "political ontology" of water governance and "the conflicts that ensue as different worlds or ontologies strive to sustain their own existence as they interact and mingle with each other" (Blaser, 2009a: 877).

This study, conducted in collaboration with four Yukon First Nations, engages with the politics of water and water governance in Yukon, Canada, as conveyed through First Nation assertions of the need to "respect water" as a "more-than-human person," as a being and relation in its own right that Elders frequently referred to as a relative, teacher, medicine, and healer. First, we review empirical data on how Elders from Yukon First Nations define what it means to respect water, as an example of a water ontology, and its relationship to Indigenous modes of governance or what we call a politics of kinship. Second, we analyze water governance arrangements in Yukon to understand how settler views of water are expressed and constrain First Nations' ability to protect the waters within their territories according to their view of water as a living entity, with agency or spirit. Finally, we examine

the strategies employed by First Nations to overcome these limitations and discuss strategies for approaches to water governance that are more in line with Indigenous notions of respect and that achieve the goal of ontological pluralism required to decolonize water.[5]

Theoretical considerations: What *is* water?

''Respecting water'' raises important ontological challenges. To engage with this, we take as our point of departure the broader question – what is water? – a question that has been raised by scholars in a variety of fields (e.g. Boelens, 2014; Chen et al., 2013; Linton, 2010; Strang, 2004; Wagner, 2013). As Linton (2010) notes, the answer to this seemingly simple question is taken for granted, due to the pervasiveness of the concept of Modern Water or settler-colonial understandings of water as a material resource. Water or H_2O in this modern interpretation is abstracted from social context or ''rendered technical'' (Li, 2007), making it possible to understand water as a resource available for human consumption and use that can be known and managed or manipulated by humans (Groenfeldt, 2013; Linton, 2010; Strang, 2004). Modern Water, it is argued, dominates current approaches to water governance, whereas the separation of water from its social context is thus considered at the root of contemporary water crises (Schmidt and Shrubsole, 2013). Therefore, critics argue that challenging this requires ''attention to water's social context and dynamics, and to reposition water as inherently political'' (Linton and Budds, 2014: 175). Yet, to date, few academics have explicitly addressed the ontological politics of water (cf. Boelens, 2014; Linton, 2010; Norman, 2012; Wilson, 2014; Yates et al., 2017). This paper thus examines water as a ''more-than-human'' entity through the lens of post-humanism and critical Indigenous studies. It explores conflicts in water governance and how dominant ontologies of water, based on the idea of Modern Water, inform present approaches to water governance, and how instead a project of decolonizing might unsettle conventional water governance. Working towards meaningful water governance alternatives will necessarily involve prioritizing Indigenous ontologies, epistemologies, and forms of governance.

The ''ontological turn'' or the study of post-humanism and the more-than-human, has begun to challenge the assumption of a singular world, and proposed instead that we take seriously the existence of diverse ways of being and knowing within and with multiple worlds (Haraway, 2003; Kohn, 2007; Nadasdy, 2007; Sundberg, 2011, 2014; Whatmore, 2002). While Indigenous ontologies are frequently cast as cultural constructions and relegated to the realm of ''myth'' or ''belief,'' Nadasdy (2007: 26) calls for the need to take Indigenous peoples' ontological assumptions as literal rather than symbolic. Cruikshank (2012: 244–245) similarly notes that a radical shift is required to engage Indigenous perspectives where

> the world is inhabited by a range of beings—human and non-human—who all apprehend that world from distinct vantage points... from this framework, animals, humans and even features of landscape have points of view, exhibit agency, and engage in reciprocal responses.

cIndigenous scholars have long acknowledged water's meaning and constitution as more-than-human (Anderson et al., 2013; LaBoucane-Benson et al., 2012; Craft, 2017; McGregor, 2012, 2014). Indigenous ontologies have also been explored from the perspective of human relationships to animals (Blaser, 2009b; Nadasdy, 2007); fish (Hoogeveen, 2016; Todd, 2014), and entities considered ''inanimate'' from a modern perspective including trees, mountains, rocks, and glaciers (Bird Rose, 2008; Cruikshank, 2005, 2012; De la Cadena, 2010, 2015). Recent literature has also explored the limitations of viewing ontological dimensions as cultural constructions that confound environmental governance including wildlife (co-)

management (Blaser, 2009a, 2009b, 2013, 2014; Nadasdy, 2007) and environmental assessment (Forsyth and Levidow, 2015; Hoogeveen, 2016; McCreary and Milligan, 2014).

More profoundly, the ontological turn has been useful in destabilizing modernism itself thereby opening spaces for ontologies that fail to fit neatly into conventional approaches to water governance. At the same time, the field has been critiqued for its universalizing tendency to use aspects of Indigenous ontologies without acknowledging the associated Indigenous thought, practice, and legal/governance approaches (Collard et al., 2015; Hunt, 2014; Sundberg, 2014; Todd, 2016; Watts, 2013). Kwakwaka'wakw scholar Sarah Hunt (2014: 29) cautions against such references to Indigenous ontologies as ultimately shallow to the extent that they act as a form of "epistemic violence." Both Hunt (2014) and Watts (2013) (a Mohawk and Anishnaabe scholar) argue that Indigenous thought should not just be seen as a source of ideas that can be drawn on, but as a complex body of knowledge that is living and practised by Indigenous peoples with whom settler society shares reciprocal responsibilities. Consequently, calls to decolonize water are fundamentally about "exposing the ontological violence authorized by Eurocentric epistemologies both in scholarship and everyday life" (Sundberg, 2014: 34). Our point, following Métis scholar Zoe Todd (2016), is that the potential of the ontological turn will only be realized once we begin to work more fully in the vein of Indigenous scholars who "have already shown that Indigenous epistemologies and ontologies represents legal orders, legal orders through which Indigenous peoples throughout the world are fighting for self-determination, sovereignty" (Todd, 2016: 17–18; see also Daigle, 2016). We respond to calls to heed to the teachings of critical Indigenous studies – a field committed to the politically engaged study of Indigenous peoples being, knowing and governing that questions how settler-colonialism constructs particular understandings of Indigenous political approaches (e.g. Coulthard, 2014; Simpson, 2011, 2014) – by engaging Indigenous scholars to ask: What is water? Moreover, what does this mean for the ontological politics of water governance in the context of settler colonialism? In particular, we question what water means on the ground in the context of water governance in Yukon Territory, shaped as it is by modern land claims? How does an understanding of the politics of kinship as engaged by four Yukon First Nations challenge governance structures and governing agents to "respect water"? And finally, how might these insights unsettle dominant ideas of water as a resource and contribute to rethinking "ontological pluralism" in water governance?

Situating research: Setting, methods and positionality

Water governance in Yukon Territory is shaped by settler water laws as well as tripartite land claim and self-government agreements between territorial, federal, and First Nation governments. In contrast to Indigenous peoples elsewhere in Canada (Phare, 2009; Simms et al., 2016), Yukon First Nations' rights and responsibilities within water governance are defined explicitly in land claims and self-government agreements. Responsibility for water governance was devolved to the territorial government from the Canadian federal government in 2003. Land claims agreements acknowledge Yukon First Nations' rights to participate in decision-making about the waters and lands within their territories. Specifically, Chapter 14 of the Yukon Umbrella Final Agreement (UFA) (Government of Canada, 1993) – the framework for modern land claims agreement in Yukon – specifically addresses "water management." The UFA includes provisions on specific matters including the applicability of "laws of general application" (e.g. the Yukon Waters Act) to both Settlement and non-Settlement Land; the powers of the Yukon Water Board; the extent of Yukon First Nation water rights; the management powers of Government; a process

for dispute resolution; and it stipulates when compensation for the loss or damage is warranted. In relation to Indigenous water rights, Chapter 14 states, a 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 and ... to use water for a traditional use in the Yukon. Chapter 14 of the UFA is the only chapter specific to water. However, water governance is understood to include not only the decision-making processes of the Yukon Water Board, which is responsible for water licensing decisions in the territory but other co-management boards including Yukon Environmental and Socio-Economic Impact Board (YESAB) or the land use planning process. The Yukon Water Board existed prior to land claims but became a co-management board through land claims with 1/3 First Nations representation. According to the Yukon First Nations Self Government Act (Government of Canada, 1994), signatory self-governing Yukon First Nations can create legislation and regulations of a local nature. First Nation legislation and decisions can supersede territorial legislation on Settlement Lands. While First Nations' roles in water governance are more clearly defined than elsewhere in Canada, water conflicts in Yukon abound as resource extraction, dominated by the mining industry and other changes in land and water are seen to encroach on First Nations' relationships to water and their ability assert their sovereignty according to these relationships.

We draw here on interviews conducted between 2012 and 2017 with Elders and government employees from four Yukon First Nations (i.e. Carcross/Tagish, Kluane, Selkirk, Tr'ondëk Hwëch'in, and White River) (Figure 1/Table 1). The first set of interviews was conducted in 2012 as part of a community-based water quality monitoring study with the Yukon River Inter-Tribal Watershed Council (YRITWC). Building on existing relationships with Yukon First Nations, the second set of interviews were conducted in 2015 as part of the lead author's dissertation research on the role of Yukon First Nations in water governance. Water governance was not the explicit focus of the first set of interviews, which focused on the meaning of water to Yukon First Nations, traditional knowledge of water and concerns about environmental change.

Working closely with Yukon First Nation governments and their staff, 27 Elders were recruited to participate in interviews. Several Elders were interviewed in both 2012 and 2017 (Table 1). Fourteen First Nation government employees were also interviewed in 2015 and 2017. Elders were given honoraria of $200 (2012) and $100 (2015) to acknowledge their expertise and to thank them for sharing their time and knowledge with us. Although using the names of Elders and other knowledge holders can be understood as a form of citation, we do not do so here in order to conform with Yukon First Nation's Traditional Knowledge Policies and their requirement for confidentiality (Carcross/Tagish First Nation, 2009; Kluane First Nation, 2012; Tr'ondëk Hwëch'in First Nation, 2012). Interviews were thematically coded using NViVo, and the results were and will be shared with our partner Yukon First Nations, including the return of raw data to First Nation Archives (where traditional knowledge policies are in place). We do not include here the many interviews conducted with non-First Nations water experts as they are not the focus of this paper; results from these interviews will appear in a later paper. Instead, we primarily reference the legal languages and logics of governance enshrined in relevant acts, policies and management plans. Research results were shared and validated by partner First Nations between August and October 2017 in the form of a community presentation and report. Research archives, with interview audio and transcripts, will also be shared with each First Nation in compliance with traditional knowledge policies.

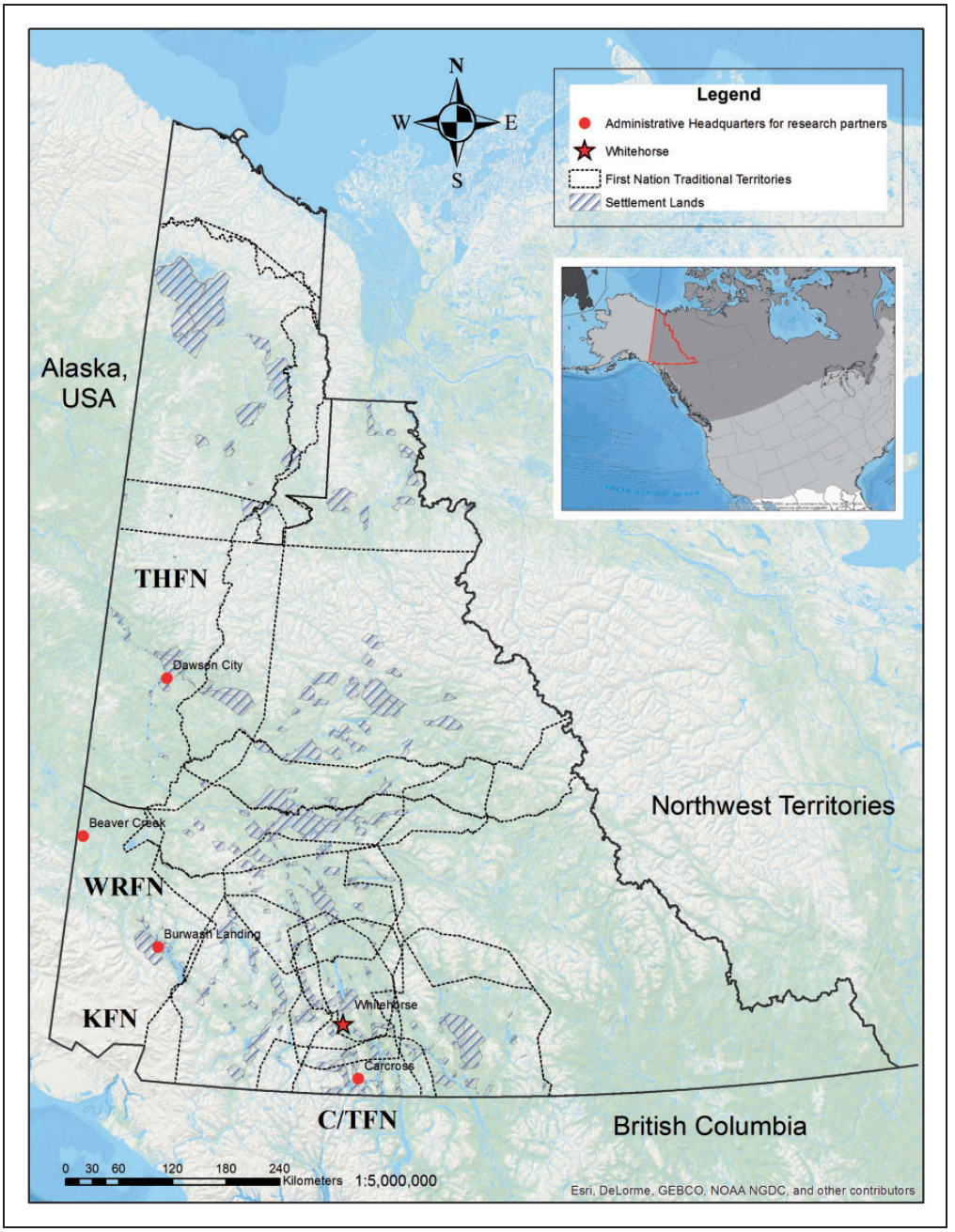

Figure 1. Map of Yukon First Nation overlapping traditional territories, settlement lands and administrative headquarters for four Yukon First Nation research partners.

As scholars of both settler and Indigenous origin – the first author is of settler origin and was born in Calgary, Alberta (Treaty 7, Blackfoot Territory), and the second author is Kaska Dena (Wolf Clan) from Ross River, Yukon – reflexivity regarding our identities has been fundamental to our engagement with Indigenous research partners and the

Table 1. Interviews conducted with four Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in, and White River First Nations.

First Nation	CTFN	KFN	THFN	WRFN
Languages spoken	Tlingit and Tagish	Southern Tutchone	Hän Hwëch'in "People of the River"	Northern Tutchone and Upper Tanana
Water	*Héen* (Tlingit) *Tuu* (Tagish)	*Chu*	*Chuu*	*Tu* (Northern Tutchone), *Tuu* (Upper Tanana)
Respect	*yáa át wooné (Tlingit)* None (Tagish)	None	None	None
Agreements	Final (Government of Canada, 2005a) and Self-Government (Government of Canada, 2005b) Agreements	Final (Government of Canada, 2003a) and Self-Government (Government of Canada, 2003b) Agreements	Final (Government of Canada, 1998a) and Self-Government (Government of Canada, 1998b) Agreements	No treaty. Reconciliation agreement in progress
Citizens	633	154	770	247
Elders	7	6	9	5
Total Elders	27			
FN Government	2	3	5	4
Total FN Government	14			
Total interviewees	41			

Note: All partner Yukon First Nations, except C/TFN, belong to the Athabascan-language group. Tagish Athabascan 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 Council of Yukon First Nations Self-Government Secretariat based on 2011 National Health Service data. WRFN recognizes 247 members, while only 149 of these are registered under the Indian Act.

ontological logics they have and continue to communicate, practice and illuminate. Additionally, the first author has been working in the Yukon River Basin in collaboration with the YRITWC – a grassroots treaty-based organization with 73 signatory Alaska Native Tribes and Canadian First Nations (Yukon and British Columbia) – since 2009. This research grew out of a three-year (2012–2015) project aimed at the development of a community-based climate change and contaminant monitoring network with four Yukon First Nations (i.e. Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in, and White River), all of whom are also research partners on this project. The second author, who was also a YRITWC employee at that time, played a fundamental role in the project. The many years of engagement with colleagues, collaborators, and community members from Alaska and Yukon have helped enrich our understanding of First Nation water ontologies, as they serve the goal of decolonizing water governance, through a more informed, critical and nuanced lens.

Respecting water and the politics of kinship

It is difficult to overstate the scale and speed of changes to water within Yukon First Nations' territories, and most are seen as negative and as associated with resource development and climate change. Mining is the leading industry in the territory, but First Nations also noted concern related to hydroelectricity development, land use planning, legacy contamination (e.g. historic mine sites or dumpsites from the building of the Alaska Highway), sewage management and in some cases oil and gas development and agriculture. Consistently, Yukon First Nations associated the negative effects of resource development with respect – with "forgetting" or "losing" respect. For example, one Elder (Elder 2; CTFN, 2015) discussed the consequences of losing respect for water:

> It's when we lose that respect and that's when all our guards are down and things happen to water. Even now, today, politically, we're on a forefront all the time to make sure that the water is kept clean and that if there's any contaminants, you know, we work hard at it to try to get it, get them to clean it up, you know, and those things.

In other words, the negative impacts to the water and land within Indigenous territories are associated with the absence or loss of respect by First Nations and settler populations alike. The First Nations certainly expressed the material importance of water to their communities, including concerns about the effects of resource development on drinking water and habitat for fish and animals. However, concerns about respect for water raises ontological questions that are not easily understood through a dualistic lens. Rather, in what follows, we engage with conceptualizations of respect for water, and its linkages to Indigenous concepts of *relationality*, *responsibility* and *reciprocity* to convey Yukon First Nation water ontologies.[6]

While Indigenous concepts of respect differ from settler definitions, it is difficult to convey exactly what is meant by "respect." To begin with, not all Yukon First Nations have a word in their language for "Respect." For the Inland Tlingit (CTFN), the term yáa at wooné (Respect) (Edwards, 2009: 314) is frequently used to refer to proper or decorous interactions between humans as well as between humans and more-than-humans (Hayman, Wedge, and James, 2015). In consultation with Elders and archival material, we found no single word or phrase for respect in the Athabascan languages including the Northern Tutchone (WRFN),[7] Upper Tanana (WRFN) (John, 1997), Hän (THFN) (Ritter, 1978), Tagish (CTFN), or Southern Tutchone languages (Nadasdy, 2003a; Tlen, 1993). Yet, the Elders from each of these Yukon First Nations frequently cite the need to respect water. In the context of human–animal relationships for the Southern Tutchone, Paul Nadasdy (2003a) notes it

seems that First Nations peoples and the people who write about them use the word "respect" to refer to a range of beliefs, values, and practices. Consequently,

> we cannot simply assume that the English word 'respect' stands for a distinct or coherent set of First Nations' beliefs and practices; rather, we can only hope to understand what First Nations peoples mean by the term if we examine it "in action." In other words, we must observe it within specific social contexts. (Nadasdy, 2003a: 79)

Through the exploration of the teachings shared by Elders from four Yukon First Nations, we aim to better understand the concept of respect and its implications for water governance in Yukon.

The theme of "respect for water" first emerged during interviews conducted with Elders in 2012 as part of a project aimed at documenting Indigenous knowledge of water and concerns about environmental change. To deepen our understanding of the meaning of respect for our Yukon First Nation partners, in 2015, Wilson asked the Elders "what is respect?" and "what does it mean to respect water?" When asked about the meaning of respect, Elder 7 (CTFN, 2015), leaned back at the table and said,

> That's a pretty big word, respect. Like I said we've forgot a lot of things. And we've forgot when long time ago the old people said when you get fish you put the bones back in the water. We forgot that. You go and ask over here. They don't know. Once you put the bones back in the water it feeds those little things and then those little things become bigger things, bigger and then pretty soon you have a whole pile of stuff these bones feed. I guess all these things that we were taught long time ago nobody seems to be thinking about it now.

We believe that in saying that respect is a "big word" the Elder was stating that respect is at once a powerful and complex concept. Similarly, the Elders emphasized that there is no single way to define respect and the meaning can vary between and among First Nations. Alternatively, as Elder 4 (CTFN, 2015) stated, "like, the snowflakes, I believe. You know, every person holds their own definition of what [respect] is." When asked, "what does it mean to respect water?," Elder 8 from Kluane First Nation (2012) stated,

> By respect, I think they meant don't play around with it. Don't make fun of it. Don't say anything like that against the water. Because to me, water is sacred. That's how I was brought up [...] because everything that lives on the land, they have spirit and if you don't respect that spirit, then you don't respect yourself.

The words this Elder, and others use to describe respect for water makes clear that water is not just seen as a material element that makes life possible, rather for Yukon First Nations, water is a living entity, with the "person-like" quality of agency referred to as "spirit." From this perspective water not only enables human life by meeting physical needs, but water *is* life or alive. To treat water with the deference it deserves, and to tend to the needs of water systems (the return of bones) is to conceive of water as a living entity with metaphysical and physical properties whose well-being must be managed as with any being or subject of great importance. Interpreting respect for water through the English definition of the term conversely obscures the protocols for engaging with water and the many consequences of resource development for the waters within Indigenous territories.

The meaning of respect for water can also be explored through Indigenous principles of relationality, responsibility and beneficial reciprocity (Atleo, 2004; Manson, 2015; Wilson, 2009). Together with respect for water, we characterize these principles as a politics of kinship, critical to understanding Indigenous governance. Relationality or the idea that Indigenous peoples are fundamentally rooted in their relationships (Atleo, 2004; Manson,

2015; Wilson, 2009) is central to Elders' descriptions of respect. Water as a living entity actively participates in relationships across the human and non-human world. While post-humanist authors have long been interested in Indigenous peoples' ideas of the more-than-human (Sundberg, 2014), relationality emphasizes a "kincentric ecology" (Salmón, 2000) or set of relations persons or beings, water in this case, as a part of extended networks of kinship or kin relationships. The principle of relationality is critical to understanding Yukon First Nation concepts of respect because Indigenous ontologies and epistemologies are fundamentally about the relationality of beings (Atleo, 2004; Wilson, 2009). "Identity for Indigenous peoples," as Shawn Wilson (2009: 80) notes,

> is grounded in their relationships with the land, with their ancestors who have returned to the land and with future generations who will come into being on the land. Rather than viewing ourselves as being in relationship with other people or things, we are the relationships that we hold and are part of.

While relationality does not negate individual agency, all people or beings are thus better understood as the embodiment of all the beings in their relational orbit that have, are and have previously come before them. Further, as Todd (2017) discusses, relationality is not always positive, because relationships are complex. Just as with our human relatives, the acknowledgment of kin relationships with water does not imply that kin always get along. For example, water is considered the giver of life, but it can also take life away (cf. Craft, 2014).

Responsibility and Reciprocity are also fundamental to understanding Indigenous concepts of respect. Humans have a responsibility to follow specific protocols or rules for behavior in relation to water (Atleo, 2012; Coulthard, 2014). Participating Elders described some of the protocols surrounding relationships to water, paying close attention to the failure to follow these protocols – both physically and conceptually. To be "disrespectful," as noted in the quote above, is to make fun of water or say/think bad things about it (Elder 8), to waste water or to generally take it for granted (Elders 2, 3, and 6). Other examples of disrespect for water provided by Elders include polluting it or contaminating it in any way by throwing garbage or inappropriate objects in the water, apart from fish bones or other animal remains (Elders 7, 10, and 15); driving through water unnecessarily or for sport (Elder 10); and using water for mining without returning the land and water to the same condition one found it in (Elders 6, 10, and 12).

Engaging in ceremony is also a meaningful way to show respect for water. Elder 4 (CTFN, 2015), referred to the water ceremony held at each of the YRITWC's biennial summits:

> The Yukon River gatherings have brought us to appreciate water in a big ceremony, in a big way every four years. And so there's this appreciation of water and it's bringing the songs out. I've heard a couple of songs during the water ceremony that I've picked up in Teslin, so there's this cross-cultural thing going on, also. Sharing of language and perceptions and ways of being and doing things, you know? We kill a moose; we do this. They kill a moose; they do that. Same idea. It's to value the one that gave itself to us that we might live on. And to acknowledge its spirit and make sure it's got the doors open for whatever it wants to be and do, you know? (Elder 4; CTFN, 2015)

This water ceremony is not specific to any First Nation, but rather an expression of inter-tribal understandings of how to respect water. At the same time, CTFN Elders (Elders 4, 5, 7), who are of both Tlingit and Tagish origin, also referred to the Tlingit salmon ceremony. By returning the fish bones to the water, a salmon ceremony is an act of respect for fish and

water (Elder 7; CTFN, 2012, 2015). Other First Nations also mentioned returning fish bones and guts (e.g. trout, whitefish and salmon) to the water in a show of respect (Elder 11; KFN, 2015; Elder 5; WRFN, 2015).

Dene political theorist Glen Coulthard (2014: 61) (Weledeh Yellowknives Dene First Nation) discusses the responsibilities humans have towards water and other elements of the environment:

> Ethically, humans held certain obligations to the land, animals, plants, and lakes in much the same way that we hold obligations to each other. And if these obligations were met, then the land, animals, plants, and lakes would reciprocate and meet their obligations to humans, thus ensuring the survival and well-being of all over time.

Reciprocity is therefore about engaging with water according to protocols to ensure mutual survival. In other words, if you take care of the water, it will take care of you. While the meaning of respect may differ across diverse First Nations, this case study of four Yukon First Nations reveals that to ''respect'' water is to engage in a manner consistent with the protocols or conventions required to maintain appropriate social relations, whether in relation to the spirit of a certain body of water or in reference to more general protocols for respecting water.[8] These protocols and the oral traditions that inform them are the basis for Indigenous water laws that have existed for millennia (Borrows, 2002; Craft, 2017; Napoleon, 2013; Napoleon and Friedland, 2016).

Indigenous peoples have been governing the lands and waters within their territories since time immemorial, and Indigenous governance systems can be understood as dynamic legal orders, rooted in those traditions, while adapting to contemporary circumstances (Borrows, 2002; Napoleon, 2013). While Indigenous governance systems have been disrupted or constrained by settler-colonial forms of governance, Indigenous peoples have enduring knowledge of such systems in practice and oral history (Borrows, 2002; Napoleon, 2013). Respect remains central to these. For example, during an interview conducted in 2012, one Elder from Carcross/Tagish First Nation discussed the importance of traditional governance structures, such as the clan system, for guiding respectful relations with water.[9] This Elder noted, ''The laws that we have for water are in the clan houses. Those kinds of things are important because we need to respect water'' (Elder 7, 2012). Further, Vanessa Watts (2013: 23) notes, ''non-human beings are active members of society. Not only are they active, they also directly influence how humans organize themselves into that society. The very existence of clan systems evidences these many historical agreements between humans and non-humans.'' While Indigenous cultures are often seen as holding a value system that ought be considered in settler governance processes (Nadasdy, 1999), ontologies are not external to governance. Critical Indigenous scholars show us how Indigenous ontologies, sovereignty and governance are linked through Indigenous thought and practice, which is guided by the principles of respect, relationality, responsibility, and reciprocity (Coulthard, 2014; Coulthard and Simpson, 2016; Manson, 2015; Wilson, 2009). Denying the agency or subjectivity of more-than-human relations erases the role these entities play in practicing and knowing responsibility and in Indigenous sovereignty itself. Such practices are the engagement of a politics of kinship on the ground (Manson, 2015; Rifkin, 2010). Coulthard (2014: 13) refers to these Indigenous decolonial principles and practices as grounded normativity, or ''the modalities of Indigenous land-connected practices and longstanding experiential knowledge that inform and structure our ethical engagements with the world and our relationships with human and nonhuman others over time.'' In other words, for Indigenous peoples' water (and land) are understood not simply as a physical asset, but as a way of knowing (epistemology) and being (ontology) embedded in

a universe of relations between human and non-human beings that can guide forms of governance and resistance. Through this lens, respect for water can be understood as a politics of kinship that is inextricably linked to Indigenous understandings of water and water governance. The following section explores the ontological politics of water governance in Yukon Territory, which is shaped by modern land claims and self-government agreements as well as the politics of kinship First Nations engage through respect for water.

The "political ontology" of water governance in Yukon

Yukon First Nations play a substantive role in water governance in Yukon as the result of modern land claims agreements. However, even a cursory analysis of water governance in Yukon Territory shows an approach to governance that reflects a fundamentally different view of water than that carried through the Elders' articulation of "respecting water." Water is widely referred to as a "resource" (e.g. Yukon Water Strategy and Action Plan (Environment Yukon, Water Resources Branch), 2014). Also, according to the Yukon Waters Act (Yukon Legislative Counsel, 2003: 3) "Water belongs to Government." While the idea that the Yukon Government "owns" the water is problematic from the perspective of Indigenous rights and jurisdiction, it also reveals the pervasiveness of settler colonialism and its buttressing ontologies – as "land [synonymous with water] is remade into property and human relationships to [water]," restricting all views "to the relationship of the owner to his property. Epistemological, ontological, and cosmological relationships to land are [thus] interred, indeed made pre-modern and backward. Made savage" (Tuck and Yang, 2012: 5). In the same vein, the "water rights of Yukon First Nations," referred to in the UFA frames the relationship to water in relation to property rights, absenting all reference to water as an ethic of respect. It thus also undermines any charge to First Nations to recognize and enact their ethic of responsibility, to take care of water – a living entity to which they have kinship ties (Anderson et al., 2013; McGregor, 2014). Water is thus rendered a resource. Or, as Anishinaabe scholar Deborah McGregor states:

> Water, in the dominant Western Euro-Canadian context, is conceptualized as a resource, a commodity to be bought and sold. Federal and provincial governments therefore make decisions about water based on a worldview, philosophy and set of values which stands in direct contrast to the views of First Nations people. (2014: 496)

Although not necessarily intentional, following Kim Tallbear (2011), engaging settler understandings of water in water governance "engenders a lot of violence" due to the constant impulse to separate humans from non-humans.

Others have questioned the ontological politics of Indigenous–state relations in the Canadian North, including the ways settler ontologies and forms of governance permeate every element of co-management boards, shaped by land claims (e.g. Nadasdy 2003a; Natcher et al., 2005; Stevenson 2006). Marc Stevenson (2006) contends that Indigenous peoples' relationships with their lands and waters are rendered "virtually invisible" in co-management processes that are dominated by state management interests and processes. Nadasdy (2012, 2017) also critiques the governance structures created by land claims in the Yukon, in his case for forcing Yukon First Nations to engage governance approaches that mimic state-led bureaucratic management. This is not only evident in the organization of co-management boards but also in the way that First Nations are themselves organized in a post-land claim era. Indeed, to take on more responsibilities under their self-government agreements, Yukon First Nations develop governing structures and legislation very different

from traditional governance structures or logics, especially rooted in a politics of kinship. Natcher et al. (2005) similarly discuss how Little Salmon/Carmacks First Nation's (Northern Tutchone) system of traditional laws known as *Doo'Li*, and which differently conceptualize human–fish relationships, contribute to ''hidden'' conflicts in ''resource management'' between settler and Indigenous populations. Co-management processes, write Natcher et al. (2005: 245), involve ontological differences, and colonial histories, related to what fish *are*. These differences are a ''formidable obstacle to reaching consensus on management issues.'' The YWB and other co-management boards such as YESAB are mandated to assign traditional knowledge and science equal consideration in decision-making. However, such ''integration'' is invariably reductionist, and rests on or reduces that knowledge to ''data'' (e.g. fish counts conducted by Indigenous employees) useable in state management processes or in a court of law should it come to litigation (Nadasdy, 1999). This of course fails, deeply, to reflect First Nations' relationships to water because ''government scientists and administrators expect expertise that conforms to their training (Nadasdy, 2003a; Natcher and Davis, 2007), which in effect pushes Indigenous ways of knowing and Aboriginal and treaty rights to the side'' (Bowie, 2013: 96). While there are ongoing calls to include traditional knowledge in ''collaborative'' water governance and decision-making processes, rarely acknowledged is the importance of the ontological framework within which such epistemologies are situated or the understandings of governance and laws that flow from them (cf. McGregor 2012, 2014; Wilson, 2014; Craft, 2017). Critiques of Indigenous–state relations in Yukon raise important questions about how First Nations' ability to influence decision-making processes is limited by the extent to which governance processes, institutions and laws reflect their ontologies and governance approaches (Nadasdy, 2003b, 2017; Natcher et al., 2005; White, 2009).

The limitations of such a system have resulted in three Yukon First Nations opting out of the land claim negotiations (i.e. White River First Nation, Ross River Dena Council, and Liard First Nation). Elder 14 (2015) from White River First Nation noted the shortcomings of land claims in acknowledging Indigenous legal systems and authorities:

> It's really important up here in our country, you know, to preserve that water and that's why one of the reasons [we didn't sign that land thing. We said,] nothing here gives us the power to say enough, huh? You know, because we're here to protect our land. We're stewards of the land. You know, we take care of our land, we take care of our animals we had. You know, the system that is in place on us today government-wise we had that system before you people, you know, Europeans came over here. We had it. We had our governance. We had our policies. We had everything down already. We're living by that.

In other words, White River First Nation and the Northern Tutchone and Upper Tanana Indigenous peoples that make-up the nation had a pre-existing Indigenous legal order through which they stewarded the land and water; a legal order which is not reflected in the governance arrangements resulting from modern land claim and self-government agreements.

Several Elders from Yukon First Nations with land claims also expressed concerns that their relationships to water were not represented or protected through the governance approaches taken on their ''behalf'' (including by their own First Nation government). They disagreed with the style of governance developed through land claims and with some of the decisions regarding resource development made by their governments (Elders 7, 4, 5, 8). One Elder stated that ''respect for water'' cannot be achieved through government because they consider the institutions and processes of government to be inappropriate means for acknowledging and protecting relationships to water. According to this perspective, ''respecting water'' is better achieved through ceremony and other

land/water-based practices that remind people of their responsibilities to water through direct engagements that are not mediated by external institutions (Elder 4). At the same time, many people from signatory First Nation governments (11 Yukon First Nations including CTFN, KFN, and THFN) see substantial power in the rights and authorities acknowledged in their agreements and express hope in the potential for implementing these agreements to protect water in a manner consistent with their relationships and the imperative to respect water. Our intention is not to disparage the hard work that was put into land claim negotiations and the ongoing implementation of these agreements nor to understate the dramatic and in many cases, beneficial changes that land claims and self-government brought about. Instead, we raise these critiques because they reflect debates occurring among and between Yukon First Nations and to highlight the importance of debates about the appropriateness of governance institutions and processes for improving water governance in Yukon.

While settler views of water structure the broader water governance landscape in Yukon, there remain opportunities through land claims and self-government agreements for First Nations to improve and even change water governance regimes such that they become consistent with their relationships to water. Signatory self-governing Yukon First Nations (according to the Yukon First Nations Self Government Act (Government of Canada), 1994) can create legislation and regulations on Settlement Land. Yukon First Nations are engaged in ongoing internal dialogue about developing or documenting their own water legislation or policies. As of May 2013, Champagne and Aishihik First Nations (CAFN) have been developing a Water Strategy. Their strategy's draft vision statement reads:

> CAFN Government and its citizens have a great and deep respect for water. It is a gift that sustains all life throughout the land. As long as the rivers flow, CAFN government and its citizens will promote the protection and conservation of water throughout the traditional territory. (2013: 1)

Both THFN and CTFN noted that they are considering developing a water law but are still early in the process. While CAFN's water policy remains in a draft format, it exemplifies how other First Nations are working to protect their relationships to water using their powers as self-governing First Nations.

Although not specific to water, other examples from across Yukon demonstrate how First Nations are using these capacities to insert a politics of kinship. CTFN Family Act (2006) reflects the clan-based origin of knowledge, the stories that encompass these, and the invocation of, literally, a kin or family based notion of relationality and respect. The Act also points to principles of traditional law that enshrine responsibilities within and between the human and nonhuman worlds, replacing the heretofore dominance of ''nature'' or ''resources'' and people with an ecology of relatives or kin. Specifically, the CTFN Family Act states that the laws developed by CTFN ''give practical expression to our values and beliefs. Our laws are based on the values taken from our traditions and our stories'' (Carcross/Tagish First Nation, 2006: 14). Just as respect guides relationships with water and other elements of the environment, it also guides understandings of relations between human kin. The Tr'ondëk Hwëch'in Heritage Act (Tr'ondëk Hwëch'in First Nation, 2016) also specifically refers to respect as a *Da'ole* or traditional law for the Hän Hwëch'in (meaning ''People of the River''). In articulating what their Elders' knowledge of culture and heritage, the Act notes,

> 'in a good way' means respect. That is our biggest law. Respect is the one that encompasses everything. When you go against doing things ''in a good way,'' that is with respect, that's when

> Da'ole [traditional law] comes in. When we do things in a bad way, it is disrespect – meaning that you have gone against all the natural laws. You bring all the negative to yourself. It is the same concept as – the idea that what you put out there comes back to you. (Tr'ondëk Hwëch'in First Nation, 2016: 2)

The CTFN Family Act and the Tr'ondëk Hwëch'in Heritage Act represent Yukon First Nations' efforts to re-engage traditional laws and values. These examples, as well as other land-based practices and ceremonies First Nations engage in, demonstrate the ways that Indigenous peoples are actively expressing a politics of kinship, grounded in understandings of respectful relationships between humans, and between humans and non-humans.

Ontological pluralism and "refusing" settler views of water

Decolonizing water governance such that water is respected in the Yukon First Nations multifaceted sense of that work will also be necessarily rooted in views of water as a present agentive being within a network of relational or kincentric ties, responsibilities, and obligations. The many steps that might lead to that decolonization involve what Mohawk scholar Audra Simpson (2014) refers to as multiple nested forms of sovereignty. By this, she means that Indigenous sovereignty is a constantly unfolding set of practices, rooted in relational politics, and existing within a settler state. Indigenous nations thus strategically engage with state conceptions of sovereignty, while seeking to assert forms of governance that people also consider consistent with their ontologies. For Simpson, Indigenous peoples are also necessarily engaged in a politics of refusal; they reject (in that refusing) the fiction of the settler state by avowing the viability of Indigenous forms of governance and insist that their governance not be subsumed within settler colonialism (e.g. swallowed up as ''data points'' to be integrated into a co-management plan). In this sense, we understand Yukon First Nations ongoing assertion of the need to ''respect water'' as a refusal of the concept of Modern Water itself, including the many associated ideas about water such as water as property and the governance arrangements that enact such assumptions.

It is not enough to simply discuss the limitations of the current system or show the many ways that Yukon First Nations continue to resist imposed modes of governance. Rather, water governance arrangements in Yukon and Indigenous–state relations more broadly require a fundamental shift towards nested sovereignty. Political ecologists have called for the development of water governance systems characterized by legal pluralism to counteract the ways that colonial laws and institutions destabilize and distort Indigenous management institutions (see Bassi, 2010; Boelens et al., 2007; Boelens and Vos, 2014; D'Andrea, 2012; Gupta et al., 2014; Zwarteveen et al., 2005). Our analysis builds on this literature to highlight a commitment to ontological pluralism that actively acknowledges and supports governance practices that differ from those engaged by settler colonialism (Collard et al., 2015: 328). Elsewhere, Wilson (2014) calls this hydrosocial multiplicity to acknowledge the need to re-affirm Indigenous laws, customs, epistemologies, and ontologies about water. Building on Indigenous traditions, this requires decentering human agency and recentering the agency of more-than-human persons (Todd, 2014) to develop alternative modes of governance to overcome current imbalances in the ontological politics of water. To counter the negative impacts of historical and ongoing colonialism, pluralistic approaches must go beyond the invocation of respect or deference on the part of settler bureaucrats (see Simpson, 2004) to acknowledge Indigenous authority to decide based on their own traditions and legal orders. It also means rethinking the very agency of all beings and thinking of water as a living entity

deserving of many things. This involves thinking of water as kin with its histories enlivened in the landscapes it carves and the people it holds, past and future.

Any such ontological pluralism also necessarily requires a fundamental rethinking of governance including the values, decision-making processes, and institutions that are involved in such as system. Modern Water is rooted in scientific rationalism, which is an ontologically monistic perspective or one where there is a singular knowable material world or truth out there. Moreover, if a metaphysical dimension exists, that existence is framed as an inert material space onto which people project their values and beliefs. Thus, a further aspect of decolonizing water is the devolution of control over water governance to Yukon First Nations themselves (Nadasdy, 1999, 2003a). However, much "government managers are reluctant to devolve true authority to local levels" (Natcher and Davis 2007: 273–274), this must remain a serious mandate. Current managers may doubt that First Nations have a sufficient understanding of the environments within their territories to develop functioning governance processes, but why not follow Natcher et al. (2005) and conclude that the ultimate success of co-management schemes will depend on members' ability to engage rather than subvert their differences. The success of contemporary regimes is dubious at best from a Yukon First Nations point of view, whereas the possibilities are many if the very essence of what water is and means is engaged.

Another option would be to shift from the co-management of water, dominated by settler views of water and modes of governance, to Indigenous-led modes of governance and co-governance rooted in a politics of kinship and respect for water. Indigenous scholar and lawyer (Anishinaabe-Métis) Aimée Craft (2017) asks what Indigenous water laws or the *Anishinaabe nibi inaakonigewin* ("our water law") might contribute to improving decision-making about water? While noting that all legal traditions emphasize rights, obligations, and responsibilities and most often include reciprocal and bilateral rights and obligations (between the individual and the state), she theorizes that Anishinaabe water law differs from other legal traditions in that it is "focused primarily on responsibility, rather than rights, and that it is multi-layered, multi-dimensional and sources from relationships among beings (human and non-human)" (Craft, 2017: 107). Through this lens, we understand Indigenous water laws to engage ontologically pluralistic approaches to governance that seeks to acknowledge the status, rights, and privileges of more-than-humans that are equal to humans and in a manner that ensures those benefits are recognized and protected. Calls for legally pluralistic water governance systems often assume that Indigenous ontologies, epistemologies, and legal traditions are only relevant at the local scale and questions about whether and how these principles and institutions can be scaled up to regional or national levels, are rarely posed (Merrey, 2009). If it is the case that Indigenous water laws tend to center on the inclusion of all relations and perspectives, governance arrangements built on Indigenous law and institutions might not only better reflect Indigenous epistemologies and ontologies, but perhaps also better serve the collective good through engaging pluralist perspectives rather than those rooted in scientific rationalism, private property, and individualism.

This logic might also extend to the concept of water rights and the governance of such rights, which transform water into a property that is owned by a human. Instead, decentering the role of humans in water governance involves acknowledging the rights of water itself. The *Te Awa Tupua* (Whanganui River Claims Settlement) represents a promising legal precedent of this kind. In that landmark case, Whanganui Maori iwi (kin group) won a 140-year legal battle to recognize their ancestral [Whanganui] river has *having personhood* and thus legal rights equal to that of humans (Salmond, 2014; Boyd, 2017). Acknowledging the rights of rivers takes the legal and governance idea of water as a

more-than-human person seriously. At the same time, this approach also raises essential questions about who can speak on behalf of nature or a body of water and what it would mean to practice respect in this context. At the very least, it complicates concepts of governance as it calls into question the ability of humans to govern or act on behalf of water. It may even call into question the extent to which water as a more-than-human is even ''governable'' (Todd, 2017).

Conclusion

In this paper, we explore the ''political ontology'' of water in the context of settler colonialism. Our findings suggest that taking Indigenous ontologies seriously involves more than a simple exploration of what settler-colonial society can learn from Indigenous peoples' relationships to water. Instead, to avoid reproducing colonial ontological and epistemic violence, rethinking the ontological politics of water necessarily involves meaningful consideration of Indigenous thought and practice, including legal and governance elements, in light of settler colonialism. Therefore, following Hunt (2014) and Watts (2013) we engage with four Yukon First Nations' calls to ''respect water'' as a more than as a source of ideas that can be drawn on, but as a complex body of knowledge that is living and practiced by Indigenous peoples with whom we share reciprocal responsibilities. We engage with First Nation calls to ''respect water'' as one Indigenous ontology of that informs Indigenous approaches to governance, acknowledging Yukon First Nation relationships to water as more-than-human as a ''concrete site of political and legal exchange that can inform a narrative that de-anthropocentrizes current Indigenous-State discourses'' (Todd, 2014: 222). We understand ''respect'' for water as a politics that insists on the viability of Indigenous forms of governance and refuses to subsume their forms of governance within that of settler-colonial society. Finally, in the quest to decolonize water and water governance, we ask how ''respect for water'' might contribute to rethinking current water governance arrangements in Yukon through devolving water governance to Indigenous control or shifting towards an Indigenous-led model of governance based on Indigenous laws and forms of governance.

Acknowledgments

This paper was originally written as a chapter of the lead author's doctoral dissertation (Wilson, 2018). We are deeply indebted to Carcross/Tagish, Kluane, Tr'ondëk Hwëch'in, and White River First Nations for their partnership in this research. We are especially grateful to the individual Elders who selflessly shared their time and knowledge and to Geraldine Pope, Kate Van Ballegooyen, Deborah Baerg, Darren Taylor, Jody Beaumont, Glen Stephen Sr, and Janet Vander Meer for the research support they provided. We would also like to thank Terre Satterfield, Leila Harris, Jordi Honey-Roses, Glen Coulthard, the EDGES research group, and three anonymous reviews for their feedback on previous drafts of this paper. Thank you! *Mähsi' cho* (Hän), *Máhsin cho* (Northern Tutchone), *Shäw níthän* (Southern Tutchone), *Tsin'jj choh* (Upper Tanana), *Gùnèlchish* (Tagish), *Gunalchîsh* (Tlingit).

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was made possible by the funding provided by the Vanier Canadian Graduate Scholarship, Killam Doctoral Fellowship, UBC Four Year Doctoral Fellowship, the Northern Scientific Training Program, an SSHRC Insight grant (UBC number F12-04439).

Notes

1. The term Indigenous refers to those communities that claim a 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. While we use the terms First Nation and Indigenous interchangeably through this paper, we do acknowledge there is an incredible diversity within Indigenous epistemologies, ontologies, and governance systems.
2. Ontologies are ways of being and defining what something *is* and epistemologies are ways of knowing. As fundamental ways of understanding the world, ontologies are systems of identification and classification that define the boundaries between self and otherness and ''serve as a point of reference for contrasting forms of cosmologies, models of social links, and theories of identity and alteriority'' (Descola, 2013). Simply put, ontologies might be thought of as the basic conceptual underpinnings of the meaning, purpose, and identity of a thing and where it belongs in the larger social order of relations, obligations, and origin (Descola, 2013).
3. 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. Settler colonialism is fundamentally about access to ''territory,'' or land and in this case water, which is gained through various means including treaties or simply taking possession. Patrick Wolfe (2006) insists that ''invasion,'' in the context of settler colonialism, ''is a structure not an event,'' therefore it never ends.
4. 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). Indigenous water governance, therefore, refers to Indigenous modes of interacting with and decision-making processes about water including cultural values, knowledge, meanings, and institutions distinct to a given people and adapted over time.
5. Decolonizing water refers to a process that seeks to understand the impacts of colonialism on Indigenous peoples, their relationships to water, and legal and governance systems. To achieve this, Indigenous peoples engage dynamic understandings of tradition to remember, revitalize, and adapt Indigenous institutions, principles, and values (Smith, 1999).
6. Powell and Curley (Navajo scholar) (2008) note the ontological turn has generally ignored intra-community, and in particular intergenerational differences. We acknowledge that in focusing primarily on Elders' views of water, we are limited in our ability to identify intergenerational differences among Yukon First Nations, including those differences that might have been, in part, shaped by the massive cultural changes brought about by land claims.
7. A Northern Tutchone dictionary developed with the First Nation of Na-cho Nyak Dun shows that the term *nitra* means respect (Ritter, 2012), but Elder speakers from White River First Nation did not recognize this term, instead saying that there are many phrases that would describe respect.
8. Ethnographic documentation also indicates that for the Tagish and Inland Tlingit (CTFN)

   > each major river has a personality and power of its own. Thus, those who do not belong to the sib claiming a particular river, must be very circumspect in their behavior while traveling on it. If they make loud noises or disrespectful remarks about the water, they will undoubtedly drown. (McClellan, 1975: 88)

9. A moiety is a form of social organization where society is divided into one of two unilineal decent groups. Athabascan peoples of the southern and central Yukon have the Crow and Wolf moieties, which are determined along matrilineal and exogamous lines. One must marry a member of the

opposite moiety, which is inherited from ones' mother. For "Tlingitized" First Nations in Yukon, these moieties are further divided into clans, which are unilineal groups descended from a common ancestor (see McClellan, 1975). C/TFN recognizes six clans: the *Daklaweidi* (Killerwhale) and *Yen Yedi* (Wolf) (both of Wolf Moieties) and *Deisheetaan* (Beaver), *Ganaxtedi* (Raven), *Kookhittaan* (Crow), *Ishkahittan* (Frog) (all of the Crow Moiety).

ORCID iD

Nicole J Wilson http://orcid.org/0000-0002-9119-1687

References

Anderson K, Clow B and Haworth-Brockman M (2013) Carriers of water: Aboriginal women's experiences, relationships, and reflections. *Journal of Cleaner Production* 60: 11–17.

Atleo ER (2004) *Tsawalk: A Nuu-chah-nulth Worldview*. Canada: UBC Press.

Atleo ER (2012) Principles of Tsawalk: An indigenous approach to global crisis. Available at: http://philpapers.org/rec/ATLPOT (accessed 11 June 2015).

Babidge S (2016) Contested value and an ethics of resources: Water, mining and indigenous people in the Atacama Desert, Chile. *The Australian Journal of Anthropology* 27: 84–103. Available at: https://doi.org/10.1111/taja.12139.

Bakker K (2003) *Good governance in restructuring water supply: A handbook*. Ottawa, Ontario: Federation of Canadian Municipalities.

Bassi MP (2010) *Ethical Issues of Water Resource Management in a Changing Climate: Equity and Legal Pluralism in Chile*. Thesis. University of Oregon, Eugene, Oregon, USA.

Bates B, Kundzewicz ZW, Wu S, et al. (eds) (2008) *Climate change and water. Technical Paper of the Intergovernmental Panel on Climate Change*. Geneva: IPCC Secretariat.

Bird Rose D (2008) On history, trees, and ethical proximity. *Postcolonial Studies* 11(2): 157–167.

Blaser M (2009a) Political ontology. *Cultural Studies* 23(5–6): 873–896.

Blaser M (2009b) The threat of the Yrmo: The political ontology of a sustainable hunting program. *American Anthropologist* 111(1): 10–20.

Blaser M (2013) Ontological conflicts and the stories of peoples in spite of Europe: Toward a conversation on political ontology. *Current Anthropology* 54(5): 547–568.

Blaser M (2014) Ontology and indigeneity: On the political ontology of heterogeneous assemblages. *Cultural Geographies* 21(1): 49–58.

Boelens R (2014) Cultural politics and the hydrosocial cycle: Water, power and identity in the Andean highlands. *Geoforum* 57: 234–247.

Boelens R (2015) *Water, Power and Identity: The Cultural Politics of Water in the Andes*. London: Routledge.

Boelens R, Bustamante R and De Vos H (2007) Legal pluralism and the politics of inclusion, recognition and contestation of local water rights in the Andes. In: Koppen B van, Giordano M and Butterworth J (eds) *Community-based water law and water resources management reform in developing countries*. Wallingford: CABI, pp. 96–113.

Boelens R and Vos J (2014) Legal pluralism, hydraulic property creation and sustainability: The materialized nature of water rights in user-managed systems. *Current Opinion in Environmental Sustainability* 11: 55–62.

Borrows J (2002) *Recovering Canada: The Resurgence of Indigenous Law*, First Thus edition. Toronto: University of Toronto Press, Scholarly Publishing Division.

Bowie R (2013) Indigenous self-governance and the deployment of knowledge in collaborative environmental management in Canada. *Journal of Canadian Studies/Revue d'études canadiennes* 47(1): 91–121.

Boyd DR (2017) *The Rights of Nature: A Legal Revolution That Could Save the World*. Toronto, ON: ECW Press.

Carcross/Tagish First Nation. (2006) *Book Two: Government of Carcross/Tagish Traditional Family Beliefs and Practices*. Carcross, YT: Carcross/Tagish First Nation.

Carcross/Tagish First Nation. (2009) *Carcross/Tagish First Nation Traditional Knowledge Policy*. Carcross, YT: Carcross/Tagish First Nation.

Champagne Aishihik First Nation (2013) CAFN draft water strategy. Available at: http://poliswaterproject.org/ (accessed 28 July 2013).

Chen C, MacLeod J and Neimanis A (eds) (2013) *Thinking with water*. Montreal, QC: McGill-Queen's Press.

Collard R-C, Dempsey J and Sundberg J (2015) A manifesto for abundant futures. *Annals of the Association of American Geographers* 105(2): 322–330.

Corntassel J (2003) Who is indigenous? 'Peoplehood' and ethnonationalist approaches to rearticulating indigenous identity. *Nationalism and Ethnic Politics* 9(1): 75–100.

Coulthard GS (2014) *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. Minneapolis: University of Minnesota Press.

Coulthard GS and Simpson LB (2016) Grounded normativity/place-based solidarity. *American Quarterly* 68(2): 249–255.

Craft A (2014) *Anishinaabe Nibi Inaakonigewin Report: Reflecting the water laws research gathering conducted with Anishinaabe Elders, 20–23 June 2013*. Manitoba: University of Manitoba.

Craft A (2017) Giving and receiving life from Anishinaabe nibi inaakonigewin (our water law) research. In: Thorpe J, Rutherford S and Sandberg LA (eds) *Methodological Challenges in Nature-Culture and Environmental History Research*. London: Routledge, pp. 105–119.

Cruikshank J (2005) *Do Glaciers Listen?: Local Knowledge, Colonial Encounters, and Social Imagination*. Canada: University of British Columbia Press.

Cruikshank J (2012) Are glaciers 'good to think with'? Recognising indigenous environmental knowledge 1. *Anthropological Forum* 22(3): 239–250.

Daigle M (2016) Awawanenitakik: The spatial politics of recognition and relational geographies of Indigenous self-determination. *The Canadian Geographer/Le Géographe canadien* 60(2): 259–269.

D'Andrea A (2012) Legal pluralism and customary water resources management in Guatemala. *Water International* 37(6): 683–699.

De la Cadena M (2010) Indigenous cosmopolitics in the Andes: Conceptual reflections beyond "politics". *Cultural Anthropology* 25(2): 334–370.

De la Cadena M (2015) *Earth Beings: Ecologies of Practice Across Andean Worlds*. USA: Duke University Press.

Descola P (2013) *Beyond Nature and Culture*. Chicago, IL: University of Chicago Press.

Edwards K (2009) *Dictionary of Tlingit*. USA: Sealaska Heritage Institute.

Environment Yukon, Water Resources Branch. (2014) *Water for Nature, Water for People: Yukon Water Strategy and Action Plan*. Whitehorse, YT: Environment Yukon.

Forsyth T and Levidow L (2015) An ontological politics of comparative environmental analysis: The green economy and local diversity. *Global Environmental Politics* 15(3): 140–151.

Government of Canada (1994) Yukon First Nations Self-Government Act. S.C. 1994, c. 35. Ottawa: Government of Canada.

Government of Canada (1998a) *Tr'ondëk Hwëch'in Final Agreement among Tr'ondëk Hwëch'in First Nation and Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada (1998b) *Tr'ondëk Hwëch'in Self-Government Agreement among Tr'ondëk Hwëch'in First Nation, Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada (2003a) *Kluane First Nation Final Agreement among Kluane First Nation, Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada (2003b) *Kluane First Nation Self-Government Agreement among Kluane First Nation, Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada (2005a) *Carcross/Tagish First Nation Final Agreement among Carcross/Tagish First Nation, Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada (2005b) *Carcross/Tagish First Nation Self-Government Agreement among Carcross/Tagish First Nation, Her Majesty the Queen in Right of Canada and the Government of the Yukon*. Ottawa, Canada: Minister of Public Works and Government Services Canada.

Government of Canada, Council for Yukon Indians and Government of the Yukon (1993) *Yukon Umbrella Final Agreement*. Ottawa, Canada: Minister of Indian Affairs and Northern Development.

Groenfeldt D (2013) *Water Ethics: A Values Approach to Solving the Water Crisis*. London: Routledge.

Gupta J, Hildering A and Misiedjan D (2014) Indigenous people's right to water under international law: A legal pluralism perspective. *Current Opinion in Environmental Sustainability* 11: 26–33.

Haraway DJ (2003) *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago, IL: Prickly Paradigm Press.

Harris L, McKenzie S, Rodina L, et al. (2017) Water justice: Key concepts, debates and research agendas. In: Holifield R, Chakraborty J and Walker G (eds) *The Routledge Handbook of Environmental Justice*. New York, NY: Routledge, pp. 338–349.

Hayman E, Wedge M and James C (2015) Storytelling Water North of the Future HÕen Kas'él'ti Oo (Among the Ragged Lakes): Collaborative Water Research with Carcross/Tagish First Nation, Yukon Territory, Canada. In: Buechler S and Hanson A-MS (eds) *A political ecology of women, water and global environmental change*. London: Routledge, pp. 185–205.

Hoogeveen D (2016) Fish-hood: Environmental assessment, critical Indigenous studies, and posthumanism at Fish Lake (Teztan Biny), Tsilhqot'in territory. *Environment and Planning D: Society and Space* 34(2): 355–370.

Hunt S (2014) Ontologies of Indigeneity: The politics of embodying a concept. *Cultural Geographies* 21(1): 27–32.

John B (1997) *Nee'aaneek. Upper Tanana Glossary. Scottie Creek Dialect*. Beaver Creek, YT: Upper Tanana Cultural Society.

Kluane First Nation (2012) Kluane First Nation Traditional Knowledge Policy (Draft). Burwash Landing, YT: Kluane First Nation.

Kohn E (2007) How dogs dream: Amazonian natures and the politics of transspecies engagement. *American ethnologist* 34(1): 3–24.

LaBoucane-Benson P, Gibson G, Benson A, et al. (2012) Are we seeking Pimatisiwin or creating Pomewin? Implications for water policy. *International Indigenous Policy Journal* 3(3): 1–22.

Li T (2007) *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham: Duke University Press.

Linton J (2010) *What is water?: the history of a modern abstraction*. Nature/history/society series. Vancouver: UBC Press.

Linton J and Budds J (2014) The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum* 57: 170–180.

Manson J (2015) *Relational Nations: Trading and Sharing Ethos for Indigenous Food Sovereignty on Vancouver Island*. Canada: University of British Columbia. Available at: https://open.library.ubc.ca/cIRcle/collections/24/24/items/1.0223167 (accessed 25 April 2016).

McClellan C (1975) *My Old People Say: An Ethnographic Survey of Southern Yukon Territory*. Ottawa: National Museum of Man.

McCreary TA and Milligan RA (2014) Pipelines, permits, and protests: Carrier Sekani encounters with the Enbridge Northern Gateway Project. *Cultural Geographies* 21(1): 115–129.

McGregor D (2012) Traditional knowledge: Considerations for protecting water in Ontario. *The International Indigenous Policy Journal* 3(3): 1–21.

McGregor D (2014) Traditional knowledge and water governance: The ethic of responsibility. *AlterNative: An International Journal of Indigenous Peoples* 10(5): 493–507.

Merrey DJ (2009) African models for transnational river basin organisations in Africa: An unexplored dimension. *Water Alternatives* 2(2): 183.

Nadasdy P (1999) The politics of TEK: Power and the 'integration' of knowledge. *Arctic Anthropology* 36(1/2): 1–18.

Nadasdy P (2003a) *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon*. Vancouver: UBC Press.

Nadasdy P (2003b) Reevaluating the co-management success story. *Arctic* 56(4): 367–380.

Nadasdy P (2007) The gift in the Animal: The ontology of hunting and human-animal sociality. *American Ethnologist* 34(1): 25–43.

Nadasdy P (2012) Boundaries among Kin: Sovereignty, the modern treaty process, and the rise of ethno-territorial nationalism among Yukon First Nations. *Comparative Studies in Society and History* 54(3): 499–532.

Nadasdy P (2017) *Sovereignty's Entailments: First Nation State Formation in the Yukon*. Toronto: University of Toronto Press, Scholarly Publishing Division.

Napoleon V (2013) Thinking about Indigenous legal orders. In: Provost R and Sheppard C (eds) *Dialogues on Human Rights and Legal Pluralism* (Ius Gentium: Comparative Perspectives on Law and Justice). Dordrecht: Springer, pp. 229–245.

Napoleon V and Friedland H (2016) An inside job: Engaging with Indigenous legal traditions through stories. *McGill Law Journal/Revue de droit de McGill* 61(4): 725–754.

Natcher DC and Davis S (2007) Rethinking devolution: Challenges for aboriginal resource management in the Yukon Territory. *Society & Natural Resources* 20(3): 271–279.

Natcher DC, Davis S and Hickey CG (2005) Co-management: Managing relationships, not resources. *Human Organization* 64(3): 240–250.

Norman ES (2012) Cultural politics and transboundary resource governance in the Salish sea. *Water Alternatives* 5(1): 138–160.

OED Online (2015) respect, n. Oxford University Press. Available at: www.oed.com/view/Entry/163779 (accessed 18 February 2016).

Perreault T (2013) Dispossession by accumulation? Mining, water and the nature of enclosure on the Bolivian Altiplano. *Antipode* 45(5): 1050–1069.

Phare M-AS (2009) *Denying the Source: The Crisis of First Nations Water Rights*. Vancouver: Rocky Mountain Books.

Powell DE and Curley A (2008) K'e, Hozhó, and non-governmental politics on the Navajo Nation: Ontologies of difference manifest in Environmental Activism. *Anthropological Quarterly* 81: 17–58.

Rifkin M (2010) *When did Indians Become Straight?: Kinship, the History of Sexuality, and Native Sovereignty*. New York, NY: Oxford University Press.

Ritter J (1978) Han Gwich'in Athapaskan Noun Dictionary. Available at: https://uafanlc.alaska.edu/Online/HN976R1978b/ritter-1978-han_dictionary.pdf (accessed 1 August 2015).

Ritter J (2012) Northern Tutchone Dictionary. Na-Cho Nyak Dun. Available at: http://www.nndfn.com/wp-content/uploads/2016/01/Dictionary-April-2017.pdf

Salmón E (2000) Kincentric ecology: Indigenous perceptions of the human–nature relationship. *Ecological Applications* 10(5): 1327–1332.

Salmond A (2014) Tears of Rangi: Water, power, and people in New Zealand. *HAU: Journal of Ethnographic Theory* 4(3): 285–309.

Salvarredy-Aranguren MM, Probst A, Roulet M, et al. (2008) Contamination of surface waters by mining wastes in the Milluni Valley (Cordillera Real, Bolivia): Mineralogical and hydrological influences. *Applied Geochemistry* 23(5): 1299–1324.

Sam MG and Armstrong J (2013) Indigenous water governance and resistance: A Syilx perspective. In: Wagner JR (ed.) *The Social Life of Water*. Oxford, UK: Berghahn Books, pp. 239–254.

Schmidt JJ and Shrubsole D (2013) Modern water ethics: Implications for shared governance. *Environmental Values* 22(3): 359–379.

Simms R, Harris L, Joe N, et al. (2016) Navigating the tensions in collaborative watershed governance: Water governance and Indigenous communities in British Columbia, Canada. *Geoforum* 73: 6–16.

Simpson A (2011) Settlement's secret. *Cultural Anthropology* 26(2): 205–217.

Simpson A (2014) *Mohawk Interruptus: Political Life Across the Borders of Settler States*. Durham, NC, USA: Duke University Press.

Simpson LR (2004) Anticolonial strategies for the recovery and maintenance of indigenous knowledge. *American Indian Quarterly* 28(3/4): 373–384.
Smith LT (1999) *Decolonizing Methodologies: Research and Indigenous Peoples*. New York: Zed Books.
Stevenson MG (2006) The possibility of difference: Rethinking co-management. *Human Organization* 65(2): 167–180.
Strang V (2004) *The Meaning of Water*. Oxford/New York: Berg.
Sundberg J (2011) Diabolic Caminos in the desert and cat fights on the Río: A posthumanist political ecology of boundary enforcement in the United States–Mexico borderlands. *Annals of the Association of American Geographers* 101(2): 318–336.
Sundberg J (2014) Decolonizing posthumanist geographies. *Cultural Geographies* 21(1): 33–47.
Tallbear K (2011) Why interspecies thinking needs indigenous standpoints. Available at: www.culanth.org/fieldsights/260-why-interspecies-thinking-needs-indigenous-standpoints (accessed 2 April 2016).
Tlen DL (1993) *Kluane Southern Tutchone Glossary* (*English to Southern Tutchone*). 1st ed. (Occasional Papers of the Northern Research Institute – Monography #1). Whitehorse, YT: Yukon College.
Todd ZC (2014) Fish pluralities: Human–animal relations and sites of engagement in Paulatuuq, Arctic Canada. *Études/Inuit/Studies* 38(1–2).
Todd ZC (2016) An indigenous feminist's take on the ontological turn: 'Ontology' is just another word for colonialism. *Journal of Historical Sociology* 29(1): 4–22.
Todd ZC (2017) *Fish Against Borders: Imagining Fish, Oil, Water and Métis Law Beyond the Settler State*. Vancouver: University of British Columbia.
Tr'ondëk Hwëch'in First Nation. (2012) *Tr'ondëk Hwëch'in Traditional Knowledge Policy*. Dawson, YT: Tr'ondëk Hwëch'in Government.
Tr'ondëk Hwëch'in First Nation (2016) Tr'ondëk Hwëch'in Heritage Act. Available at: www.trondek.ca/downloads/ (accessed 4 November 2017).
Tuck E and Yang KW (2012) Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society* 1(1): 1–40.
Wagner JR (2013) *The Social Life of Water*. Oxford: Berghahn Books.
Watts V (2013) Indigenous place-thought and agency amongst humans and non-humans (First woman and sky woman go on a European world tour!). *Decolonization: Indigeneity, Education & Society* 2(1): 20–34.
Whatmore S (2002) *Hybrid Geographies: Natures, Cultures, Spaces*. Thousand Oaks, CA: Sage.
White G (2009) Cultures in collision: Traditional knowledge and Euro-Canadian governance processes in northern land-claim boards. *Arctic* 59(4): 401–414.
Wilson NJ (2014) Indigenous water governance: Insights from the hydrosocial relations of the Koyukon Athabascan village of Ruby, Alaska. *Geoforum* 57: 1–11.
Wilson NJ (2018) *"More Precious Than Gold": Indigenous Water Governance in the Context of Modern Land Claims in Yukon*. Vancouver: University of British Columbia.
Wilson NJ, Walter MT and Waterhouse J (2015) Indigenous knowledge of hydrologic change in the Yukon River Basin: A case study of Ruby, Alaska. *Arctic* 68(1): 93–106.
Wilson S (2009) *Research Is Ceremony: Indigenous Research Methods*. Winnipeg, MB: Fernwood Publishing Co., Ltd.
Wolfe P (2006) Settler colonialism and the elimination of the native. *Journal of Genocide Research* 8(4): 387–409.
Yates JS, Harris LM and Wilson NJ (2017) Multiple ontologies of water: Politics, conflict and implications for governance. *Environment and Planning D: Society and Space* 35(5): 797–815.
Yukon Legislative Counsel (2003) *Yukon Waters Act*. Yukon Territory: Yukon Government.
Zwarteveen M, Roth D and Boelens R (2005) Water rights and legal pluralism: Beyond analysis and recognition. In: Roth D, Boelens R and Zwarteveen M (eds) *Liquid Relations: Contested Water Rights and Legal Complexity*. New Brunswick: Rutgers University Press, pp. 254–268.