



Article

Indigenous Processes of Consent: Repoliticizing Water Governance through Legal Pluralism

Deborah Curran

Faculty of Law and School of Environmental Studies, University of Victoria, Victoria, BC V8W 2Y2, Canada; dlc@uvic.ca; Tel.: +1-250-853-3105

Received: 1 November 2018; Accepted: 12 March 2019; Published: 19 March 2019



Abstract: While international instruments and a few state governments endorse the "free, prior and informed consent" of Indigenous peoples in decision-making about the water in their traditional territories, most state water governance regimes do not recognize Indigenous water rights and responsibilities. Applying a political ecology lens to the settler colonialism of water governance exposes the continued depoliticizing personality of natural resources decision-making and reveals water as an abstract, static resource in law and governance processes. Most plainly, these decision-making processes inadequately consider environmental flows or cumulative effects and are at odds with both Indigenous governance and social-ecological approaches to watershed management. Using the example of groundwater licensing in British Columbia, Canada as reinforcing colonialism in water governance, this article examines how First Nations are asserting Indigenous rights in response to natural resource decision-making. Both within and outside of colonial governance processes they are establishing administrative and governance structures that express their water laws and jurisdiction. These structures include the Syilx, Nadleh Wut'en and Stellat'en creating standards for water, the Tsleil-Waututh and Stk'emlúpsemc te Secwépemc community assessments of proposed pipeline and mining facilities, and the First Nations of the Nicola Valley planning process based on their own legal traditions. Where provincial and federal environmental governance has failed, Indigenous communities are repoliticizing colonial decision-making processes to shift jurisdiction towards Indigenous processes that institutionalize responsibilities for and relationships with water.

Keywords: water governance; politics; law; decision-making processes; governmentalities; UNDRIP; free; prior and informed consent; FPIC; groundwater; environmental flows; environmental assessment

1. Introduction

Conflicts between nation state governments and Indigenous peoples often manifest as disputes over water governance [1–4]. Two recent and high profile examples from North America that have attracted international attention are the clashes over approval of pipelines across the traditional territories of multiple Indigenous communities. The Standing Rock Sioux, whose reservation spans North and South Dakota in the United States, oppose the Dakota Access Pipeline in multiple fora, including through occupation of the pipeline route [5] and in court [6]. In Canada, the Tsleil-Waututh and other First Nations along the Trans Mountain pipeline route between the provinces of Alberta and British Columbia have opposed the twinning of the pipeline due to potential impacts on the environment [7], and specifically water [8], also challenging federal government approval of the environmental assessment in court [9].

In both of these conflicts the nation state governments—at the federal, state or provincial levels—maintain that they consulted with the Indigenous communities through state-initiated processes such as environmental assessment. In turn, the Indigenous communities articulate the governance standard as one of "free, prior and informed consent", a component of the United Nations Declaration on the

Water 2019, 11, 571 2 of 16

Rights of Indigenous Peoples (the UN Declaration or UNDRIP) [10], that reflects Indigenous people's laws and water governance responsibilities that predate colonization. These tensions about Indigenous sovereignty and the right to a healthy ecology manifest as issues of consultation and consent: The state depoliticizes decisions about water by directing them into administrative processes like environmental assessment while Indigenous communities are repoliticizing water governance by creating evaluation processes that reflect their own legal traditions and standards.

The framework of settler colonialism—the way that colonization occurs across a geographic landscape through the control of land and people [11]—channels Indigenous rights challenges to decision-making about the environment into state-based administrative and legal processes. These processes define how Indigenous peoples can interact with water governance by a state or government within their traditional watersheds and establish the boundaries or scope of the conversation. State processes, such as environmental impact assessment, may mandate consultation with members of Indigenous communities about the potential impacts of a proposed project on their ways of life, but is typically limited to evaluating the project apparatus and not cumulative or broader watershed impacts. More fundamentally, state-prescribed environmental and natural resource decision-making processes do not provide a fora within which Indigenous communities can address the method of governance itself, and how their own laws, governance practices and rights are expressed.

Participation in state consultation processes creates legitimacy in, and reliance on, those activities that serves to depoliticize the decisions at issue [12,13]. Problems with the scope and scale of governance are channeled through narrowly-defined administrative practices, which validates the process of decision-making while controlling the means by which opposition to a project is expressed [14]. In effect, consultation can channel and dissipate dissent, thus depoliticizing these processes and rendering them administrative exercises rather than addressing the underlying issues about who is making decisions and has authority to govern a watershed. To repoliticize, therefore, is to break out of state-sanctioned consultation processes to challenge the very basis of decision-making. It is to affirm the complex, multiscalar and political nature of environmental governance. In Mouffe's view, debate in the public sphere and a consideration of alternatives are required elements of repoliticization [15] (p. 147). Therefore, the term repoliticizing in this context refers to Indigenous communities rejecting state processes and creating their own interventions in a public way to shift the authority for and jurisdiction over water governance.

Water governance scholars are increasingly exploring the necessity of including traditional knowledge and values in water governance, and identify the importance of enriching ontological understandings about water and socio-ecological relationships in decision-making about water [16] (pp. 216–217) [17–19]. However, the focus on using traditional knowledge and values as inputs to governance processes can uncritically accede to state frameworks of decision-making [20,21]. Von der Porten et al. caution against using Indigenous knowledge systems as an input into Eurocentric decision-making processes [22]. Water governance conflicts cannot be resolved by greater consideration of traditional knowledge or Indigenous worldviews without addressing the locus of decision-making and attending to its depoliticizing tendencies.

Indigenous opposition to environmental decision-making is a challenge to the settler colonial basis of water governance and the state's assertion of authority to make unilateral decisions about traditional territories [23,24]. While the state may take note of customary or Indigenous water rights, colonial water laws—enacted by the various levels of governments of nation states—are presumed to have authority [25–27]. In this context, Indigenous peoples are restating their inherent legal and governance authority [28–30]. This authority predates settler law and, in many places, continues to operate but at a scale and with a level of transparency that is not obvious to public and state processes [28,31].

Indigenous laws are place-based [23] (p. 202) and take as their starting point a healthy environment [16] (p. 15). Borrows links the reconciliation between state and Indigenous peoples with reconciling with the

Water 2019, 11, 571 3 of 16

earth [32]. Indigenous laws and perspectives embody a concern for the integrity of the entire connected environment [33,34], not just a small portion of a watershed where a project is located.

These statements of Indigenous jurisdiction and calls for ecological governance occur contemporarily in the context of the UN Declaration or UNDRIP, which sets out principles for redressing the structures of colonization and lifting up inherent Indigenous jurisdiction. However, one standard, that of free prior and informed consent, is the element of the UN Declaration that Indigenous peoples have adopted most strongly as the basis for state-involved activities on their traditional territories (Article 32).

Both Indigenous peoples and some colonial governments have committed to implementing the UN Declaration. The Government of Canada removed its permanent objector status to the UNDRIP in 2016 [35,36]. In addition, the Province of British Columbia supported the adoption of the UN Declaration in 2017 [37], and expressions of this commitment began emerging soon after [38]. For example, the provincial government is requiring companies with aquaculture licenses to obtain the consent of First Nations in whose traditional territories fin fish net pen facilities operate before the province will renew licenses that expire in 2021 [39].

While the principle of free, prior and informed consent has received significant attention [40–43], scholars and others have not deeply addressed its governance implications in legally pluralistic contexts where Indigenous legal orders operate alongside or in priority to state legal systems [44–48]. Even in the Arctic, where modern land claims establish co-management structures that incorporate collaborative or consensus decision-making [49,50], decisions are often application-driven in response to development proposals.

The purpose of this article is to highlight contemporary disjunctures between state water governance processes that reinforce settler colonialism and Indigenous legal processes that incorporate free, prior and informed consent. While state governments may adopt the language of free, prior and informed consent, they continue to use the same administrative processes of consultation that depoliticize water governance. In contrast, Indigenous communities are repoliticizing decisions that affect watershed health and are establishing their own processes of consent as appropriate expressions of the UN Declaration in practice.

Within the context of fragmented water governance in Canada, the example of the new groundwater licensing regime in British Columbia, an extension of settler colonial jurisdiction, is contrasted with Indigenous initiatives that circumvent state-initiated and narrowly defined water and natural resource governance processes. Relying on their own laws and procedures, Indigenous communities are repoliticizing water governance by using the principle of free, prior and informed consent to reject proposals for natural resources development and create their own water management and governance frameworks based on Indigenous legal traditions. I use the term Indigenous in this article as meaning the peoples who governed across territories before European settlers arrived in what is now known as the nation state of Canada. Canada's constitution defines "aboriginal peoples of Canada" as Indian, Inuit and Metis peoples [51] (s 35), and that term, therefore, arises from state or colonial law. The terms state or colonial law refer to provincial and federal Canadian law, which is in contrast to the Indigenous law and legal orders of the Indigenous peoples across Canada. Finally, the term First Nation refers to the political organizations that represent groups of Indigenous peoples in their interactions with the state.

2. Fractured Governance

As with many countries around the world [16,52], the settler colonialism critique maps onto the political ecology of water governance in Canada. While settler colonialism is the process by which Europeans took over territory and attempted to replace Indigenous peoples [53], political ecology focuses on the economic, political and social forces that significantly determine ecological outcomes [54,55]. Not solely a matter of science, ecosystem health depends on power over decision-making and control over the activities in a watershed, where scale is important [56] and links to decolonization are beginning [57]. The political ecology of water governance, therefore, addresses the confluence of relationships, or "hydrosocial

Water 2019, 11, 571 4 of 16

territories" [58], that exert power and influence decisions about water. The critique of settler colonialism and the political ecology of water both highlight structures of inequality: who has control over decision making and the ecological outcomes of those decisions, particularly in relation to Indigenous communities who rely on and have a relationship with specific waterbodies.

In Canada, water governance has focused almost exclusively on authorizing water use, with little attention given to the underlying ecological conditions of watersheds [59]. This pro-diversion bias manifests in "little to nothing being done on EFN" [environmental flow needs] [60] (p. iii), both in terms of scientific understanding and enforceable regulation [61,62]. The lack of science on watershed function has resulted in over-allocation in some areas and no ability in law to retract or amend existing licensed allocations [63]. There is little adaptive capacity in water licensing regimes in Canada [64], which provincial governments are just starting to address [63,65].

The absence of a nuanced ecological context makes environmental governance an exercise in reinforcing the pro-diversion focus of water law. Decision-making occurs when a project or application triggers an evaluation of potential impacts. There are no fora through which to address cumulative effects on a watershed scale or changing ecological conditions. Governance manifests as administrative allocation decisions that lack oversight of their systemic ecological and legal implications, with this critique being more pronounced regarding water use for oil and gas activities [66–68].

These ecologically inadequate water governance regimes map onto settler colonialism in two primary ways that serve to further depoliticize decisions about water. The first relates to the connection between healthy ecological systems, particularly hydrological, and the conditions necessary for the exercise of aboriginal rights and Indigenous laws. The ability to practice aboriginal rights such as fishing, hunting and gathering are predicated on functioning ecosystems. Absent an aboriginal right to water that secures the underlying ecological basis of other aboriginal rights, those other rights are subject to erosion at a watershed scale when natural resource-specific decision-making occurs on a case-by-case basis.

The second obvious way that the political ecology of water governance in Canada maps onto settler colonialism is the depoliticization of governance through the framework of aboriginal rights. Since 1982, the Canadian Constitution has "recognized and affirmed" aboriginal and treaty rights [69] (s 35). Courts have interpreted the purpose of this recognition as the "reconciliation of the preexistence of Aboriginal societies with the sovereignty of the Crown" [70] (para 31) [71] (para 186]. However, 35 years of jurisprudence has evolved the practice of reconciliation between state governments and First Nations into one largely of procedural consultation and not substantive outcomes. While courts adjure that reconciliation should occur through negotiated settlements [71] (para 186), its daily framework is one of the Crown or state having a duty to "consult and accommodate" First Nations [72] (paras 20–35), [73] (paras 54, 63). The federal and provincial governments must justify activities that infringe aboriginal rights [74] (para 1109), [75] (para 119).

Most of the contemporary court decisions on aboriginal rights are limited to asking whether or not the Crown has fulfilled its procedural duty to consult and accommodate, and accept impacts on or infringement of aboriginal rights as justified [76–78]. Accommodation often takes the form of economic accommodation through impact benefit agreements [79,80], and provincial jurisdiction for land and water governance is relatively unconstrained [81,82] (para 50) except in a few unique areas such as the Tsilhqot'in Nation's aboriginal title lands [75,83] on the island archipelago of Haida Gwaii [84], or in the north [49].

The critique of aboriginal rights as a procedural framework for reconciliation spans from legal to Indigenous resurgence scholars. Evaluating how Canadian courts have developed the jurisprudence of aboriginal rights, Borrows notes their constrained interpretation of the historic evolution of aboriginal rights and how it is out of step with other areas of constitutional law [85] (pp. 129–131). Scholars' advocating sovereignty identify the "neocolonial politics of reconciliation" [86] (p. 110) as deepening settler colonialism [87] (p. 43), including through channeling dissent into consultation processes [29] (pp. 204–209).

Water 2019, 11, 571 5 of 16

While consultation is clearly not consent [88], there is no court identified nor proactive statutory acknowledgement of Indigenous water rights in Canada [89]. Likewise, historic and modern treaties either do not address water rights or governance, or fit treaty rights to water into the state allocation system [63]. This is in contrast to the United States where, since 1908, courts have recognized federal Indian reserved water rights with a priority date based on the creation of land reservations for tribes [90,91], even if they have not resulted in the availability of sufficient useable water for those communities [92]. Modernized water laws in Canada, such as the new *Water Sustainability Act* (WSA) in British Columbia, continue to assert state ownership and governance authority in the "property in and right to use" fresh water [93] (s 5).

In this context, water governance conflicts escalate as consultation on water license applications or environmental assessments are the only fora through which to address concerns about cumulative effects, lack of environmental data, or aboriginal rights [94,95]. The public and political concept of free, prior and informed consent has not infiltrated these administrative processes. A contemporary manifestation of these characterizing weaknesses of water governance regimes in Canada—lack of meaningful ecological baseline for water use and failure to acknowledge Indigenous rights to water—is the recent groundwater licensing exercise in British Columbia.

3. Example: Groundwater Licensing Under the Water Sustainability Act

British Columbia became one of the last jurisdictions in North America to mandate groundwater licensing in 2016 when it brought the WSA into force by enacting the *Groundwater Protection Regulation* [93] (s 219), [96]. The context for groundwater regulation in the most westernmost province in Canada is one of insufficient groundwater data such that scientists have inferred aquifer vulnerability using a "conservative approximation of groundwater use" because most volumes are unreported [62] (pp. 4–5, 41–43). Even with this conservative approach, Forstner et al. estimated that almost 20% of aquifers are stressed, most of which lie in the driest and most populous regions of the province with concentrated agricultural and other groundwater uses (p. 74). At the same time, while the provincial environmental flow needs policy contemplates groundwater, it does not assist decision-makers with evaluating aquifer impacts [97] (p. 6).

The strengths of the WSA are its linking ecological systems through law, in this case requiring the consideration of impacts to surface water in watercourses and connected groundwater in aquifers. There is also benefit to overriding the blunt common law "right of capture" regime - which ties virtually unrestricted groundwater use to overlying property rights - with more specific statutory regulation [98] (pp. 367–8). However, the province chose to insert existing groundwater use into the historic surface water licensing system and give priority to groundwater licenses based on the date of the first use of water. This approach reinforces colonialism in water governance. The state did not acknowledge Indigenous interests in water and governance of their traditional territories, and First Nations are still consigned to the "consultation and accommodation" processes. As this consultation occurs on a license-by-license basis, there is no forum in which each First Nation can address cumulative impacts or water governance.

As a starting point, the WSA confirmed the pre-existing surface water license regime that relies on historic licensing to determine priority for water use amongst users. Called prior allocation, the "first in time, first in right" (FITFIR) regime pin points the seniority of water use as of the date the province granted a license (s 22). As with other FITFIR regimes around the world, more senior water license holders with older rights can continue to use their allocation of water in times of shortage and more junior water rights holders on the same system must cut back or cease taking water. The most senior water rights holder can continue to use their full allocation in law, subject to the WSA, regulations, and conditions in the license or administrative orders (s 8).

Acknowledging the connection between surface and groundwater (see, for example, sections 15 on environmental flows, 22 relating to seniority of water rights, or 46 dealing with introducing foreign matter into a stream), the WSA establishes the legal structure for the complex task of inserting

Water 2019, 11, 571 6 of 16

existing and new non-domestic groundwater uses into the FITFIR system that had previously only applied to the taking of surface water. Making it an offence to divert water from an aquifer without a license [s 6(1)], the WSA permits those who are currently using groundwater to continue to do so but requires them to apply for a license when told to (s 140) while exempting domestic users from obtaining a license [s 6(4)]. Thus, when the provincial government brought the *Water Sustainability Regulation* into force in 2016, it directed all non-domestic users to apply for groundwater licenses by 2019 [99] [s 55(1)], which gave them 3 years to apply for a license. A decision-maker may direct that an applicant for a groundwater license give notice to the affected license holders, riparian owners and landowners [93] (s 13). The WSA does not specify any process for First Nations.

The WSA explicitly acknowledges the difference between existing groundwater use and new groundwater use by mandating that decision-makers consider the impact of groundwater licensing decisions on surface water and environmental flow needs for new licenses where an aquifer is hydrologically connected to surface water (s 15). However, the *Water Sustainability Regulation* exempts existing groundwater user applicants from that same scrutiny [s 55(4)]. The WSA also protects existing groundwater uses by requiring provincial decision-makers to consider an application even where regulations designate an aquifer as having insufficient water in it [s 135(3(b)].

The final piece of the groundwater licensing regime's unique treatment of existing groundwater users establishes a license priority based on the time of first use. Existing non-domestic groundwater users obtain a license with a date of priority that is the "person's date of first use in relation to the diversion and use of water from the aquifer" [99] [s 55(5)], [93] [s 14(3)]. The new law inserts existing groundwater users into the FITFIR surface water license priority regime. In effect, groundwater users will take precedent over both surface and groundwater users if they started using water earlier than other licensees.

Accepting, as-of-right, existing groundwater use into the provincial water license system raises several water governance issues. For existing surface water licensees, they could be faced with being junior to new groundwater licensees, and thus, have a lower priority position in times of water shortage. From a more systemic perspective, the provincial government is assuming that existing groundwater use is sustainable and that aquifers can supply existing users at current rates. There is no cumulative effects analysis for the water balance in a watershed or in an aquifer.

From the perspective of Indigenous communities, this approach in provincial law to maintaining historic groundwater use and granting groundwater licenses without evaluating cumulative effects or ecological capacity undermines a meaningful evaluation of potential infringement of aboriginal rights and fails to meet any free, prior and informed consent yardstick. In addition, administrative consultation and accommodation with First Nations' pursuant to aboriginal rights occurs on a license-by-license basis, which also avoids systemic challenge to the water governance weaknesses of the groundwater licensing process. Consultation involves the provincial government sending First Nations a groundwater license application, background information and an aquifer classification sheet that may be 20 years old. Based on this information, a First Nation is asked to evaluate whether that particular license will have an impact on their aboriginal rights. Absent an accurate definition of environmental flows and a basic understanding of the interaction between surface waters upon which fish rely and aquifer recharge, as well as a cumulative effects framework for analysis, it is not possible to determine that any groundwater license, as applied for, will not adversely affect aboriginal rights.

Perhaps more fundamentally, the WSA does not acknowledge aboriginal rights to water or provide enhanced government-like status to Indigenous communities over stakeholders or affected parties in water governance. The current manifestation of water governance through the groundwater licensing process echoes the criticisms leveled at the water law reform process. First Nations and First Nations' organizations continually pointed to the need for meaningful engagement and consultation on the legislative proposal for the WSA and underscored that short timelines for providing input do not build effective partnerships for governing the province together [100,101]. First Nation leadership organizations reiterated their call for a framework, such as a memorandum of understanding, through

Water 2019, 11, 571 7 of 16

which First Nations and the province could work together on a government-to-government basis to acknowledge aboriginal rights and title to water in BC, and address the flawed provincial assertion of jurisdiction over water while working towards reconciling responsibilities for water, including groundwater [102–104]. First Nations clearly identified their role in water governance in a legally pluralistic state:

Furthermore, the Province must not assume that it has sole jurisdiction over water, nor that it is the sole authority to delegate management of the water in our traditional territory. Water issues transcend jurisdictional boundaries and are not the responsibility of just one governing body. Despite our prior submission stating that First Nations must be in full partnership with other jurisdictions with an interest in water governance, this approach still continues to be ignored. [105]

Scholarly analysis of the provincial government's multi-stage consultation process on the WSA concluded that the public consultation model used was incapable of addressing the specific concerns of Indigenous communities and privileged existing rights holders [106]. Even if the provincial government was not willing to acknowledge the unique status of Indigenous communities within a prior allocation water regime, First Nations governmental standing within the Canadian state warrants treatment within the WSA as a government-to-government relationship that is qualitatively different than any other water user or stakeholder. While the WSA offers the potential to create new relationships through delegated authority [s 126(c-d)], none of the creative water governance tools in the Act are aimed at Indigenous-Crown or -state affairs.

The experience of these conditions of water governance for Indigenous communities in BC—the disconnect between ecological conditions and real-time decision-making, and continued treatment as a quasi-stakeholder that is consulted on an application-by-application or license-by-license basis without acknowledgement in state law addressing natural resources—has contributed to Indigenous communities renewing their assertions of authority over their lands and waters in their traditional territories in new ways. They are redefining political and governance processes by declaring their own Indigenous laws that mandate ecological and procedural outcomes. They are inserting new governance processes into state administrative activities beyond the narrow mandate of "consultation and accommodation" that serve to repoliticize water governance using the language of consent. They are embracing free, prior and informed consent as an international standard against which they hold Canadian governments, and are, therefore, repoliticizing consultation by adhering to consent as ongoing collaborative governance processes and not a one-time action.

4. Repoliticizing Water Governance Authority

The lack of substance to aboriginal rights and the continued systemic ignorance of Indigenous rights to water—including through groundwater licensing in BC—has contributed to First Nations' adoption of the language of the UNDRIP and free, prior and informed consent. Moving beyond the state-based language of aboriginal rights, Indigenous communities are repoliticizing environmental assessment" and license allocation, which are, fundamentally, water governance decisions. First Nations are asserting Indigenous rights in response to natural resource decision-making. Both within and outside of the colonial governance processes, they are establishing administrative and governance structures that express their water sovereignty and laws and repoliticize the legitimacy of state natural resources decision-making. These structures include environmental flow regulations, community assessments of proposed mining and pipeline facilities, and watershed planning. While taking different approaches, these activities are intended to move these First Nations towards watershed governance processes that incorporate free, prior and informed consent parallel to colonial laws.

The first approach to repoliticizing water governance involves declarations of Indigenous law. First Nations are repositioning their authority beyond state-defined aboriginal rights by relying on the UN Declaration and their own Indigenous legal traditions to declare their expectations for behaviour

Water 2019, 11, 571 8 of 16

and responsive action within their traditional territories. The Okanagan Nation Alliance adopted the Syilx Nation Siwłkw (water) Declaration in 2014 as a statement of their water law [107]. Similar in principle to the Lakota creation story that identifies *Mni Woc'oni* (water of life) and internationalized by the Standing Rock Sioux action to stop a pipeline through their territory in 2018 as "water is life" [108], the Siwłkw (water) Declaration locates water as a relation and as life, recognizing water as the connector of relationships, health and resilience. This places the Syilx people in a position of having duties and responsibilities to ensure siwłkw can maintain all of these relationships (pp. 1–2). The Siwłkw (water) Declaration also points to mismanagement of water by state government, such as overallocation of water through licensing (p. 3), and asserts jurisdiction over the territory:

The Syilx Nation governs our lands and siw kw. Any external process for any proposed use of siw kw or lands within our homelands must be premised on our unextinguished Syilx Aboriginal Title and Rights, which includes the right to decide how the lands, siw kw and resources of our Territory will be used. Any activities within and around our siw kw will be lead by the Syilx Nation and carried out with the participation of Syilx Nation members in accordance with Syilx laws, customs and practices ... The provincial and federal governments do not have jurisdiction or ownership of lands and resources within Syilx Territory. (p. 5)

An application of the Siw¹kw (water) Declaration is the Syilx Nation (as represented through the Okanagan Nation Alliance) project with the Okanagan Basin Water Board and provincial government to define environmental flow needs and critical flows for 19 streams in the Okanagan watershed [109]. In addition to developing new methodologies for environmental flows in the watershed [110,111], the intent is to establish environmental flow needs and critical flows parameters that the provincial government will use in drought management and water licensing decisions [109].

Another example of the application of Indigenous laws is the Yinka Dene 'Uza'hné (hereditary chiefs) of the Nadleh Wut'en and Stellat'en First Nations stating their water laws in their own language and then translating those legal principles into water management policies [112,113]. Proclaimed as "the first aboriginal water management regime" [114], the management policies, as "expression of our living governance and laws" [115] (p. 1), set water quality and quantity parameters for activities in the traditional territories of the Nadleh Wut'en and Stellat'en First Nations. In operation for only two years, staff of these First Nations confirm that the provincial government has taken the standards into account in forestry decisions and incorporated them into permits for mining activities [116]. The background information to the policies indicates that proponents and the provincial government will need to obtain the consent of the Nadleh Wut'en and Stellat'en First Nations, with consent including agreeing to be bound by the policies [114].

The second approach First Nations are taking to repoliticize water governance is by using Indigenous laws and procedures to review projects proposed in their traditional territories. Rather than responding to colonial administrative processes such as environmental assessment, First Nations are evaluating large-scale natural resource projects through their own processes and a lens of free, prior and informed consent. The Tsleil-Waututh Nation adopted a Stewardship Policy in 2009 as part of its "initiatives to restore and rebuild our stewardship role" [117]. Based on Coast Salish legal principles [118] (p. 52), the Stewardship Policy provides direction for governments and proponents on meaningful consultation, the purpose of which is to achieve informed consent (pp. 6, 11). The Tsleil-Waututh Nation used the Stewardship Policy as a framework through which to conduct its own environmental assessment of the Trans Mountain pipeline expansion proposal. This process included evaluating the potential negative impact of the project on natural and cultural resources and, if those impacts did not exceed "Tsleil-Waututh legal limits" [118] (p. 50), then assessing the project's community benefits. In rejecting the proposed project, the Tsleil-Waututh concluded, in part, that:

Water 2019, 11, 571 9 of 16

... if implemented without Tsleil-Waututh consent, the proposal denies Tsleil-Waututh and our future generations control over a critical decision about our territory, in violation of Tsleil-Waututh law. [118] (p. 86)

Similarly, the Stk'emlúpsemc te Secwépemc Nation undertook a community assessment of a mine proposed for their territory. The process involved the Nation exercising its own Indigenous environmental governance by establishing a community assessment panel composed of elected Chiefs and councilors, as well as 26 elders, youth and individuals appointed by families [119]. Based on Secwépemc laws and governance structures, the assessment methods used the principle of "walking on two legs" that relied on both Secwépemc and Western knowledge [119] (p. 3). The assessment report opens with the statement "the Stk'emlúpsemc te Secwépemc Nation (SSN) does not give its free, prior and informed consent to the development of lands and resources at Pipsell (Jacko Lake and Area) for the purposes of the Ajax Mine Project" [119] (p. 1).

The final approach that First Nations are using to repoliticize water governance is taking a collaborative approach to establishing frameworks for comprehensive watershed governance. The Cowichan Watershed Board is a unique partnership between Cowichan Tribes and the regional government to address governance issues, including salmon survival, drought, and flooding and water quality, at a watershed scale in collaboration with other agencies and stakeholders. Working through the Cowichan Basin Water Management Plan and targets for ecological function, the Board recently adopted the Cowichan Tribes principle of *Nutsamatkwsyaay'ustthqa'* ("we come together as a whole to work together to be strong as partners for the watershed") as one of its guiding principles [120] (p. 8). Another example is five First Nations of the Nicola Valley—the Coldwater, Lower Nicola, Nooaitch, Shackan, and Upper Nicola Bands—signing a memorandum of understanding (MOU) with the Province of BC in 2018 committing to undertake a pilot project on watershed management [121]. Notably, the parties acknowledge this MOU as a "government-to-government partnership to develop and pilot a governance structure to sustainably manage water resources within the Nicola Watershed" [121] (p. 2).

The agreement reads as an expression of dual jurisdiction where the Province of BC, a state or colonial government, recognizes the inherent jurisdiction of the First Nations "arising from their respective legal traditions and governance systems" [121] (p. 2). The First Nations view the "new water collaborative governance approaches" as a first step towards reconciliation between their legal jurisdiction and authority, and state jurisdiction (p. 4). The MOU goals contemplate working within three legal traditions—two Indigenous (Nlaka'pamux and Syilx) and one colonial or state (provincial) —to develop and recommend a governance approach for sustainable water management. The MOU identifies a variety of legislative approaches that may inform the government-to-government relationship, but points to Nlaka'pamux and Syilx laws informing those state legal tools (pp. 5–6). Finally, the parties to the MOU also commit to implementing UNDRIP (p. 2).

In repoliticizing water governance, First Nations are bypassing the restrictive framework of consultation and accommodation afforded by aboriginal rights in Canada and asserting their Indigenous laws, rights and governance processes in multiple ways. The Syilx, Nadleh Wut'en and Stellat'en Nations are translating their laws into a Western scientific framework that can interact with state water governance while also repoliticizing provincial government decisions about licenses and authorizations. The repoliticization occurs through establishing publicly accountable parameters for provincial decision-making where the Indigenous communities develop or co-create the framework based on their own laws. As an expression of legal pluralism, the sole authority for environmental flow needs or water quality does not rest with the First Nation or the provincial government, but is accessible to and embedded in hybridized Indigenous-colonial watershed processes.

Repoliticization is also occurring through the practice of Indigenous governance and legal processes in response to proposed natural resource development projects. The Tsleil-Waututh and Stk'emlúpsemc te Secwépemc Nations rejected the state's environmental assessments in favor of their own community assessment processes carried out pursuant to their governance and legal

authority as Coast Salish and Secwépemc peoples. Rather than providing input as a stakeholder to the environmental assessment process or providing a response to a consultation request from state governments, the Nations publicly declared that they did not give their free, prior and informed consent to the proposed projects [122,123]. They relied on international norms for consent and heightened the transparency in the decision-making processes by making their assessments a matter of public debate.

Finally, five Nicola First Nations are repoliticizing water governance by embedding their own laws and expectations about consent in joint water governance processes with the provincial government. They have shifted the jurisdictional foundation upon which a watershed pilot project rests to one that includes both Indigenous and colonial authorities, with a commitment to creating a governance structure to address sustainable water management. This approach clearly surpasses the "consultation and accommodation" framework required under Canadian law and embeds free, prior and informed consent as an implementation goal.

5. Conclusions

Free prior and informed consent is being used as rhetoric and a depoliticizing practice by nation state governments, but is also as a tangible standard by which First Nations are repoliticizing decisions about their territories. In a global context, this repoliticization of water governance by Indigenous peoples is occurring across many spatial and temporal scales. In the United States, Tribes continue to expand the scope of Indian reserved water rights in the context of federal and state law. For example, the case of *Agua Caliente Band of Cahuilla Indians v Coachella Valley Water District* confirmed that the Tribe has federal reserved groundwater rights and a right to use that groundwater that takes precedence over the state's water allocation regime [124]. At the same time, the Standing Rock movement initiated by the Standing Rock Sioux in opposition to the Dakota Access Pipeline is a declaration of free, prior and informed consent and the broader demand for a role for Indigenous communities in water governance. In New Zealand and pursuant to the Treaty of Waitangi created in 1840, a modern expression of that treaty relationship is seen in the legal personhood status awarded to the Whanganui River [125]. The River has its own legal representation in water governance processes as an ancestor of the Maori iwi (Indigenous community).

The language of free, prior and informed consent has provided Indigenous communities in Canada with a common international standard through which they can address failures in water governance such as inadequate attention to ecological conditions like environmental flows and exclusion of Indigenous rights to water. First Nations are adopting free, prior and informed consent as a framework through which to evaluate proposals using their own legal and governance processes. Not only do these Indigenous legal processes repoliticize decisions about water on Indigenous terms, but also transform water governance by integrating Indigenous methodologies [126].

These three types of examples from British Columbia could be labeled by what Yates et al. identify as *ontological conjunctures* where water governance embraces multiple water ontologies [18]. In performance, these expressions of Indigenous law and legal processes challenge state worldviews and practices that manifest as administrative tasks in natural resource decision-making and create space for debate about water governance. They also repoliticize water governance by publicly asserting locally legitimate processes and results. Importantly, Indigenous peoples use these approaches as more than simply stakeholders or "hydrocitizens", which are people living in relation to water [127]. They act as Coast Salish or Secwépemc or Carrier citizens whose laws direct them to take responsibility for the health of their ecosystems for future generations.

While consent is incorporated into Indigenous-lead administrative processes (Nadleh Wut'en and Stellat'en) and evaluation of mining and pipeline proposals (Stk'emlúpsemc te Secwépemc and Tsleil-Waututh), state governments have not incorporated free, prior and informed consent into regular consultation and decision-making processes. The groundwater licensing regime in BC is a clear example of the disjuncture between the state's commitment to free, prior and informed consent and ongoing administrative and legal procedures that continue in the settler colonial tradition.

To overcome the potential for free, prior and informed consent to act as a depoliticizing force, it requires forethought by Indigenous communities about how their Indigenous laws can establish both substantive and procedural standards for activities within their territories and waters. The provincial government's incorporation of the Nadleh Wut'en and Stellat'en First Nations' water quality standards into state permitting processes and the Nicola Bands concurrent Indigenous laws' process for developing a water sustainability plan offers some possibility for the convergence of diverse water ontologies and legal processes.

Funding: This research was funded by the Social Sciences and Humanities Research Council grant number 890-2015-0115 and the Real Estate Foundation of British Columbia grant number 2016-11.

Acknowledgments: Thanks to Oliver Brandes and the Water Sustainability Project team, and Susi Porter-Bopp and Deana Machin of the First Nations Fisheries Council for ongoing dialogue and collaborations.

Conflicts of Interest: The author declares no conflict of interest.

References and Notes

- 1. Januehowski-Hartley, S.; Hilborn, A.; Crocker, K.; Murphy, A. Scientists Stand with Standing Rock. *Science* **2016**, 353, 1506. [CrossRef] [PubMed]
- 2. Cox, S. Breaching the Peace: The Site C Dam and a Valley's Stand against Big Hydro; UBC Press: Vancouver, BC, Canada, 2018.
- 3. Doremus, H.; Tarlock, A.D. *Water War in the Klamath Basin: Macho Law, Combat Biology, and Dirty Politics*; Island Press: Washington, DC, USA, 2008.
- 4. Boelens, R.; Getches, D.; Guevara-Gil, A. (Eds.) *Out of the Mainstream: Water Rights, Politics and Identity*; Earthscan: London, UK, 2010.
- 5. Levin, S. Dakota Access Pipeline: The Who, What and Why of the Standing Rock Protests. *The Guardian*. 3 November 2016. Available online: https://www.theguardian.com/us-news/2016/nov/03/north-dakota-access-oil-pipeline-protests-explainer (accessed on 28 February 2019).
- 6. Young, S. The Sioux's Suits: Global Law and the Dakota Access Pipeline. Am. Indian Law J. 2017, 6, 173–238.
- Kassam, A. Kinder Morgan Pipeline: Canadians Intensify Huge Opposition to Expansion. *The Guardian*.
 December 2016. Available online: https://www.theguardian.com/world/2016/dec/03/canada-kinder-morgan-pipeline-expansion-protest (accessed on 28 February 2019).
- 8. Coldwater Indian Band v Canada (Indian and Northern Affairs) 2017 FCA 199. Available online: https://www.canlii.org/en/ca/fca/doc/2017/2017fca199/2017fca199.html?autocompleteStr=%092017% 20FCA%20199&autocompletePos=1 (accessed on 18 March 2019).
- 9. Tsleil-Waututh Nation v Canada (Attorney General) 2018 FCA 153. Available online: https://decisia.lexum.com/fcacaf/decisions/en/item/343511/index.do?r=AAAAAQAMMjAxOCBmY2EgMTUzAQ (accessed on 18 March 2019).
- 10. United Nations. United Nations Declaration on the Rights of Indigenous Peoples. 1993. Available online: https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenouspeoples.html (accessed on 28 February 2019).
- 11. Pasternak, S. Jurisdiction and Settler Colonialism: Where Do Laws Meet? *Can. J. Law Soc.* **2014**, 29, 145–161. Available online: muse.jhu.edu/articles/551214 (accessed on 27 February 2019). [CrossRef]
- 12. Schilling-Vacaflor, A. Who Controls the Territory and the Resources? Free, Prior and Informed Consent (FPIC) as a Contested Human Rights Practice in Bolivia. *Third World Q.* **2017**, *38*, 1058–1074. [CrossRef]
- 13. Anshelm, J.; Haikola, S.; Wallsten, B. Politicizing Environmental Governance—A Case Study of Heterogeneous Alliances and Juridical Struggles around the Ojnare Forest, Sweden. *Geoforum* **2018**, *91*, 206–215. [CrossRef]
- 14. Dunlap, A.A. "A Bureaucratic Trap:" Free, Prior and Informed Consent (FPIC) and Wind Energy Development in Juchitán, Mexico. *Capital. Nat. Social.* **2017**, 29, 1–21. [CrossRef]
- 15. Mouffe, C. Politics and Passions: The Stakes of Democracy. *Ethical Perspect.* **2002**, *7*, 146–150. Available online: http://www.ethical-perspectives.be/viewpic.php?LAN=E&TABLE=EP&ID=139 (accessed on 27 February 2019). [CrossRef]

16. Marshall, V.; Kirby, M.D. 1939. Overturning Aqua Nullius: Securing Aboriginal Water Rights; Aboriginal Studies Press: Canberra, Australia, 2017.

- 17. Berry, K.; Jackson, S.; Saito, L.; Forline, L. Reconceptualising Water Quality Governance to Incorporate Knowledge and Values: Case Studies from Australian and Brazilian Indigenous Communities. *Water Altern. J.* **2018**, *11*, 40–60.
- 18. Yates, J.S.; Harris, L.M.; Wilson, N.J. Multiple Ontologies of Water: Politics, Conflict and Implications for Governance. *Environ. Plan. Soc. Space* **2017**, *35*, 797–815. [CrossRef]
- 19. Wilson, N.J.; Inkster, J. Respecting Water: Indigenous Water Governance, Ontologies, and the Politics of Kinship on the Ground. *Environ. Plan. E Nat. Space* **2018**, *1*, 516–538. [CrossRef]
- 20. Bryan, M. Valuing Sacred Tribal Waters Within Prior Appropriation. Nat. Resour. J. 2017, 57, 139–182.
- 21. Maclean, K.; Bana Yarralji Bubu Inc. Crossing Cultural Boundaries: Integrating Indigenous Water Knowledge into Water Governance through Co-Research in the Queensland Wet Tropics, Australia. *Geoforum* **2015**, *59*, 142–152. [CrossRef]
- Von der Porten, S.; de Loë, R.E.; McGregor, D. Incorporating Indigenous Knowledge Systems into Collaborative Governance for Water: Challenges and Opportunities. J. Can. Stud. Détudes Can. 2016, 50, 214–243. [CrossRef]
- 23. Pasternak, S. *Grounded Authority: The Algonquins of Barriere Lake against the State*; University of Minnesota Press: Minneapolis, MN, USA, 2017.
- 24. Simms, R.; Harris, L.; Joe, N.; Bakker, K. Navigating the Tensions in Collaborative Watershed Governance: Water Governance and Indigenous Communities in British Columbia, Canada. *Geoforum* **2016**, *73*, 6–16. [CrossRef]
- 25. McNeil, K. Indigenous Land Rights and Self-Government: Inseparable Entitlements. In *Between Indigenous and Settler Governance*; Ford, L., Rowse, T., Eds.; Routledge: New York, NY, USA, 2013; pp. 135–147.
- 26. Rieu-Clarke, A.; Allan, A.; Hendry, S. *Routledge Handbook of Water Law and Policy*; Routledge, Taylor & Francis Group: London, UK, 2017.
- 27. Hollo, E.J. Water Resource Management and the Law; Edward Elgar Publishing: Cheltenham, UK, 2017.
- 28. Borrows, J. Canada's Indigenous Constitution; University of Toronto Press: Toronto, ON, Canada, 2010.
- 29. Manuel, A.; Derrickson, R.M. *The Reconciliation Manifesto: Recovering the Land, Rebuilding the Economy*; James Lorimer and Company Ltd.: Toronto, ON, Canada, 2017.
- 30. Simpson, L.B. *As We Have Always Done: Indigenous Freedom through Radical Resistance*; University of Minnesota Press: Minneapolis, MN, USA, 2017.
- 31. Napoleon, V. Ayook: Gitksan Legal Order, Law, and Legal Theory. Ph.D. Thesis, University of Victoria, Victoria, BC, Canada, 2009.
- 32. Borrows, J. Earth-Bound: Indigenous Laws and Environmental Reconciliation. In *Resurgence and Reconciliation: Indigenous-Settler Relations and Earth Teachings*; Asch, M., Borrows, J., Tully, J., Eds.; University of Toronto Press: Toronto, ON, Canada, 2018.
- 33. Atleo, E.R. *Tsawalk: A Nuu-Chah-Nulth Worldview*; UBC Press: Vancouver, BC, Canada; Toronto, ON, Canada, 2004.
- 34. Ignace, M.; Ignace, R. *Secwépemc People, Land, and Laws*; McGill-Queen's University Press: Montreal, QC, Canada; Kingston, ON, Canada, 2017.
- 35. Lafontaine, T. Canada Officially Adopts UN Declaration on Rights of Indigenous Peoples. *CBC*. 10 May 2016. Available online: https://www.cbc.ca/news/indigenous/canada-adopting-implementing-un-rights-declaration-1.3575272 (accessed on 26 October 2018).
- 36. Indigenous and Northern Affairs Canada—United Nations Declaration on the Rights of Indigenous Peoples. Available online: https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958 (accessed on 26 October 2018).
- 37. 2017 Confidence and Supply Agreement between the BC Green Caucus and the BC New Democrat Caucus. 2017. Available online: http://bcndpcaucus.ca/wp-content/uploads/sites/5/2017/05/BC-Green-BC-NDP-Agreement_vf-May-29th-2017.pdf (accessed on 2 March 2019).
- 38. Province of British Columbia. Draft Principles That Guide the Province of British Columbia's Relationship with Indigenous Peoples. Province of British Columbia 22 May, 2018. Available online: https://news.gov.bc.ca/files/6118_Reconciliation_Ten_Principles_Final_Draft.pdf?platform=hootsuite (accessed on 28 October 2018).

39. Hunter, J.B.C. Fish Farms Will Require Indigenous Consent. *The Globe and Mail*. 19 June 2018. Available online: https://www.theglobeandmail.com/canada/british-columbia/article-bc-fish-farms-will-require-indigenous-consent/ (accessed on 30 October 2018).

- 40. Martin, E.M.W. Free, Prior, and Informed Consent (FPIC) in the Yukon: Established Practice or Untravelled Path? *North. Rev.* **2018**, *47*, 113–134. [CrossRef]
- 41. Southalan, J.; Fardin, J. Free, Prior and Informed Consent: How and from Whom? An Australian Analogue. *J. Energy Nat. Resour. Law* **2018**, 1–24. [CrossRef]
- 42. Laplante, J.; Nolin, C. Consultas and Socially Responsible Investing in Guatemala: A Case Study Examining Maya Perspectives on the Indigenous Right to Free, Prior, and Informed Consent. *Soc. Nat. Resour.* **2014**, 27, 231–248. [CrossRef]
- 43. Lawrence, R.; Moritz, S. Mining Industry Perspectives on Indigenous Rights: Corporate Complacency and Political Uncertainty. *Extr. Ind. Soc.* **2018**, *6*, 41–49. [CrossRef]
- 44. Nosek, G. Re-Imagining Indigenous Peoples' Role in Natural Resource Development Decision Making: Implementing Free, Prior and Informed Consent in Canada through Indigenous Legal Traditions. *Univ. B. C. Law Rev.* **2017**, *50*, 95–160.
- 45. Heiner, M.; Hinchley, D.; Fitzsimons, J.; Weisenberger, F.; Bergmann, W.; McMahon, T.; Milgin, J.; Nardea, L.; Oakleaf, J.; Parriman, D.; et al. Moving from Reactive to Proactive Development Planning to Conserve Indigenous Community and Biodiversity Values. *Environ. Impact Assess. Rev.* 2019, 74, 1–13. [CrossRef]
- 46. Spears, S.A.; Laplante, L.J. Out of the Conflict Zone: The Case for Community Consent Processes in the Extractive Sector. *Yale Hum. Rights Dev. Law J.* **2008**, *11*, 69–116.
- 47. MacDonald, G.G.; Zezulka, G. Understanding Successful Approaches to Free, Prior, and Informed Consent in Canada Part I: Recent Developments and Effective Roles for Government, Industry, and Indigenous Communities; Boreal Leadership Council: Ottawa, ON, Canada, 2015.
- 48. McGee, B. Participation with a Punch: Community Referenda on Dam Projects and the Right to Free, Prior, and Informed Consent to Development. *Water Altern.* **2010**, *3*, 162–184.
- 49. Latta, A. Indigenous Rights and Multilevel Governance: Learning from the Northwest Territories Water Stewardship Strategy. *Int. Indig. Policy J.* **2018**, *9*, 1–22. [CrossRef]
- 50. Herrmann, T.M.; Martin, T. (Eds.) *Indigenous Peoples' Governance of Land and Protected Territories in the Arctic;* Springer International Publishing: Cham, Switzerland, 2016.
- 51. *Constitution Act*, 1867. 30 & 31 Victoria, c. 3 (U.K.). Available online: https://canlii.ca/t/ldsw (accessed on 18 March 2019).
- 52. Ruru, J. Indigenous Restitution in Settling Water Claims: The Developing Cultural and Commercial Redress Opportunities in Aotearoa, New Zealand. *Pac. Rim Law Policy J.* **2013**, 22, 311–352.
- 53. Veracini, L. Settler Colonialism: A Theoretical Overview; Palgrave Macmillan: New York, NY, USA, 2010.
- 54. Robbins, P. Political Ecology: A Critical Introduction, 2nd ed.; J. Wiley & Sons: Malden, MA, USA, 2012.
- 55. Biersack, A. Reimagining Political Ecology: Culture/Power/History/Nature. In *Reimagining Political Ecology*; Biersack, A., Greenberg, J.B., Eds.; Duke University Press: Durham, NC, USA, 2006; pp. 2–40.
- 56. Neumann, R.P. Political Ecology: Theorizing Scale. Prog. Hum. Geogr. 2009, 33, 398–406. [CrossRef]
- 57. Loftus, A. Political Ecology I: Where Is Political Ecology? Prog. Hum. Geogr. 2019, 43, 172–182. [CrossRef]
- 58. Boelens, R.; Hoogesteger, J.; Swyngedouw, E.; Vos, J.; Wester, P. Hydrosocial Territories: A Political Ecology Perspective. *Water Int.* **2016**, *41*, 1–14. [CrossRef]
- 59. Pahl-Wostl, C.; Arthington, A.; Bogardi, J.; Bunn, S.E.; Hoff, H.; Lebel, L.; Nikitina, E.; Palmer, M.; Poff, L.N.; Richards, K.; et al. Environmental Flows and Water Governance: Managing Sustainable Water Uses. *Curr. Opin. Environ. Sustain.* **2013**, *5*, 341–351. [CrossRef]
- 60. Harwood, A.; Girard, I.; Johnson, S.; Locke, A.; Hatfield, T. *Environmental Flow Needs, Approaches, Successes and Challenges—Summary Report*; Canadian Council of Ministers of the Environment: Ottawa, ON, Canada, 2014; Available online: https://www.ccme.ca/files/Resources/water/water_conservation/Environmental% 20Flow%20Needs%20Approaches%20Successes%20and%20Challenges%20-%20Summary%20Report.pdf (accessed on 2 March 2019).
- 61. Nowlan, L. CPR for Canadian Rivers: Law to Protect and Conserve Environmental Flows in Canada. *J. Environ. Law Pract.* **2012**, *23*, 237–286.
- 62. Forstner, T.; Gleeson, T.; Borrett, L.; Allen, D.M.; Wei, M.; Baye, A. Mapping Aquifer Stress, Groundwater Recharge, Groundwater Use, and the Contribution of Groundwater to Environmental Flows for Unconfined Aquifers

- across British Columbia; Water Science Series; WSS2018-04; Province of British Columbia: Victoria, BC, Canada, 2018. Available online: http://a100.gov.bc.ca/appsdata/acat/documents/r54468/WSS-2018-04GWfootprint_1532281350342_2278704448.pdf (accessed on 2 March 2019).
- 63. Curran, D. Leaks in the System: Environmental Flows, Aboriginal Rights, and the Modernization Imperative for Water Law in British Columbia. *Univ. B. C. Law Rev.* **2017**, *50*, 233–291.
- 64. Curran, D. The Adaptation Potential of Water Law in Canada: Changing Existing Water Use Entitlements. *Water Int.* **2019**. forthcoming.
- 65. Curran, D.; Mascher, S. Adaptive Management in Water Law: Evaluating Australian (New South Wales) and Canadian (British Columbia) Law Reform Initiatives. *McGill J. Sustain. Dev. Law* **2016**, *12*, 174–227. [CrossRef]
- 66. Moore, M.-L.; Castleden, H.; Shaw, K. Regional Snapshot Report: Building Capacity to Build Trust: Key Challenges for Water Governance in Relation to Hydraulic Fracturing; Canadian Water Network: Waterloo, ON, Canada, 2015.
- 67. Garvie, K.H.; Shaw, K. Shale Gas Development and Community Response: Perspectives from Treaty 8 Territory, British Columbia. *Local Environ.* **2016**, *21*, 1009–1028. [CrossRef]
- 68. Curran, D. Hydraulic Fracturing in Canada: Regulation by Moratorium or Specialized Agencies in Landscapes of Aboriginal and Treaty Rights. In *Regulating Water Security in Unconventional Gas and Oil;* McKay, J., Lopez-Gunn, E., Buono, R.M., Staddon, C., Eds.; Springer: New York, NY, USA, Forthcoming.
- 69. Constitution Act, 1982. Schedule B to the Canada Act 1982 (UK), 1982, c 11. Available online: http://canlii.ca/t/ldsx (accessed on 13 March 2019).
- 70. *R v Van Der Peet*. [1996] 2 SCR 507, 137 DLR (4th) 289. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/1407/index.do (accessed on 13 March 2019).
- 71. *Delgamuukw v British Columbia*. [1997] 3 SCR 1010; [1997] SCJ No 108. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/1569/index.do (accessed on 13 March 2019).
- 72. *Haida Nation v BC*. 2004 SCC 73. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/2189/index.do (accessed on 13 March 2019).
- 73. *Mikisew Cree First Nation v Canada (Minister of Canadian Heritage)*. 2005 SCC 69. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/2251/index.do (accessed on 13 March 2019).
- 74. *R. v Sparrow.* [1990] 1 SCR 1075, 70 DLR (4th) 385. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/609/index.do (accessed on 13 March 2019).
- 75. *Tsilhqot'in Nation v British Columbia*. 2014 SCC 44. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/14246/index.do (accessed on 13 March 2019).
- 76. Adams Lake Indian Band v BC; 2012 BCCA 333. Available online: https://www.courts.gov.bc.ca/jdb-txt/CA/12/03/2012BCCA0333cor1.htm (accessed on 18 March 2019).
- 77. Ritchie, K. Issues Associated with the Implementation of the Duty to Consult and Accommodate Aboriginal Peoples: Threatening the Goals of Reconciliation and Meaningful Consultation. *UBC Law Rev.* **2013**, *46*, 397–438.
- 78. Vermette, D. Dizzying Dialogue: Canadian Courts and the Continuing Justification of the Dispossession of Aboriginal Peoples. *Windsor Yearb. Access Justice* **2011**, *29*, 55–72. [CrossRef]
- 79. Newman, D. Rule and Role of Law: The Duty to Consult, Aboriginal Communities, and the Canadian Natural Resource Sector; Macdonald-Laurier Institute for Public Policy: Ottawa, ON, Canada, 2014.
- 80. Papillon, M.; Rodon, T. Proponent-Indigenous Agreements and the Implementation of the Right to Free, Prior, and Informed Consent in Canada. *Environ. Impact Assess. Rev.* **2017**, *62*, 216–224. [CrossRef]
- 81. McLeod, F.; Viswanathan, L.; Whitelaw, G.S.; Macbeth, J.; King, C.; McCarthy, D.D.; Alexiuk, E.; Walpole Island First Nation; Mississaugas of the New Credit First Nation; Queen's University; et al. Finding Common Ground: A Critical Review of Land Use and Resource Management Policies in Ontario, Canada and Their Intersection with First Nations. *Int. Indig. Policy J.* **2015**, *6*, 1–23. [CrossRef]
- 82. *Grassy Narrows First Nation v Ontario* (*Natural Resources*). 2014 SCC 48. Available online: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/14274/index.do (accessed on 13 March 2019).
- 83. MacIntosh, C. Tsilhqot'in Nation v BC: Reconfiguring Aboriginal Title in the Name of Reconciliation. *UBC Law Rev.* **2014**, 47, 167–210.
- 84. Haida Gwaii Reconciliation Act, 2010. Available online: http://www.bclaws.ca/civix/document/id/lc/statreg/10017_01 (accessed on 18 March 2019).

Water 2019, 11, 571 15 of 16

85. Borrows, J. Freedom and Indigenous Constitutionalism; University of Toronto Press: Toronto, ON, Canada, 2016.

- 86. Coulthard, G.S. *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition;* University of Minnesota Press: Minneapolis, MN, USA, 2014.
- 87. Mann, G. From Countersovereignty to Counterpossession? Hist. Mater. 2016, 24, 45–61. [CrossRef]
- 88. Moore, M.; von der Porten, S.; Castleden, H. Consultation Is Not Consent: Hydraulic Fracturing and Water Governance on Indigenous Lands in Canada. *Wiley Interdiscip. Rev. Water* **2017**, *4*, e1180. [CrossRef]
- 89. Phare, M.-A. *Denying the Source: The Crisis of First Nations Water Rights;* Rocky Mountain Books: Victoria, BC, Canada, 2009.
- 90. *Winters v United States*. 1908, 207 U.S. 564. Available online: https://supreme.justia.com/cases/federal/us/207/564/ (accessed on 13 March 2019).
- 91. Hopley, S.; Ross, S. Aboriginal Claims to Water Rights Grounded in the Principle Ad Medium Filum Aquae, Riparian Rights and the Winters Doctrine. *J. Environ. Law Pract.* **2009**, *19*, 225–266.
- 92. Getches, D.H. Defending Indigenous Water Rights with the Laws of a Dominant Culture: The Case of the United States. In *Liquid Relations: Contested Water Rights and Legal Complexity*; Roth, D., Boelens, R., Zwarteveen, M., Eds.; Rutgers University Press: New Brunswick, NJ, USA, 2005; pp. 44–65.
- 93. Water Sustainability Act. SBC 2014 c 15. Available online: http://www.bclaws.ca/civix/document/id/complete/statreg/14015 (accessed on 18 March 2019).
- 94. *Gale v British Columbia (Assistant Regional Water Manager)*; 2012-WAT-013(c); 2015. Available online: http://www.eab.gov.bc.ca/water/2012wat013c.pdf (accessed on 18 March 2019).
- 95. *Halalt First Nation v British Columbia*; 2011 BCSC 945. Available online: https://www.courts.gov.bc.ca/jdb-txt/SC/11/09/2011BCSC0945.htm (accessed on 18 March 2019).
- 96. Groundwater Protection Regulation. B.C. Reg. 39/2016. Available online: http://www.bclaws.ca/civix/document/id/loo99/loo99/39_2016 (accessed on 18 March 2019).
- 97. Province of British Columbia. Environmental Flow Needs Policy. 2016. Available online: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water-rights/efn_policy_mar-2016_signed.pdf (accessed on 2 March 2019).
- 98. Scott, A. *The Evolution of Resource Property Rights*; Oxford University Press: Oxford, UK; New York, NY, USA, 2008.
- 99. Water Sustainability Regulation. B.C. Reg. 36/2016. Available online: http://www.bclaws.ca/civix/document/id/complete/statreg/36_2016 (accessed on 18 March 2019).
- 100. First Nations Leadership Council. Comments on Water Sustainability Act Proposal, December 2 2013 (on file with author)
- 101. Phillip, G.C.S. (Okanagan Nation Alliance). Re: Water Act Modernization, April 20 2010 (on file with author)
- 102. First Nations Leadership Council. Water Act Modernization and Policy Proposals for the Water Sustainability Act, March 9 2011 (on file with author)
- 103. First Nations Summit. A Water Sustainability Act for BC: Legislative Proposal. December 2013 (on file with author)
- 104. Union of British Columbia Indian Chiefs. Response to British Columbia's Legislative Proposal for a Water Sustainability Act. No date (on file with author)
- 105. Alphonse, H. (Chief, Cowichan Tribes). Re: Proposed Water Sustainability Act Legislative Proposal, December 2 2013 (on file with author)
- 106. Jollymore, A.; McFarlane, K.; Harris, L.M. Whose Input Counts? Evaluating the Process and Outcomes of Public Consultation through the BC Water Act Modernization. *Crit. Policy Stud.* **2018**, 12, 1–25. [CrossRef]
- 107. Syilx Nation Siw lkw Declaration. 31 July 2014. Available online: https://www.syilx.org/wp/wp-content/uploads/2016/11/Okanagan-Nation-Water-Declaration_Final_CEC_Adopted_July_31_2014.pdf (accessed on 28 October 2018).
- 108. Looking Horse, C.A. Standing Rock Is Everywhere: One Year Later. *The Guardian*. 22 February 2018. Available online: https://www.theguardian.com/environment/climate-consensus-97-per-cent/2018/feb/22/standing-rock-is-everywhere-one-year-later (accessed on 28 October 2018).
- 109. Okanagan Nation Alliance. Environmental Flow Needs. Available online: https://www.syilx.org/projects/environmental-flow-needs-efn/ (accessed on 28 October 2018).
- 110. Okanagan Basin Water Board; Okanagan Nation Alliance; BC Ministry of Forests, Lands and Natural Resource Operations. *Collaborative Development of Methods to Set Environmental Flow Needs in Okanagan*

- Streams, Working Document Version 1; 2016. Available online: https://www.syilx.org/wp/wp-content/uploads/2017/08/OBWB_EFN_May2016_mainreport.pdf (accessed on 28 October 2018).
- 111. Okanagan Basin Water Board. Environmental Flow Needs Project. Available online: https://www.obwb.ca/efn/ (accessed on 28 October 2018).
- 112. Nadleh Whut'en First Nation; Stellat'en First Nation. Yinke Dene 'Uza'Hné Surface Water Management Policy (Version 4.1). 18 March, 2016. Available online: http://www.carriersekani.ca/images/docs/Yinka% 20Dene%20\T1\textquoterightUzah\T1\textquoterightne%20Surface%20Water%20Management% 20Policy%20%28March%2018%202016%29%20%2800303183xC6E53%29.pdf (accessed on 28 October 2018).
- 113. Nadleh Wut'en First Nation; Stellat'en First Nation. *Yinke Dene 'Uza'Hne' Guide to Surface Water Quality Standards*. 2016. Available online: http://www.carriersekani.ca/images/docs/Yinka%20Dene%20\T1\textquoterightUzah\T1\textquoterightne%20Guide%20to%20Surface%20Water%20Quality%20Standards% 20%28March%2018%202016%29%20%2800303157xC6E53%29.pdf (accessed on 28 October 2018).
- 114. Carrier Sekani Tribal Council. Yinke Dene 'Uza'Hne' Guide to Surface Water Quality Standards. Available online: http://www.carriersekani.ca/news/yinke-dene-uzahne-guide-to-surface-water-quality-standards (accessed on 28 October 2018).
- 115. Nadleh Wut'en and Stellat'en First Nations. *Discussion Paper: Opportunities for Collaborative Water Management*. 2016. Available online: http://www.carriersekani.ca/images/docs/Discussion%20Paper%20(March% 202016)%20(00303629xC6E53).pdf (accessed on 28 October 2018).
- 116. Tong, M.; Upper Fraser Fisheries Conservation Alliance, Williams Lake, BC, Canada. Personal communication, 2018.
- 117. Tsleil-Waututh Nation. *Tsleil-Waututh Stewardship Policy*; Tsleil-Waututh Nation: Vancouver, BC, Canada, 2009.
- 118. Tsleil-Waututh Nation, T. Assessment of the Trans Mountain Pipeline and Tanker Expansion Proposal; Tsleil-Waututh Nation: North Vancouver, BC, Canada, 2015; Available online: http://eareview-examenee.ca/wp-content/uploads/uploaded_files/twn-assessment-report-11x17-small.pdf (accessed on 28 October 2018).
- 119. Stk'emlúpsemc te Secwépemc Nation. *Honouring Our Sacred Connection to Pipsell Stk'emlúpsemc Te Secwépemc Says Yes to Healthy People and Environment*; Stk'emlúpsemc te Secwépemc Nation: Kamloops, BC, Canada, 2017; Available online: https://stkemlups.ca/files/2013/11/2017-03-ssnajaxdecisionsummary_0.pdf (accessed on 28 October 2018).
- 120. Cowichan Watershed Board. Governance Manual (Version 3). 24 September 2018. Available online: http://cowichanwatershedboard.ca/sites/default/files/CWB-Gov-Manual-Version3-24Sep2018.pdf (accessed on 18 March 2019).
- 121. Nicola Chiefs; The Province of British Columbia. Nicola Watershed Pilot Memorandum of Understanding. 2018. Available online: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/nicola_watershed_pilot_mou_-_signed_2018.pdf (accessed on 28 October 2018).
- 122. Tello, C. Tsleil-Waututh First Nation Releases Scathing Report on Kinder Morgan Expansion. National Observer 27 May, 2015. Available online: https://www.nationalobserver.com/2015/05/27/news/tsleil-waututh-first-nation-releases-scathing-report-kinder-morgan-expansion (accessed on 28 October 2018).
- 123. The Sacred Trust. Tsleil-Waututh Nation Release Landmark Independent Assessment of Kinder Morgan Trans Mountain Proposal. 2015. Available online: https://twnsacredtrust.ca/tsleil-waututh-nation-release-landmark-independent-assessment-of-kinder-morgan-trans-mountain-proposal/ (accessed on 28 October 2018).
- 124. *Agua Caliente Band of Cahuilla Indians v Coachella Valley Water District*; 9th Cir. 2017. 849 F.3d 1262. Available online: https://cdn.ca9.uscourts.gov/datastore/opinions/2017/03/07/15-55896.pdf (accessed on 18 March 2019).
- 125. Charpleix, L. The Whanganui River as Te Awa Tupua: Place-based Law in a Legally Pluralistic Society. *Geogr. J.* **2018**, *184*, 19–30. [CrossRef]
- 126. Arsenault, R.; Diver, S.; McGregor, D.; Witham, A.; Bourassa, C. Shifting the Framework of Canadian Water Governance through Indigenous Research Methods: Acknowledging the Past with an Eye on the Future. *Water* 2018, 10, 49. [CrossRef]
- 127. Hydrocitizenship. Available online: https://www.hydrocitizenship.com (accessed on 30 October 2018).



© 2019 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).