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UNCEDDED WATERS: INDIGENOUS WATER GOVERNANCE IN CANADA

Our relationship with our lands, territories and water is the fundamental physical, cultural, and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations. We assert our role as caretakers with rights and responsibilities to defend and ensure the protection, availability and purity of water. We stand united to follow and implement our knowledge and traditional laws and exercise our right of self-determination to preserve water, and to preserve life.¹

Sustainable water governance² is central to responsible, robust, and resilient stewardship of our resources. This is a particularly critical issue for Indigenous communities currently grappling with access to safe water, and with associated health and livelihood issues in the context of climate change and resource extraction in northern Canada (Basdeo and Bharadwaj 2013; Boyd 2011; Chiefs of Ontario 2007; Fresque-Baxter 2015; Gill 2014; Parlee 2015; Wilson et al. 2015). Indigenous communities face ongoing challenges with respect to safe drinking water: a recent *Globe and Mail* study found that high-risk water systems pose a threat to the health of one-third of First Nations people living on reserves (McClearn 2016b; see also Assembly of First Nations 2012; Dyck et al. 2015; MacIntosh 2008, 2009; McCullough and Farahbakhsh 2012; Office of the Auditor General 2005; Plummer et al. 2013; Smith et al. 2006; Swain et al. 2006).

Water is absent from the Supreme Court of Canada's definition of Aboriginal title (Laidlaw and Passelac-Ross 2010; Phare 2009). This situation contrasts to the United States, where the Winters doctrine and the subsequent 1976 *Cappaert* decision of the US Supreme Court³ state that surface and ground water rights are implied by the federal establishment of American Indian reservations, and set standards to which the US government must adhere in ensuring sufficient water for reservations, thereby recognizing the centrality of water-land interactions to American Indian communities (Shurts 2000). In Canada, Indigenous water rights and laws, as well as their participation in water governance, have, with few exceptions, been treated implicitly within land-focused legal claims and negotiation processes.⁴ As a result, historical inequalities have often constrained Indigenous communities' access to secure water in Canada (Phare 2009; Simms 2014; von der Porten 2012; von der Porten and de Loë 2013). To give just two brief examples:

¹ From the Simpcw Water Declaration (Shuswap Nation, BC, 2010), cited in Shuswap Nation Tribal Council 2013, 1 (Water Sustainability Act consultation process submission).

² A western definition of water governance is: "the range of political, organizational and administrative processes (including laws, rules and norms) through which interests are articulated, input is absorbed, decisions are made and implemented, and decision makers are held accountable" (Bakker 2003, 3). Indigenous water governance is broader, and includes social, political, economic, and spiritual values and relationships between water, land, and animals as expressed in traditional (environmental) knowledge that may be embodied in stories, ceremonies, and traditional land- and-water-based activities (e.g., hunting and fishing) (adapted from Borrows 2002).

³ *Winters v. United States*, 207 U.S. 564 (1908); *Cappaert v. United States*, 426 U.S. 128 (1976).

⁴ Following the work of John Borrows, I frame the term "Indigenous law" as prior to, and exceeding that of, the colonial nation-state's Aboriginal laws (Borrows 2002).

1. First in Time, but not in Right: The FITFIR (First in Time, First in Right) water rights regimes in British Columbia and other provinces were established at the time of colonial settlement in a manner prejudicial to the rights of Indigenous communities. FITFIR regimes allocate water on the basis of a rank order of licence holders. A priority number (determined by the date and time the licence application was approved) is recorded on the licence, and indicates seniority in times of shortage. When there is not enough water for all the licensees, the oldest licensees get their water before the newer ones. Although First Nations are undeniably “First in Time,” they were prevented from applying for water licences at the time the regulatory regime was created (British Columbia Assembly of First Nations 2010; Simms 2014). For example, the Lower Similkameen Indian Band (LSIB) holds the 61st out of 105 licences on the Similkameen River (Simms, 2014, 49). In 1969, the LSIB applied for the right to use 2,000 gallons of water a day from Nahumcheen Brook, but the application was refused on the basis that there was insufficient water to grant this allocation (Simms 2014). However, seventeen years later, the Province of British Columbia issued a licence to a private landowner for a much larger amount of water.⁵ Similar issues affect First Nations across the province. This situation was left unchanged during the Government of British Columbia’s recent Water Act Modernization process, despite repeated calls from First Nations to overhaul FITFIR. Similar issues affect Indigenous peoples across the country.

2. Treaty rights infringement via water-related impacts from upstream resource development: For decades, Indigenous communities have protested the degradation of Alberta’s Peace Athabasca Delta (the largest inland freshwater delta in North America, designated a World Heritage Site by UNESCO) due to upstream oil sands development and hydroelectric development on the Peace River in British Columbia (notably the Bennett Dam built in the 1960s).⁶ In 2015, the Mikisew Cree submitted a petition to UNESCO requesting that Alberta’s Wood Buffalo National Park (which overlaps with the Delta) be designated a World Heritage Site in Danger. Potential effects from the Site C dam (a major new \$9 billion hydroelectric project being built on the Peace River in British Columbia) are a major concern for many downstream Indigenous communities. The environmental assessment process put in place by the provincial and federal governments did not include a comprehensive assessment of cumulative impacts at a watershed scale, and consequent infringement on Treaty rights. Despite this, construction of the dam has begun and was supported by the issuance of permits by the federal government in mid-2016 without full review by the BC Utilities Commission – in contradiction to the recommendations of the environmental assessment panel and in contravention of the Ministerial mandate letters. These matters now are subject to ongoing litigation.

These examples demonstrate that the current legal regime in Canada provides insufficient safeguards for ensuring water security for Indigenous peoples. As a result, conflict is growing. To cite just a few examples: as I draft this proposal, Assembly of First Nations National Chief Perry Bellegarde is touring the proposed Site C Dam site in British Columbia at the invitation of West Moberly and other local First Nations communities. In Labrador, protesters have physically blocked the construction of the Muskrat Falls hydroelectric project and entered the construction site – prompting the provincial government to remove hundreds of workers and hold emergency talks (#MakeMuskratRight). In northern BC, several Indigenous protest camps (including Lelu Island) have been created to protest against water-related risks stemming from oil and gas pipelines and facilities, with conflict set to intensify given the federal government’s recent approval of the Pacific Northwest LNG project, and upcoming decision on Kinder Morgan. In Alberta,

⁵ The private landowner was granted 150 acre-feet of water annually (1 acre-foot is approximately 893 gallons per day, or 326,000 gallons per year) in addition to 1,000 gallons a day from Everden Spring and Nahumcheen Brook (Ministry of Environment 1997a, 1997b).

⁶ To cite just two examples, Beaver Lake Cree and Blueberry First Nations have filed lawsuits regarding the cumulative impacts of resource developments on their territories, at the core of which are water-related impacts.

conflict over water allocations to First Nations reserves in Alberta is intensifying.⁷ Fifty Indigenous groups across North America have signed an unprecedented pan-continental Treaty Alliance Against Tar Sands Expansion. In the meantime, some Indigenous communities have taken the initiative of developing their own policies for resource governance.⁸ A related trend has been increased involvement of Indigenous peoples in collaborative water governance, in line with broader trends of community participation in decision making at the watershed scale, notably via the Northwest Territories Water Stewardship Strategy. This parallels calls by industry for new approaches to resource management (e.g., the recent appeal by TransCanada's CEO for conflict resolution with Indigenous communities over pipelines [Lewis 2015]). These initiatives are characterized by a shared recognition that current approaches to consultation and environmental assessment are unsatisfactory, and are likely to undergo significant transformation given the federal government's ongoing commitment to overhauling the federal environmental assessment processes, as well as implement the UN Declaration on the Rights of Indigenous Peoples – while enshrining the importance of reconciliation with Indigenous peoples as a top priority in federal Ministerial mandates.

At the core of this debate is a set of questions about the extent of Aboriginal water rights. Scholars have argued that water security (which depends upon the interrelationship between human and environmental health) is necessary for the fulfilment of other Constitutional and Treaty rights, and that Indigenous water rights are inherently necessary to fulfill the purpose and intent for which reserves were created (including hunting and fishing rights) (Bartlett 1998; Laidlaw and Passelac-Ross 2010; Matsui 2009; Phare 2009; Walkem 2007). A related argument pertains to Aboriginal title: insofar as water and land are integrally interconnected, Aboriginal title gives Indigenous peoples the right to lands submerged by waters, and entitles them to make use of waters (Passelac-Ross and Buss 2011).⁹ More generally, Indigenous peoples claim that they have inherent water rights that stem from their relationships with their traditional territories (BCAFN 2010; Norman 2015; Walkem 2007). Recent jurisprudence is noteworthy in this regard. For example, the BC Supreme Court's *Halalt* decision found that the Halalt had a proprietary interest in the groundwater beneath their reserve (Laidlaw and Passelac-Ross 2010).¹⁰ Moreover, the full implications of the Supreme Court of Canada's 2014 *Tsilhqot'in* decision have yet to be fully explored.¹¹ Some scholars also argue that the colonial Aboriginal law regime should be complemented or supplanted by Indigenous laws that stem from historic cultural, spiritual, and material relationships, values and water use practices of Indigenous peoples (Borrows 2002; Craft 2014; Phare 2011; Rizvi et al. 2013; Singh 2006; UBCIC 1991; UNESCO 2006; Wilson 2014). At the risk of oversimplification: whereas Western law frames water as a resource available for human exploitation, Indigenous laws frame water as an animate (living) entity that, like other elements of nature, is a rights-bearing entity imbued with socio-cultural and spiritual meaning, and interrelated with all aspects of the environment (Borrows 2010).

Exploring the potential implications of these arguments, and their potential to contribute to enhanced water security for Indigenous communities, is the focus of my proposed project.

⁷ See, for example, the recent *Globe and Mail* article on looming confrontation over water for reserves in Alberta, "Fluid Situation for Alberta Reserves" (McClearn 2016a).

⁸ Examples include: the Tsilhqot'in Nation's 2014 Mining Policy and the Kaska Nation's 2015 Resource Law governing resource extractive activity in their respective traditional territories; and the 2016 Yinka Dene 'Uza'hné Surface Water Management Policy and Yinka Dene 'Uza'hné Guide to Surface Water Quality Standards.

⁹ This is at odds with some positions taken by the Canadian government; for example, Bill S-8 (2013 Safe Drinking Water for First Nations Act) has been criticized for a clause that permits Aboriginal and Treaty rights to be overridden to ensure drinking water safety (AFN 2012; Simeone and Troniak 2012).

¹⁰ *Halalt First Nation v. British Columbia (Environment)*, 2011 BCSC 945. For a commentary, see Bull Housser 2011.

¹¹ The historic Supreme Court of Canada decision in [Tsilhqot'in Nation v. British Columbia \(2014 SCC 44\)](#) was the first time that the court had formally declared that Aboriginal title existed, although the legal concept of Aboriginal title has been developing over decades, particularly since *Calder v. Attorney General of British Columbia* (1973 SCC 313).

PROJECT OBJECTIVES AND BUDGET

This project was inspired, in part, by the insightful op-ed published in the *Globe and Mail* by Cindy Blackstock and Stephen Toope, in which they argued that “universities and colleges should reflect on how Western thought has shaped them, and work to incorporate Indigenous ways of knowing the world.” Simultaneously, Blackstock and Toope (2016) caution that Indigenous knowledge must not become a “bandwagon” of expertise, and urge researchers to avoid expropriation of knowledge through approaching collaboration as learners and allies, not experts.

With these critical insights in mind, my proposed project is a partnership with Indigenous scholars and organizations to advance understanding of Indigenous water governance in Canada and globally by:

- convening members of the Pierre Elliott Trudeau Foundation community with leading scholars, activists, and artists at a learning-from-the-land meeting (Year 1);
- producing a landmark edited trade book (Year 2);
- creating a free, accessible online multimedia portal about Indigenous water issues (Year 2); and
- implementing a communications strategy designed to maximize public engagement (Years 1 through 3).

The project is specifically designed to maximize cross-sectoral engagement, supported by a solid communications strategy. This builds on two decades of experience I have gained as Director of UBC’s Program on Water Governance, which has engaged with thousands of decision makers and community members in Canada and beyond. Of course, much inspiring work on related issues is already being done within the Pierre Elliott Trudeau Foundation community, with which I would enthusiastically engage if my proposed project were to be selected.

Within this context, I view this project as an opportunity to respond to the Truth and Reconciliation Commission’s Calls to Action, including the creation of postsecondary courses in Aboriginal languages (16); the adoption and implementation of the UN Declaration on the Rights of Indigenous Peoples (45.ii); the renewal of Treaty relationships based on principles of reciprocity (mutual recognition, mutual respect, and shared responsibility) (45.iii); the reconciliation and mutual dialogue between Indigenous, Aboriginal, and Crown constitutional and legal orders (45. iv); and education on Aboriginal peoples (16, 57, 62). The proposed project also reflects principles articulated in the TRC’s “Principles for Reconciliation” report, including the urgency of revitalizing Indigenous laws (p. 121); the importance of a respectful relationship between all living things (p. 122); the overarching importance of reconciliation with the natural world (p. 123); and our collective responsibility to undertake reconciliation as Treaty peoples (p. 126).

The project thus engages closely with **three Foundation themes**: *People and Their Natural Environment*, *Responsible Citizenship*, and *Human Rights and Dignity*, as well as with two targeted areas of inquiry: Indigenous relations in Canada, and water-energy-food security. Below, the objectives for each year of the grant are outlined in detail.

YEAR 1

CONNECTING WITH THE LAND, CONNECTING WITH COMMUNITY: WATER BUSH CAMP

Reconciliation is not about “doing things,” or ticking off boxes on a checklist. Rather, it is about doing things differently. It is about building relationships with the land and with all of our relations.

– Karen Joseph (Kwakwaka’wakw, CEO, Reconciliation Canada)

I was recently privileged to participate in a round table dialogue on reconciliation with Karen Joseph (quoted above). This quote frames my evolving understanding of research in partnership with Indigenous communities, which has been a process of unlearning and relearning. I have learned that relationship building and trust building, which necessarily take time, are key to this process. Hence, the first year of the Foundation grant would be spent on building relationships and connecting with community, in preparation for our meeting at the end of Year 1. Building on my past work and existing relationships, the first step would be to consult with elders and advisors. I realize that the Pierre Elliott Trudeau Foundation and its community members have already spent considerable time building relationships, and so I would also simultaneously engage in consultative dialogue with the Foundation community. I anticipate that this consultative dialogue phase would involve individual and group meetings (phone and in-person), and a briefing note by Month 4. The outcome of this process would be the creation of an Advisory Board by Month 6, which could include some members of the Pierre Elliott Trudeau Foundation community.

The learning-from-the-land meeting (“Water Bush Camp”) would occur at the end of Year 1, and would be co-organized and co-hosted with an Indigenous community partner. This event would include approximately 30 to 40 participants (with a goal of a minimum of 50% Indigenous participants) and would be held in northern Canada (budget and schedule permitting). I would work to ensure diversity through liaising with the Foundation and my own network to ensure representation from First Nations, Inuit, and Métis. I am also committed to mentoring Indigenous students through my ongoing links with UBC’s First Nations and Indigenous Studies, and Northwest Indian College; 10% of spots will be reserved for Indigenous students, whose travel costs will be covered by the budget.

The major goal of this meeting would be to form a collective of authors that would work together on the multimedia trade book/online portal tentatively titled *Unceded Waters* (see below). Although the final themes would be determined through the dialogue process described above, our starting point would be to focus on the solutions that are being developed (often from the ground up) by and for Indigenous communities across Canada. These topics could include: community case studies of Indigenous water law; community-led initiatives (e.g. Guardian programs; community-based water monitoring); implications of recent legal cases (e.g. *Tsilhqot’in*); and implications of the UN Declaration on the Rights of Indigenous Peoples. Multi-scalar and cross-sectoral analysis (linking land, water, health and livelihoods) would be a central analytical focus, which would enable participants to develop cross cutting themes that would feed into the trade book (below). The Camp would also expose participants within Indigenous traditions of living on and learning from the land. At our previous workshops, our proceedings were grounded in ceremony, and participants learned experientially (e.g. through time spent with elders on the water, working in camp with moose hide preparation, and contributing to chores and site cleanup), deepening participants’ relationships to the land and water, as well as one another.

Supporting documentation:

- 2015 learning-from-the-land [Water Bush Camp](#) video
- Learning-from-the-land Water Bush Camp overview (Word document)

YEAR 2

TRADE BOOK: *UNCEDED WATERS*

The major focus of Year 2 would be the production of the multimedia trade book, tentatively titled *Unceded Waters*. I intend to publish this book with a trade publisher. I have had previous experience with two successful trade books, one of which won a national writing award and was published in 13 countries.¹² A trade publisher will be appropriate in this case because we are targeting a non-academic audience, and adopting an innovative format that will be an appropriate reflection of the diversity of authors. We have initial interest from several publishers, including Routledge, University of Toronto, MIT, and UBC Press. UBC Press has a new, interactive e-publishing format that I believe will be a great fit with this project.

The authors would form an editorial collective (much like the Kino-nda-niimi Collective's role in crafting *The Winter We Danced*), and would include academics, policy makers, activists, lawyers, Indigenous community members, and artists. Their contributions would be crafted to target the general public. The book would include photos and graphics, storytelling, and poetry as well as prose pieces; and would include a diversity of voices.

I believe that public appetite for books such as this is relatively high. My last edited volume, *Eau Canada*, was one of the best-selling academic books on Canadian water issues over the past decade (4,000 copies sold). *Eau Canada* also had a major public policy impact (e.g., the Walter and Duncan Gordon Foundation distributed a copy to every Member of Parliament, and the book stimulated significant debate in policy circles). I anticipate that this new book would have a similar impact. As with *Eau Canada*, any royalties from the book would be donated to an Indigenous non-governmental organization.

Beyond the Foundation community and the participants mentioned previously, we would reach out to other major initiatives (e.g. SSHRC Partnership Grants such as *Tracking Change*, *Wa Nis Ka Tan Hydro Alliance*, *Initiative for Indigenous Futures*, and *Federalism and Indigenous Governance*) and also engage international networks, notably [Justicia Hídrica](#), the largest network focused on Indigenous water justice issues in Latin America, of which I am a long-standing member.

YEAR 3

ONLINE/MULTIMEDIA PORTAL

In Year 3, we will focus on the free multimedia online portal about Indigenous water issues. There are several reasons to create such a portal to complement the book: greater accessibility (including for Indigenous communities as well as the general public); ease of translation (subject to future funding, subtitling in Indigenous languages may be integrated); impact (the videos and readings we would produce would be designed for the general public, and thus reach a wider audience than is typically the case with academic courses); and modularity (individual videos and other products could be used in public communications and for various purposes).

¹² I have published two trade books under my *nom de plume* – Karen Le Billon: *French Kids Eat Everything* (2012) and *Getting to Yum* (2014) (HarperCollins USA/Canada).

The portal would be designed as a mobile-friendly web-based platform designed in a non-academic, informative, and engaging style, hosted on an open-source platform. The written materials would synthesize key information from the trade book in engaging formats. For example, various geo-localized “hotspots” would be identified on an interactive map of Canada; users would click to enter these hotspots, and access a variety of media (video, podcast, readings, or social media analysis powered by automated “digital humanities” software (e.g. Gephi). The final decision on the content of the portal would be made through the consultative process and formation of the collective of authors noted above; however, it is likely to include topics such as drinking water insecurity (e.g. identification of existing Boil Water Advisories in Indigenous communities); water-energy nexus hotspots; Indigenous community water monitoring and policy initiatives; as well as recent and forthcoming policy-related publications; and real-time social media analysis. After the end of the grant, the portal would be taken over by the Program on Water Governance at UBC to ensure a legacy product that would outlive the grant: real-time, continuously updated, and publicly relevant. As I am based in a Geography department, I work with colleagues and students with the right combination of expertise (e.g., Geographic Information Systems [GIS], coding/programming, eco-informatics, filmmaking, digital humanities) to enable the portal to be accessible and aesthetically captivating.

Graphic design and GIS mapping would be provided by our highly experienced staff at the UBC Geography Department (30+ years experience). I have already received expressions of interest from two students (including an Indigenous student who has extensive video/TV experience and is currently completing her undergraduate degree in First Nations and Indigenous Studies and Geography at UBC as a mature student; and a graduate student who is an experienced filmmaker who is currently completing her PhD in Geography). We are also hoping to work with train students from UBC and/or the *Indigenous Independent Digital Filmmaking* program at Capilano University, North Vancouver, to produce the videos. I have also secured initial agreement from the Indigenous campus radio collective (*Unceded Airwaves*) at UBC to support the podcasts.

The final format and content of the multimedia portal will depend upon our discussions with authors; our contract with the book publisher; and the specific budget rules for Foundation grants. In Year 1, I would develop a specific proposal that would serve as the basis for a confirmation of planned expenditures, in order to provide a basis for moving forward with the project.

Supporting documentation:

- [*Water Ethics: Think like a watershed*](#) from my Harvard EdX Massive Open Online Course (MOOC)

YEARS 1 THROUGH 3

PUBLIC ENGAGEMENT AND COMMUNICATION

I am deeply excited about engaging with the Foundation community given its impressive track record in public engagement. Were the Foundation Project to be funded, I would work with an Indigenous communications specialist to develop and distribute educational materials to policymakers and general audiences in Canada and internationally. The communications strategy would be designed to incorporate each of the **three Pierre Elliott Trudeau Foundation themes** with which the project engages: ***People and Their Natural Environment***, ***Responsible Citizenship***, and ***Human Rights and Dignity***, as well as with two of the Foundation's targeted areas of inquiry: Indigenous relations in Canada, and water-energy-food security. In order to design this communications strategy I would seek out an experienced communications consultant to act as an advisor or perhaps sit on the Advisory Board; for example, I already have an established working relationship with Toronto-based Rob Firing (Senior Director of Publicity and Communications and Head of the Speakers' Bureau at HarperCollins Canada), who attended the 2015 Water Bush Camp. Rob (or someone of similar background) would help design the strategy from Year 1 onwards.

To implement the strategy, my intention is to work with one of western Canada's leading Indigenous communications consultants. I have previously worked with this consultant on communications. The consultant would implement a two-pronged strategy, involving different modalities (e.g., fact sheets, press releases, briefings for policymakers). At appropriate moments—such as the launch of the book, as well as the meeting (at which we would strive to have an embedded reporter)—we would also strategically target TV and radio appearances, as well as op-eds in leading national (e.g. *Globe and Mail*, *Hill Times*, *Policy Options*) and international publications (e.g. *Guardian Weekly* and *The Nation*). It is our intention to apply to *Ideas* (or a program of similar reach) to do a full-length feature story on this project.

I am fluent in French (and Spanish) and am committed to making the results of the project available in both official languages (English and French), as well as in Dene and Cree (for which I will seek additional funding). I also intend to translate project publications into Indigenous languages relevant to northern Indigenous communities (e.g., Dene), in response to the TRC Call to Action on language revitalization.

Internationally, I intend to make a contribution by mobilizing my existing international networks (notably *Justicia Hídrica*, the largest network of water researchers focused on Indigenous water governance in Latin America). I would collaborate with this network and other international partners – e.g., my collaborators in the United States (e.g., Duke University, Stanford University), Europe (e.g., Wageningen University, University of Amsterdam, Autonomous University of Barcelona, Manchester University, University College London) – to bring our work to the world's leading water conferences (e.g., World Water Forum 2018 in Brasilia). This international dimension of the communications strategy would also ensure that this project would also link to the Foundation's ***Canada and the World*** theme.

PRIOR RESEARCH AND BACKGROUND

The path that led to this research proposal began with a series of projects on drinking water security in Indigenous communities, as well as selected chapters in (co-)edited books: *Eau Canada* (UBC Press, 2007; included in the supporting materials for this application) and *Water without Borders* (University of Toronto Press, 2013). From the mid-1990s to mid-2000s, I also spent a decade conducting research on water privatization in developing countries; this research (particularly the work that I did in Cochabamba, Bolivia, where a “Water War” against privatization was led by local Indigenous communities) sparked growing interest, summarized in my sole-authored book *Privatizing Water* (Cornell University Press, 2010). I also began working with graduate students who were conducting community-based research with Indigenous communities. Gradually, our work on Indigenous water issues expanded. A summary of our grants, and many of our publications, can be obtained from our Program of Water Governance website (<http://www.watergovernance.ca>).

This research led to two SSHRC Partnership Development Grants, and a SSHRC Partnership Grant titled *Sustainable Water Governance and Indigenous Law* (2016–23) (www.decolonizingwater.ca). Also in 2016, I was awarded a SSHRC Insight Grant to conduct a comparative analysis of hydraulic fracturing on Indigenous territories in the US and Canada (working with colleagues at Duke and Penn State). These grants include collaboration with some of Canada’s leading Indigenous scholars, including Dr. John Borrows (University of Victoria), Dr. Carrie Bourassa (Laurentian University), Dr. Aimée Craft (University of Manitoba), Dr. Glen Coulthard (UBC), and Dr. Gordon Christie (UBC). We also work closely with a range of Indigenous non-governmental organizations.

Since founding the Program on Water Governance over a decade ago, I have devoted a substantial amount of time to communication with policymakers and the general public. Our program has hosted over 1,000 participants at our workshops, and communicates with over 2,000 people on our listserv. As a public speaker, I am regularly invited to both academic and non-academic conferences (in 2016 alone, I will give 14 public talks, including Stanford, Banff Forum, Globe Sustainability, and Living Waters conferences; and presentations to Environment Canada’s Deputy Minister’s Speakers Series, the Government of the Northwest Territories Water Stewardship Strategy Group, and the Tsuu T’ina First Nation). I also do regular media outreach (our team’s work on Site C, for example, led to interviews on Global TV and CBC, as well as an op-ed in the *Hill Times* and coverage in the *Globe and Mail*, *Vancouver Sun*, *Canadian Press*, and regional news outlets). I view engagement with community and contributions to public debate as both an obligation and tremendous opportunity for academics. The inclusion of these values at the core of the Foundation’s vision aligns deeply with my personal values. I would be delighted to collaborate with the Pierre Elliott Trudeau Foundation to maximize the public impact of this project, should it be funded.

If selected, I would also become an engaged and enthusiastic member of the Foundation community. For example, I recently undertook an intensive year-long training program as an accredited workplace coach in order to improve my mentorship skills. In the future, I will be volunteering at UBC to coach members of equity-seeking groups (both staff and faculty) and I would be delighted to “give back” to the Foundation community after the completion of my project through coaching for scholars.

I would be honoured to have this project funded and to be selected as a member of the Pierre Elliott Trudeau Foundation community. Thank you for your kind consideration of this application.

REFERENCES

- Assembly of First Nations (AFN). 2012. "Bill S-8: Safe Drinking Water for First Nations Act." Submission to the Standing Senate Committee on Aboriginal Peoples. http://www.afn.ca/uploads/files/water/senatestandingcommitteebill_s-8.pdf.
- Bakker, K. 2003. *Good Governance in Municipal Restructuring of Water Supply*. Ottawa: Federation of Canadian Municipalities; Program on Water Issues, Munk Centre for International Studies.
- Bartlett, R. 1998. *Aboriginal Water Rights in Canada: A Study of Aboriginal Title to Water and Indian Water Rights*. Calgary: Canadian Institute of Resources Law.
- Basdeo, M., and L. Bharadwaj. 2013. "Beyond Physical: Social Dimensions of the Water Crisis on Canada's First Nations and Considerations for Governance." *Indigenous Policy Journal* 23(4): 1–14.
- Blackstock, C., and S. Toope. 2016. "The Promise of Reconciliation: Indigenous Knowledge Waiting in the Wings." *Globe and Mail*, September 27. <http://www.theglobeandmail.com/opinion/the-promise-of-reconciliation-indigenous-knowledge-waiting-in-the-wings/article32066220/>.
- Borrows, J. 2002. *Recovering Canada: The Resurgence of Indigenous Law*. Toronto: University of Toronto Press.
- Borrows, J. 2010. *Canada's Indigenous Constitution*. Toronto: University of Toronto Press.
- Boyd, D. 2011. "No Taps, No Toilets: First Nations and the Constitutional Right to Water in Canada." *McGill Law Journal* 57(1): 83–134.
- British Columbia Assembly of First Nations (BCAFN). 2010. "Section 3.31: Water." In *BCAFN Governance Toolkit: A Guide to Nation Building*, 443–62. West Vancouver: BCAFN.
- Bull Housser. 2011. "Halalt First Nation v. British Columbia (Environment)." July 27. <https://www.bht.com/resources/halalt-first-nation-v-british-columbia-environment>.
- Chiefs of Ontario. 2007. *Aboriginal Traditional Knowledge and Source Water Protection: First Nations' Views on Taking Care of Water*. Toronto: Chiefs of Ontario.
- Craft, A. 2014. "Reflecting the Water Laws." Research Gathering conducted with Anishinaabe Elders, June 20–23, 2013, at Roseau River, Manitoba. University of Manitoba, Centre for Human Rights Research (CHRR) and Public Interest Law Centre (PILC).
- Dyck, T., R. Plummer, and D. Armitage. 2015. "Examining First Nations' Approach to Protecting Water Resources Using a Multi-Barrier Approach to Safe Drinking Water in Southern Ontario, Canada." *Canadian Water Resources Journal/Revue canadienne des ressources hydriques* 40: 204–23.
- Fresque-Baxter, J. 2015. "Water Is Life: Exploring the Relationship between Place Identity, Water and Adaptive Capacity in Fort Resolution, Northwest Territories, Canada." PhD dissertation, Wilfrid Laurier University.
- Gill, H., and T. Lantz. 2014. "A Community-Based Approach to Mapping Gwich'in Observations of Environmental Changes in the Lower Peel River Watershed, NT." *Journal of Ethnobiology* 34(3): 294–314.
- Laidlaw, D., and M. Passelac-Ross. 2010. "Water Rights and Water Stewardship: What about Aboriginal Peoples?" *Law Now* 35(1): 1–12.
- Lederman, M. 2016. "Yuxweluptun's Exhibition Brings You Face to Face with Indigenous History." *Globe and Mail*, May 15. <http://www.theglobeandmail.com/arts/art-and-architecture/yuxweluptuns-exhibition-brings-you-face-to-face-with-indigenous-history/article30018419/>.
- Lewis, J. 2015. "TransCanada CEO Says Canada Needs to Resolve Conflicts over Pipelines." *Globe and Mail*, February 4. <http://www.theglobeandmail.com/report-on-business/economy/transcanada-ceo-says-canada-needs-to-resolve-conflicts-over-pipelines/article22798276/>.
- MacIntosh, C. 2008. "Testing the Waters: Jurisdictional and Policy Aspects of the Continuing Failure to Remedy Drinking Water Quality on First Nations Reserves." *Ottawa Law Review* 39: 63–97.
- MacIntosh, C. 2009. "Public Health Protection and Drinking Water Quality on First Nation Reserves: Considering the New Federal Regulatory Proposal." *Health Law Review* 18(1): 5–11.

- Matsui, K. 2009. *Native Peoples and Water Rights: Irrigation, Dams, and the Law in Western Canada*. Montreal and Kingston: McGill-Queen's University Press.
- McClearn, M. 2016a. "Fluid Situation for Alberta Reserves." *Globe and Mail*, October 17. <http://www.theglobeandmail.com/news/showdown-over-water-looms-for-albertareserves/article32386029/>.
- McClearn, M. 2016b. "Water Systems at Risk." *Globe and Mail*, October 30. <http://www.theglobeandmail.com/news/national/indigenous-water/article31589755/>.
- McCullough, J., and K. Farahbakhsh. 2012. "Square Peg, Round Hole: First Nations Drinking Water Infrastructure and Federal Policies, Programs, and Processes." *International Indigenous Policy Journal* 3(1): 1–27.
- Ministry of Environment (MOE). 1997a. *First Nations Water Rights in British Columbia: A Historical Summary of the Rights of the Lower Similkameen First Nation*. Victoria: Water Management Branch.
- Ministry of Environment (MOE). 1997b. *First Nations Water Rights in British Columbia: A Historical Summary of the Rights of the Okanagan Nation*. Victoria: Water Management Branch.
- Norman, E.S. 2015. *Governing Transboundary Waters: Canada, the United States and Indigenous Communities*. New York and London: Routledge.
- Office of the Auditor General (OAG). 2005. "Drinking Water in First Nations Communities." In *Report of the Commissioner of the Environment and Sustainable Development*. Ottawa: Office of the Auditor General of Canada.
- Parlee, B.L. 2015. "Avoiding the Resource Curse: Indigenous Communities and Canada's Oil Sands." *World Development* 74: 425–36.
- Passelac-Ross, M., and K. Buss. 2011. "Water Stewardship in the Lower Athabasca River: Is the Alberta Government Paying Attention to Aboriginal Rights to Water?" *Journal of Environmental Law and Practice* 23: 69–83.
- Phare, M. 2009. *Denying the Source: The Crisis of First Nations Water Rights*. Victoria: Rocky Mountain Books.
- Phare, M.A. 2011. *Restoring the Lifeblood: Water, First Nations and Opportunities for Change*. Toronto: Walter and Duncan Gordon Foundation.
- Plummer, R., D. de Grosbois, D. Armitage, and R. de Loë. 2013. "An Integrative Assessment of Water Vulnerability in First Nation Communities in Southern Ontario, Canada." *Global Environmental Change* 23(4): 749–63.
- Rizvi, Z., J. Adamowski, and R. Patrick. 2013. "First Nation Capacity in Quebec to Practice Integrated Water Resources Management." *International Journal of Water* 7(3): 161–90.
- Shurts, J. 2000. *Indian Reserved Water Rights: The Winters Doctrine in Its Social and Legal Context, 1880s–1930s*. Norman: University of Oklahoma Press.
- Shuswap Nation Tribal Council. 2013. "Legislative Proposal for a New Water Sustainability Act." Submission letter to the BC Ministry of Environment, Water Protection and Sustainability Branch, November 15, 2013. <https://engage.gov.bc.ca/watersustainabilityact/files/2013/11/Shuswap-Nation-Tribal-Council.pdf>.
- Simeone, T., and T. Troniak. 2012. "Legislative Summary: Bill S-8: The Safe Drinking Water for First Nations Act." Publication No. 41-1-S8-E. Ottawa: Library of Parliament.
- Simms, B.R. 2014. "'All of the Water That Is in Our Reserves and That Is in Our Territory Is Ours': Colonial and Indigenous Water Governance in Unceded Indigenous Territories in British Columbia." Master's thesis, University of British Columbia. <http://circle.ubc.ca/handle/2429/51475>.
- Singh, N. 2006. "Indigenous Water Management Systems." *Society and Natural Resources* 19(4): 357–66.
- Smith, D., R. Guest, C. Svrcek, and K. Farahbakhsh. 2006. "Public Health Evaluation of Drinking Water Systems for First Nations Reserves in Alberta, Canada." *Journal of Environmental Engineering and Science* 5(1): S1–S17.
- Swain, H., S. Louttit, and S. Hrudehy. 2006. *Report of the Expert Panel on Safe Drinking Water*. Ottawa: Indian Affairs and Northern Development.
- Truth and Reconciliation Commission of Canada, 2012. *Calls to Action*.

<http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls to Action English2.pdf>

Truth and Reconciliation Commission of Canada, 2015. *What we have learned: Principles of Truth and Reconciliation*.

<http://www.myrobust.com/websites/trcinstitution/File/Reports/Principles English Web.pdf>

UNESCO. 2006. *Water and Indigenous Peoples*. Paris: UNESCO.

Union of British Columbia Indian Chiefs. 1991. "Indian Water Rights in British Columbia: A Handbook." Vancouver: Union of BC Indian Chiefs.

http://www.ubcic.bc.ca/files/PDF/ubcic_indianwaterrights_1991.pdf.

von der Porten, S. 2012. "Canadian Indigenous Governance Literature: A Review." *AlterNative: An International Journal of Indigenous Peoples* 9(1): 1-14.

von der Porten, S., and R.C. de Loë. 2013a. "Collaborative Approaches to Governance for Water and Indigenous Peoples: A Case Study from British Columbia." *Geoforum* 50: 149-60.

von der Porten, S., and R.C. de Loë. 2013b. "Water Governance and Indigenous Governance: Towards a Synthesis." *Indigenous Policy Journal* 23(4): 1-12.

Walkem, A. 2007. "The Land Is Dry: Indigenous Peoples, Water, and Environmental Justice." In *Eau Canada*, ed. K. Bakker, 311-29. Vancouver: UBC Press.

Wilson, N.J. 2014. "Indigenous Water Governance: Insights from the Hydrosocial Relations of the Koyukon Athabaskan Village of Ruby, Alaska." *Geoforum* 57: 1-11.

Wilson, N.J., M.T. Walter, and J. Waterhouse. 2015. "Indigenous Knowledge of Hydrologic Change in the Yukon River Basin: A Case Study of Ruby, Alaska." *Arctic* 68: 93-106.