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# Rethinking Water Governance in the Saskatchewan River Delta Through Indigenous Relational Worldviews

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## Abstract

This study critically examines the implications of integrating Indigenous relational worldviews into the water governance framework of the Saskatchewan River Delta. Using a relational theoretical framework and community-based participatory research methodology, both Indigenous community members and non-Indigenous researchers collectively examine the negative impacts of Western water governance policies and practices on the Métis community residing in Cumberland House, located in northeast Saskatchewan, Canada. Through Indigenous traditional water story-sharing methods with Indigenous Elders and Knowledge Keepers, our focus centres on Indigenous interpretations and ways of knowing the Delta. The community highlighted the pervasive influence of power dynamics and political agendas in the governance of the Delta. As such, we emphasise the necessity of challenging settler colonial systems and structures and reinvigorating Indigenous worldviews for water governance. By doing so, we advocate for the advancement of Indigenous sovereignty and self-determination in their relationship with land and water, thereby promoting the meaningful implications of the Truth and Reconciliation Commission Calls to Action.

**Keywords:** Saskatchewan River Delta; Indigenous peoples; Western water governance; Indigenous sovereignty; Indigenous self-determination; environmental education; environmental issues

*What I trust and hope we will do is not for today or tomorrow only; what I will promise, and what I believe and hope you will take, is to last as long as that sun shines and the yonder river flows. You have to think of those who will come after you, and it will be a remembrance for me as long as I live, if I can go away feeling that I have done well for you. I believe we can understand each other.*

(Alexander Morris, The Treaties of Canada, (1991[1890]), 202)

## Introduction

Access to safe drinking water and traditional ways of life associated with water play a critical role in sustaining important cultural practices for Indigenous peoples that include hunting, fishing,

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trapping and medicine gathering (Datta & Hurlbert, 2020; Hurlbert & Datta, 2022; Hurlbert, 2022; Yazzie & Baldy, 2018). In addition, the connection with origin stories exemplifies Indigenous identity as grounded in relationships with other living things (Cajete, 2000; Kimmerer, 2013; McGregor, 2012). Yet Indigenous communities in Saskatchewan are the most affected by a lack of access to safe drinking water and cultural practices with water, as the result of ongoing processes of bio-colonization and universalising claims of Western technoscience that appropriate Indigenous lands and enact coercive agricultural methods through colonial logic of extraction (Chilima *et al.*, 2021; Lasczik *et al.* 2020; McKibbin, 2023).

While the Saskatchewan River Delta (i.e. the Delta from hereon) serves multiple water needs, including agricultural, domestic, recreational and hydroelectric power generation, prioritising Western uses of water intensifies resource extraction and significantly impacts safe and equitable access to water for Indigenous communities (Chief *et al.* 2021; Megdal, 2024; Rodina, 2019). As uneven power dynamics imbued in colonial hierarchy silence and erase Indigenous voices in water management decision-making, not only does this adversely impact Indigenous peoples' sovereignty and self-determination for water governance, but these power differentials have deleterious effects on the sustainability of the Delta writ large (Carlson, 2016; Strickert *et al.*, 2016; Wilson & Inkster, 2018). For example, inefficient fertiliser run-off and sewage draining in municipal and industrial wastewaters and the use of heavy fertilisers in agricultural practices cause excessive phosphorus and nitrogen to build up in the soil and enter the Delta via surface run-off (Radford, 2020).

In response, this article explores a community-based participatory research (CBPR) project, informed by a relational theoretical framework, with Elders and Knowledge Keepers from the Cumberland House<sup>1</sup> Métis community in Saskatchewan in 2023. This study sought to expose and contest dominant Western governance models and frameworks proliferating through the management of the Delta at the expense of Indigenous cultural practices that are crucial for their survival and livelihood. For instance, as we write this article, the Cumberland House Métis community has declared a state of emergency due to low, and unsafe, drinking water levels in the local reservoir.

This article contributes to a growing body of literature that explores intersections of environmental management, Indigenous rights and cultural practices to advance the reclamation of Indigenous water and land management (Hartwig *et al.*, 2022; O'Bryan, 2019). Specifically in this article, we emphasise the presence of power dynamics and politics in water governance of the Delta and the subsequent impacts on Indigenous communities, highlighting the complicated nature of government policies and regulations with respect for Indigenous land rights and consultation, industry and economic interest, urbanisation and municipal needs, environmental conservation and ecological concerns and the impacts of climate change (e.g. Carlson, 2016; Pearce, 2021; Abu, 2017).

Exemplifying the ecological, political, cultural, social and material conditions of the present context of Delta governance in Saskatchewan, we also enact a political ecology of education to grapple with power among and between political, economic and social processes for environmental change in education (Henderson & Zarger, 2017; Lloro-Bidart, 2015; Meek, 2015). Just like classical ecology explores the relationships of organisms within ecosystems, the political ecology of education locates teaching and learning within situated and emplaced contexts to close the gap between diverse everyday practices in environmental education and government policy action (McKenzie, 2012). Thus, as we delineate Indigenous knowledge about water management, conservation practices and sustainable resource use, in which water is understood as sacred and integral to Indigenous identity and well-being (Bradford, Ovsenek & Bharadwaj 2017; Poelina, Perdrisat, Woollorton & Mulligan 2023), we name the particular realities and

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<sup>1</sup>Cumberland House is located on Pine Island in the Saskatchewan River, Saskatchewan.

corresponding ideologies missing in both mainstream governance and models of Western education (Ahenakew, 2016; Bang et al., 2014; Bang, 2020; Calderon, 2014; Wildcat et al., 2014).

### Positionality

Affirmative and transformative pathways for cultural renewal that advance truth and reconciliation in the settler state of Canada is a collective responsibility and process that understands colonisation as an ongoing and pervasive system of oppression in Canada today (Chrona, 2022; Coulthard, 2007; Simpson, 2017). Calling for a thoroughly renovated politics that promotes Indigenous sovereignty and self-determination for water governance and, therefore, a more equitable and sustainable approach to conservation (Stein, Ahenakew, da Silva Huni Kui, Bowness & Mendes 2023), our article is positioned in response to the Truth and Reconciliation Commission of Canada (2015) *Calls to Action* #47, which calls for federal, provincial, territorial and municipal governments to “repudiate concepts used to justify European sovereignty over Indigenous peoples and lands, such as the Doctrine of Discovery and *terra nullius*, and to reform those laws, government policies, and litigation strategies that continue to rely on such concepts” (p. 327). We acknowledge our positionalities as a racialised Black settler<sup>2</sup> of African descent, an invited White settler of European descent, a racialised scholar and as Indigenous Métis Elders to emphasise the importance of consciously and intentionally querying what particular positionalities might mean for the relationships to the lands that we call home (Wolfe, 2006).

### Critical perspectives of the Delta governance

As part of the Saskatchewan River Basin that spans 121,095 km<sup>2</sup> across the Canadian prairie provinces of Alberta, Saskatchewan and Manitoba and the state of Montana in the United States (Wheater & Gober, 2013), the Delta is comprised of the South Saskatchewan River, which flows from the confluence of the Red Deer and Bow Rivers in Alberta; the North Saskatchewan River, with the Battle River in Alberta serving as major tributary; and the Saskatchewan River, which flows from the confluence of the South and North Saskatchewan Rivers in Prince Albert to its headwaters in central Manitoba. Formed over 10,000 years through sediment accumulation and river floods, the Delta is a collection of different wetlands, lakes, river channels and forests, all with their own hydrological, biochemical and ecological characteristics (Jardine et al. 2023). As the largest inland water delta in North America, the Delta has supported Swampy Cree and Métis Indigenous communities for more than 7,000 years, while also providing vital habitat for a diverse range of wildlife (see Figure 1). As Pearce (2021) also observed, the Delta stores billions of tonnes of carbon in its plant biomass and soils up to one metre in depth and, thus, serves as an important carbon sink in these times of mitigating and adapting to climate change.

Despite perceptions that Canada is a water-rich country, however, the Delta exemplifies global water security challenges (Hipel et al., 2013). As a new concept, water security has contested meaning and is subject to divergent definitions. Yet at its core, water security is assuring an available and clean water supply for humans and the environment (Strickert et al. 2016). Yet flagrant urbanisation in Saskatchewan is exerting heavy pressure on prairie river ecosystems and native grasslands; areas that are more exposed to human impacts are also inundated with a higher

<sup>2</sup>We acknowledge that *settler* is a treacherous, messy, loaded and contested term, understanding the many different routes that non-Indigenous people have taken to call Canada home, all intensely complicated and fraught with vast differences in resources and privilege (e.g. refugees, African-Americans in North America) (Hern & Johal, 2018). Thus, we use the term settler carefully to locate ourselves as colonisers in Canada and as people with deep moral and ethical responsibilities to disrupt colonial logics and violent relationships that European colonisers, specifically, continue to inflict on Indigenous peoples. Further, we do not intend to reify categories and place ourselves, or others, into neat and fixed identity boxes, understanding the unstable and political nature of such category, and other categories, in that they possess fluid borders and heterogeneous members (Breen, 2019; Haney-Lopez, 2006).



**Figure 1.** The Saskatchewan River Delta near Cumberland House, Saskatchewan.

proportion of invasive species. Other challenges include the provision of drinking water, with almost 50% of Saskatchewan’s provincial population relying on the South Saskatchewan River for its daily needs, the quality of drinking water for Indigenous communities<sup>3</sup>, balancing industrial (e.g. potash mines) and natural resource development with the needs of agriculture, the allocation of water for flood and drought management and the mitigation of discharges from agricultural production and major cities (Strickert *et al.*, 2016). These issues are compounded by the decline in the magnitude of river flows because of retreating glaciers in the Rocky Mountains and changing rain and snow balances. Downstream in the prairies, global warming has led to the increasing prevalence and severity of floods and droughts. These changes have threatened crop production and husbandry practices and thereby the livelihoods of farmers, as well as destroying wildlife habitat and endangering some animal species (Wheater & Gober, 2013). Moreover, given the province’s carbon and water-intensive industries of agriculture, mining, oil and gas, Saskatchewan’s ecological footprint is above the Canadian average with the highest greenhouse gas emission rates in the country (City of Saskatoon, 2014; Government of Saskatchewan, 2013). These issues, among others, culminate in the Delta as being one of the most threatened ecosystems in Canada (Sask. River Delta Conservation Initiative, *n.d.*).

Ecosystem destruction, degradation and fragmentation of the Delta is occurring on many First Nations and Métis Lands. Thus, such ecological crises are very personal for Indigenous communities in Saskatchewan. Seventy-two First Nations live within Saskatchewan’s borders,<sup>4</sup>

<sup>3</sup>As of 18 March 2024, in Saskatchewan, there are currently 191 “boiled water” advisories (the second highest across provinces after British Columbia), and 4 “do not consume” advisories in Saskatchewan (the third highest across provinces after Quebec and British Columbia). Monitored by Indigenous Services Canada, some of these “boiled water” advisories are also deemed long term, meaning they have been in place for more than one year, with each one of them located within Indigenous reserves (Water Today, 2024). Issues of chronic boiled water advisories are a result of a collapse in jurisdictional and institutional responsibilities for source water protection, given that water quality on Indigenous reserves is the responsibility of the federal government. What is needed is for federal governments to unify with local solutions and initiatives that are designed around policies adapted to local needs and perspectives (Wheater & Gober, 2013).

<sup>4</sup>Saskatchewan is comprised of many Indigenous linguistic groups, including but not limited to variations of Cree dialect, for example, Nèhiyawak (Plains Cree First Nation in Saskatchewan), Nèhithawak (Woodland Cree First Nation that covers

with Treaties 2, 4, 5, 6, 8 and 10 encompassing the province of Saskatchewan (Government of Canada, 2010).<sup>5</sup> Many communities rely still in whole or in part on the land for agriculture, hunting, fishing and trapping (Strickert et al., 2016). But neoliberal and capitalist land development practices, ecological resource management and pollution not only threaten these traditional subsistence activities, but the physical dislocation and displacement of the land is deeply implicated by the silencing and erasure of Indigenous culture, cosmologies and spiritualities. In the face of stress and shocks, however, Indigenous communities across Saskatchewan, Canada, and throughout the world have demonstrated unwavering resilience that has led to adaptations, persistence and transformational responses to environmental changes (Ford et al., 2020). For example, the Indigenous-led social movement, *Idle No More*, commenced in 2012 among treaty people in Manitoba, Saskatchewan and Alberta to protest the federal government's dismantling of environmental protection laws and build a movement for Indigenous rights and the protection of land, water and sky (Idle No More, 2020). For Indigenous communities, "Water is life, Land is our first teacher" (Tuhiwai Smith et al., 2019, p. 1).

While the Saskatchewan provincial government is investing in sustainability as a strategy to reduce energy consumption and greenhouse gas emissions (Government of Saskatchewan, 2018), supporting and mobilising local efforts for active contributions to sustainable societies is an increasingly important task in Saskatchewan. However, as several international bodies report (i.e. the Intergovernmental Panel on Climate Change [IPCC], 2021, 2023; the International Energy Agency [IEA], 2021; the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service [IPBES], 2019; and [UNDRR, 2019]), there is an urgent need for more extensive actions to move us towards a more just and sustainable world. For example, the IPCC released a final report in April 2022 that named colonialism as a historical and ongoing driver of the climate crisis (IPCC, 2022). Such urgency is exacerbated by matters of politics and power concerning how discourse works to constrain and limit what counts as viable for different presents and futures (Blühdorn, 2011, 2016). That is, current processes within institutionalised pursuits of justice and sustainability models can serve to legitimise, rather than challenge, the status quo of extractive and exploitative colonial water (and land) relations. Blühdorn and Deflorian (2021) refer to tensions of *depoliticisation* within the *post-political* conditions of these neoliberal times. While different stakeholders might be engaged through procedures of consensual governance, depoliticisation arrests generative and transformative political conflict through socially constructed norms of consensus. Thus, depoliticisation works to pacify, deny and suppress the *political* and, as such, maintains dominant narratives and the closure of spaces that contest hegemonic consensus and the articulation and celebration of dissensus. Therefore, particular attention is needed regarding the production and distribution of knowledge, values and attitudes and how these shape perceptions through various regimes that influence the rationalities of individuals and institutions (Albrecht, 2015; Gordon, 1991).

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northern Manitoba and Saskatchewan), Nêhinawak (Swampy Cree First Nation that covers northern Manitoba and eastern Saskatchewan), Nahkawiniwak (Saulteaux First Nation that covers Ontario, Manitoba, Saskatchewan, Alberta and British Columbia in Canada), Nakota (Assiniboine First Nation that covers Montana and Dakota in the United States and Manitoba, Saskatchewan and Alberta in Canada), Dakota (Sioux First Nation that covers Minnesota, South Dakota and North Dakota in the United States and Manitoba and Saskatchewan in Canada), Lakota (Western Sioux First Nation that covers North Dakota, South Dakota, Nebraska, Minnesota and Montana in the United States and Manitoba and Saskatchewan in Canada) and Denesuline (Dene or Chipewyan First Nation that covers Manitoba, Saskatchewan and Alberta and the Northwest Territories in Canada) (Heritage Centre of Cree Nations, 2022; Office of the Treaty Commissioner, 2018; Stonechild, n.d.).

<sup>5</sup>Taking place in 1876, these treaties are a formal agreement between Indigenous sovereignties and the Crown, in which both parties must fulfil obligations and expectations that guarantee a co-existence between treaty parties within mutually beneficial arrangements (Office of the Treaty Commissioner, 2018).



## Theoretical framework, methodology and methods

In this research, we used a relational theoretical framework for our research design, data collection, analysis and dissemination of knowledge. A relational theoretical framework reinforces researchers' relational accountability to their research community (Tynan, 2021; Wilson, 2008). A relational theoretical framework suggests "that things are materially and spiritually connected through interactions with each other" (Datta, 2015, p.1). A relational theoretical framework was crucial for this project because it provided opportunities to prioritise the water worldviews of the Cumberland House Métis community (Wilson, 2008). It was a deliberate choice aimed at learning from and collaborating with Indigenous Elders, Knowledge Keepers (two of which are authors on this article) and community members regarding the competing uses of the Saskatchewan River Basin and the deleterious effects of Western management regimes on Indigenous communities (Chilisa *et al.*, 2017; Kovach, 2009; Wilson, 2008).

Following the relational theoretical framework, we employed CBPR as our research methodology to establish trust between researchers and communities and foster a sense of community ownership over the research (Castledan *et al.*, 2008). CBPR also rejects hierarchical relationships and reduces power imbalances between researchers and co-researchers (Ward & Fridkin, 2016). To ensure the research was conducted ethically and that community voices were upheld and valued, the project was directed and facilitated by the Cumberland House Métis community through the Community Knowledge Council (CKC). Thus, we incorporated several core components of CBPR, including building on strengths and resources within the community, facilitating collaborative and equitable involvement of all partners in all phases and integrating knowledge and action for the mutual benefit of all partners (Hackett, 2019; Snijder *et al.*, 2020).

Specific methods employed in this research included story sharing and deep listening from, and with, three Elders and Knowledge Keepers from the Cumberland House Métis community. Both methods allowed for relationship building and created the space for the respectful sharing of stories in facilitating a safe space where community members could feel comfortable sharing their experiences on the implications of power dynamics in water governance for their community (Kovach, 2009). Moreover, story-sharing and deep listening methods cohesively align with the relational framework and the CBPR approaches in this research by honouring the oral sharing of Indigenous knowledge (Datta, 2018).

## Data analysis

Research findings involved a collaborative story-learning process that engaged co-researchers in our analysis process. This analysis process aimed to prevent the researcher's voices from dominating those of the co-researchers (Birt *et al.*, 2016). We first adopted a thematic analysis approach to analyse the data. Thematic analysis is "a form of pattern recognition within the data, where emerging themes become the categories for analysis" (Fereday & Muir-Cochrane, 2006). Braun and Clarke (2006) observed it "is a method for identifying, analysing, and reporting patterns (themes) within data" (p. 6). The research adopted a thematic analysis approach because it provides "a rich and detailed, yet complex account of data" (Braun & Clarke, 2006, p. 5). The analysis process began with the researchers manually transcribing recorded stories. The transcripts were sent back to the co-researchers to confirm if we could meaningfully capture their (*i.e.* co-researchers) views and ensure accuracy. The next stage was manual coding and deductively categorising codes into sub-themes.

Examples of the codes we adopted include Indigenous people, worldviews, power dynamics, competing uses, stakeholders, self-determination, sovereignty, access, hunting, fishing, trapping, traditional ways, gaps, water, governance, impacts and marginalisation, among others. Since we used individual storytelling, manual thematic analysis was adopted to understand the flow of our learning and organise the stories into themes. Sub-themes were then created based on the coding

and categorising to reduce the data size for the collaborative analysis process. Sub-themes that emerged from this process included “traditional ways of life,” “impacts on the Delta,” “access,” “safe drinking water,” “Indigenous peoples,” “power dynamics,” “Indigenous worldviews” and “water needs.” These sub-themes were sent to all three co-researchers for member checking. After this, the sub-themes were presented to a CKC as a PowerPoint presentation for further analysis. The presentation allowed the co-researchers to participate in the data analysis process, in which the researchers and CKC categorised the sub-themes under major themes. This collaborative analysis process found three major themes: (a) impacts of Delta power dynamics on Indigenous communities’ traditional ways of life (including sub-themes of “traditional ways of life” and “impacts on the Delta”), (b) navigating Delta power dynamics and Indigenous peoples’ access to safe drinking water (including sub-themes of “access,” “safe drinking water” and “Indigenous peoples”) and (c) implications for solving the water crises and reclaiming Indigenous water worldviews (including sub-themes of “power dynamics,” “Indigenous worldviews” and “water needs”).

## Findings

The major themes demonstrate significant water conflicts abounding the Delta, as a direct result of ontological differences between Western and Indigenous views of water and uneven power relationships set in colonial hierarchies (Wilson & Inkster, 2018). Yet mindful to avoid the universalising of Indigenous ontologies (Laborde & Jackson, 2022; Sundberg, 2014; Todd, 2016) and subsequent epistemic violence in scholarship (Hunt, 2014; Watts, 2013), we acknowledge the specifically located and emplaced Indigenous thought, practices and legal/governance approaches relevant to the Cumberland House Métis community. As such, we do not intend to borrow ideas presented through the stories from the Elders and Knowledge Keepers, but we think with the complexities in the stories to grapple with settler responsibilities for water management within pervasive colonial governance systems (Stein et al., 2023; Wilson & Inkster, 2018).

### Major theme 1: Impacts of Delta power dynamics on Indigenous communities’ traditional way of life

The ubiquity of Western water governance models in the management of the Delta has far-reaching consequences for the Cumberland House Métis community. As a result of over-extraction through priorities of Western water uses, traditional ways of life with water that include hunting, fishing, trapping and medicine picking are adversely impacted. For example, the EB Campbell and the Gardiner hydro-dams have degraded water resources that include fish stocks within ecosystems of the Cumberland House Métis community. As one Elder commented:

They used to be thriving, the highest muskrat harvesting in the province, back in the, I think it was in the 60s or somewhere around there. I can’t remember. I have the documents. People were all out there. Their families, in one you could have, like, 20 different tents, you know that they’re doing their spring harvesting, and all the families will be out there with their children and now you can’t even find the muskrat in those lakes. If you do, it’s very few and scattered. It just changed the whole way we live even. It just put a blockage on everything. (Co-researcher, 2)

Depleting fish stock has profound impacts on the community including food security. This quote reflects the significant decline in muskrat harvesting and the profound impact it has had on the community’s way of life. This decline in muskrat populations has had far-reaching consequences, affecting not only the economy but also the social fabric of the community. The loss

of this traditional activity has disrupted the way of life for the people, creating a sense of loss for the community. The impact of this environmental change highlights the profound connection between the health of ecosystems and the well-being of communities reliant on them for their livelihoods and cultural practices.

As highlighted by the Elders, adverse impacts on the Delta are observed through the widespread use of fertilisers in farmlands which eventually seep into the river ecosystems, resulting in observable changes in the aquatic integrity that include abnormal growths on fish and a decline in animal populations. Commenting on the degradation of the environment and the decline in water quality, a second Elder said:

For me when I was a child, you could just drink out of the river, with a cup, just drink from the river as you travelled. But now you wouldn't, you wouldn't even go there, not with all the chemicals and things. We even think about the farmland in the southern part of the province and all the fertilisers and stuff they put into the ground year after year. That goes into the ground and goes into water and eventually in the spring it runs off into the river systems. And then you see all kinds of different things like we've seen fish with some growths and things on them. Different changes and the depleting animals that we have within the Delta. Everything is going down. And there's even been like my husband was working out on a sturgeon project study, they call it and he's seen great big bogs of sludge, pink kind of things, floating on the river. And he wishes he had a sample at that time, but he didn't. So, we know our water is not safe and we know it's poorly being looked after by the government. It seems like they don't seem to care after their dams. You know after that they don't seem to care what happens after the dam? But eventually, it's going to kill everything. (Co-researcher, 3)

Coupled with evidence of environmental degradation, the community observes the government's lack of adequate measures to address the issue, particularly in the maintenance of dams and water management practices. Even when Indigenous communities make formal appeals to authorities to re-examine the conflicting water uses within the Delta and the subsequential impacts on their communities, government bureaucracy serves as a barrier to their concerns being heard and actualised. According to one of the co-researchers on the project:

So many challenges and that's when we decided it was enough, finally, we attempted to contact the federal government and the provincial government with environment and justice. And we've tried to, you know, bring these issues to them, see what could be done. Nothing. We just kept getting the runaround and they refer us to different agencies and then just kept us going in circles, we didn't get anywhere. (Co-researcher 1)

Following this, another Elder went further to note that government agencies who controlled the flow of water in the Saskatchewan River do not understand local ecosystems. As she noted:

I know the village has been trying to deal with the *SaskPower* and other agencies and the government. You know, to get that water through and to have it and maintain a steady flow, because their problems, the management from this dam that's close to us here, that's causing most of our problems here. Is that it's just a push-button person that's in Regina, that's controlling this dam when they I guess, do whatever, whenever they want, and they can leave periods of no water flow in there for a certain amount of time. So that leaves fish stranded, you know? The eggs, the little minnows and everything are stranded, which adds to the dying of the fish and everything else. And then another time when there's high waters, they have poor management of maintaining that water flow, they'll just flush us right through. Like, we've had like a flash flood where there were three feet over the land everywhere the whole Delta was covered, and animals are dying everywhere. You see floating moose; you see a



bird's nest floating and you see dead animals everywhere. It was devastating. That was back in 2013, I believe, or earlier? That was the first major flood that they had, and they controlled it over there. In Regina, they control how the water flows and they're supposed to maintain 150 cubic metres per second, but they don't, sometimes I say they just shut it off. So, we know it's not being done, but they say they agreed to do it. I don't know. (Co-researcher 1)

These stories illuminate the notable lack of engagement and consultation of the local community that is directly impacted by decision-making concerning water management of the Delta. Thus, we are called to navigate Delta power dynamics that implicate Indigenous peoples' access to safe drinking water

## Major theme 2: Navigating Delta power dynamics and Indigenous peoples' access to safe drinking water

Power dynamics enmeshed within the Delta and the water crisis within the Cumberland House Métis community are interrelated and interconnected. As such, a holistic approach is needed to address the current water crises, in which Indigenous water needs must be at the centre of water governance. As one of the co-researchers indicated:

Again, with this policy, this should be made a priority absolutely when you are in this country there is no excuse for us not to have safe drinking water. Um, we are now. The way that I look at it is when you look at First Nations communities, Métis communities, we are now bordering that Third World. I guess it would be not a mentality, but absolutely we're looking at Third World circumstances and so, and the reason being is we don't have enough money in the coffers to go out and fix that. So, communities are having to wait. Nobody should have to wait for safe drinking water. I think that's a human, right? (Co-researcher 3)

The situation facing many Indigenous communities in Saskatchewan reflects systemic failures and calls for immediate attention to garner inclusive approaches to water governance. As the same co-researcher commented:

I think the governance piece has to be very inclusive. And I think it needs to engage all sectors of our community. And there needs to be equality when we're discussing this because so many times again, we're reactive rather than proactive and I think that being reactive has shown that there are now problems. You know, problems are cropping up and we're now seeing them. They're now coming to light. And so having said that, I think we need to look at being proactive and being proactive is to be equal and equitable to everybody across the board and ensure that everybody has a voice. And so, I think that's part of the governance piece and I think, like, you know, we have watershed, watershed authorities across Saskatchewan. (Co-researcher 3)

To address uneven power dynamics in water management practices of the Delta, water governance needs to think beyond inclusivity, in critically questioning *inclusivity into what systems?* That is, a complete renovation of land and water politics should not only seek Indigenous recognition by policymakers but also resonance. Moreover, the quest for social and ecological justice is more about illuminating the particular realities of the Cumberland House Métis community, calling into question settler occupation and the maintenance and reproduction of settler colonial projects and bringing Indigenous cultural practices with water from something invisible in mainstream water governance to something noticeably absent (Ahenakew, 2016).

### Major theme 3: Implications for solving the water crises and reclaiming Indigenous water worldviews

Reclaiming Indigenous water governance for the Delta will involve an ontological shift as to how water is understood in disrupting and dismantling the dominant colonial worldview that sees water as a resource that can be owned, exploited and managed and revitalising Indigenous cultural practices that hold water in relational reciprocity and deep respect (Wilson & Inkster, 2018). For example, water, and thus, the Delta, is a living entity for the Cumberland House Métis community. As a more-than-human person and relative, there ensues a sacred responsibility to protect its vitality and integrity, while simultaneously protecting Indigenous cultural identity. According to an Elder,

If I look at it through another lens, we know the importance of water. We always hear water is life which we sometimes take for granted. I know we have a water drinking system here that runs through the tap and it's clean water for us, it's treated water. But out there and our Delta and what's coming downstream? Well, who manages that? Who manages that for not only us but the actual ones that are unspoken for that don't have a voice, those are the animals. And, you know, there's a, there's a cycle of life that we follow. Within our ways we've been taught to trap, fish, hunt, and it's a sustained life. And in order for us to keep on that path of life and teach our young ones, water is very important. Like 20 years down the road, you know 20 years later our grandchildren. Are they gonna be able to have that same experience? Living the life of trapping and fishing and hunting? It is our way of life and if we were to lose that, it's part of our identity too as a people. This is where we were raised, and this is our life. Our way of life. Like everybody else has their own ways of life. That is one big component of who we are and where we come from. So, it's a message that we need to share with others. We cannot lose it. It's really important. (Co-researcher, 2)

Such narrative sheds light on the profound spiritual and cultural significance of water for Indigenous communities, in which the interconnectedness between water, livelihoods, identity and traditions in relationship with ancestral lands is consistently emphasised. The community acknowledges the essential role of water as the source of life. While the community has shown the utmost resilience in the face of impoverished colonial governance systems and structures, social and ecological injustices remain and beget the need for further collective action to protect water as a fundamental element of life and culture for Indigenous communities.

### Discussion and relational learning reflections

Power dynamics in the Delta are intimately tied to differences in water worldviews. These worldviews stem from diverse cultural, social and historical perspectives, which influence how water is perceived, managed and valued. The dominant water worldview in Western societies exemplifies water as a commodity or resource to be managed for human use and economic development through centralised governance structures (Stein *et al.*, 2023; Wilson & Inkster, 2018). In the context of the Delta, Western worldviews regarding water prioritise water allocation for agricultural irrigation, industrial development and municipal consumption, often at the expense of environmental sustainability and Indigenous rights (Carlson, 2016; Strickert *et al.*, 2016). In contrast, Indigenous water worldviews are rooted in cultural, spiritual and relational interconnections between all earthly kin that includes land and water. Thus, water is understood as a living entity with its own intrinsic value and rights (Bradford *et al.*, 2017; Chief *et al.*, 2021). In the case of the Delta, Indigenous communities advocate for water management approaches that prioritise ecological health, cultural preservation and collective well-being (Megdal, 2024; Strickert *et al.*, 2016), emphasising holistic stewardship, intergenerational responsibility and respect for

natural laws and traditional knowledge systems (Wilson & Inkster, 2018).<sup>6</sup> The Delta holds significant importance for the Indigenous Peoples, as articulated by the Elders and Knowledge Keepers from the Cumberland House Métis community in this article. Yet colonial power dynamics inherent in the water governance and management of the Delta have significantly impacted their traditional ways of life and access to clean drinking water through economic, legal and political marginalisation of Indigenous people and environmental degradation because of overconsumption and exploitive resource extraction.

### Addressing colonial legacies and promoting Indigenous sovereignty and self-determination in Delta governance

Addressing colonial legacies in the governance of the Delta is twofold. First, given that the separation of water from human sociocultural contexts is deemed at the root of contemporary water crises (Schmidt & Shrubsole, 2013; Yazzie & Baldy, 2018), there is a need to unsettle, or decolonise, dominant ideas of water as a resource for extraction and as something humans consume from a detached and separate distance from earthly systems (Wilson & Inkster, 2018). Rethinking “ontological pluralism” in water governance (Wilson & Inkster, 2018) is a praxis that respects and embodies water as a living entity with its own agency, rather than as something to be owned, while simultaneously taking Indigenous peoples’ ontological assumptions literally, rather than as a symbolic “myth” or “belief” (Nadasdy, 2007). Such praxis means to realise the interconnected relationships between humans and more-than-human worlds, in which the health and well-being of one entity are intricately linked to the other, at our core (Maller et al., 2006).

Moreover, legal and policy reforms are urgently needed for local Indigenous communities to hold their own jurisdictions over water (Hurlbert et al., 2024; Diver et al., 2022; Stein et al., 2023). There is a need to listen to local communities that are directly impacted by governing decisions for water management, through deep acknowledgement and respect for Indigenous rights and knowledge. Thus, to address colonial legacies and promote Indigenous sovereignty and self-determination, governance of the Delta must enact comprehensive, holistic and systemic approaches to water management that include meaningful engagement and consultation with Indigenous communities in all decision-making processes (Abu et al., 2019; Pearce, 2021; Viaene, 2021; Yates et al., 2017).

### Conclusion

Community leaders in the Delta are continuing to build capacity and push upstream policy decision-makers to greater accountability for ecological, economic and cultural integrity (Jardine et al., 2023). However, ethical horizons of hope within sustainable futurities are not just a pragmatic project but one that calls for an ontological shift in positioning the human as inseparable from broader ecologies of the world. Thus, the job for effective and just water governance is not only a project of respecting Indigenous governance structures; nor is it only about bringing Indigenous and Western voices into collaborative conversation. Rather, joining with Delta communities that are sustaining culture through a resurgence of on-the-land activities and local languages (Jardine et al., 2023), signs of hope will come from the implementation of relational frameworks and critical and careful consideration of treaty promises. With reference to the epigraph at the beginning of this article, treaties are in effect as long as the “yonder river flows.”

<sup>6</sup>A poignant example of how collective governance to maintain the spiritual, cultural and environmental health of rivers and waterways is possible can be drawn from the Fitzroy River Declaration in Western Australia. As a historic statement signed by seven traditional owner nations, this landmark declaration stipulates a collaborative approach to inclusive water management of the Martuwarra (Fitzroy River) as a single living system (LIM et al., 2017; Poelina et al., 2019). See also <https://www.klcfitzroymartuwarra.org.au/>.

Thus, given that such a “yonder river” within the Delta is under serious and escalating threat as a result of colonial hierarchies perpetuating social and ecological harm and disarray, there has never been a more important time to rethink governance to account for not only who is coming after, but who is still here amidst the ruins.

Collaborating with Indigenous Knowledge Keepers and Elders from the Cumberland House Métis community and learning from, and with, their stories, we work against the grain of dominant colonial narratives in this article to open spaces of dissensus within water governance of the Delta and corresponding curricular and pedagogical enactments in (environmental) education. We do this by showing how dominant political views grounded in Western governance models work to reify colonial logic and ideologies that separate humans from their environments (Lasczik *et al.*, 2020) while bringing Indigenous ontologies of water and culture under erasure. Thus, our efforts in this article seek to contest and challenge the status quo of extractive and exploitative colonial water (and land) relations, while standing in solidarity with Indigenous sovereignty and self-determination for governance in accordance with situated and emplaced ways of knowing and being as set in relational reciprocity (Poelina *et al.*, 2023; Wilson & Inkster, 2018). Such praxis seeks to nurture complex entanglements without collapsing important differences and distinctions that matter—a praxis that is more than *witnessing the ruins* and beyond politics of recognition, what Oliver (2001) claimed as only affirming status quo hierarchies to doing something with the idea in the ethical space (Ermine, 2007, 2011), and in the case of good governance and good education, *working the ruins* outside of dualistic opposition.

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## Author Biographies

**John Bosco Acharibasam (BA, MA, Ph.D.)** is a Postdoctoral Fellow at Mount Royal University. His work focuses on addressing health inequities, social, and environmental justice issues within Black and other marginalized communities. Following this, my research goal is to reduce environmental vulnerabilities and health inequities within Black, Indigenous, and other marginalized communities. As an immigrant, John acknowledges the need to build cross-cultural bridges among BIPOC communities in Saskatchewan, Canada. His research also addresses decolonizing methodologies, and anti-racial issues.

**Kathryn Riley, Ph.D.** is an Assistant Professor with the Faculty of Education at the University of Manitoba. Kathryn's research focuses on relational ontologies, pedagogies for (w)holistic wellbeing, and an anticolonial praxis for social and ecological justice to advance relational and sustainable solidarities with Land/Country/Place. Kathryn is the Principal Investigator (University of Manitoba, 2023–2028) in the Movement as Artivism project, exploring physical activity and arts-based practices in response to eco-anxiety with middle-years teachers and learners. Kathryn recently published a book (Re) Storying human/earth relationships in environmental education: Becoming (partially) Posthumanist. Kathryn is an Associate Editor with the Australian Journal of Environmental Education.

**Ranjan Datta, Ph.D.** is settler of color in Canada and Canada Research Chair in Community Disaster Research and Assistant Professor, Department of Humanities, Mount Royal University, Calgary, Alberta, Canada. Ranjan's research interests include advocating for critical anti-racist perspectives on community disaster research, Indigenous environmental sustainability, community-led climate change solutions, and decolonial community research. His current research program is supported by his existing network of Indigenous, visible minority immigrants and refugee, Black communities, scholars, students, practitioners, and professionals in Canada and beyond.

**Elder Denise McKenzie** is a mother, an Elder, and a Supervisor for KidsFirst North. My work is focused on enhancing the health and wellness of community members. This is highlighted by my extensive work in the Saskatchewan River Delta restoration projects.

**Elder Veronica Favel** is a mother, an Elder, and a Home Visitor at KidsFirst North. My work is focused on enhancing the health and wellness of community members. This is highlighted by my extensive work in the Saskatchewan River Delta restoration projects.

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