Holding Back the River: Water and Colonialism in Northwestern Ontario

John Sandlos
Holding Back the River: Water and Colonialism in Northwestern Ontario

JOHN SANDLOS

Dams are an ancient technology: the earliest known earthen works to manipulate river flows along the Nile date back to 4,900 years ago. The era of ever-larger and abundant dams has been relatively brief, however, inaugurated (arguably) by the construction of the massive Hoover Dam (221.3 metres high) on the Colorado River in 1935 and accelerating rapidly with advances in engineering and construction equipment after Second World War. Mega dams, such as China’s Three Gorges and Egypt’s High Aswan dam, stand out in the public and political imagination as symbols of national ambition and as temples to the high modernist faith in the ability of science and technology to bend wild nature to human purposes. Perhaps even more impressive than these awe-inspiring mega projects (or more disturbing, from an environmentalist perspective) is the sheer number of large dams that have been constructed globally. One recent study has estimated that 2.8 million active dams have reduced the proportion of free-flowing rivers (longer than 1,000 kilometres) around the globe to a mere 37 percent of the total. Another has posited that the world’s 58,000 large dams — defined as higher than 15 metres — possess a cumulative storage capacity equal to one-sixth the total annual flow of the Earth’s rivers to the sea. Humans have thus transformed an astonishingly large proportion of the world’s natural flowing watercourses into enviro-technical systems meant to serve their needs and desires.

The proliferation of dams has undoubtedly provided an eclectic array of human benefits, including electrical power, flood control, improved navigation, and water storage capacity to serve irrigation and water diversion schemes. Even author and activist Marc Reisner, an ardent critic of dams, acknowledged that much of southern California would have to be evacuated if it could no longer borrow water from the dams and diversions of the Colorado River to combat the inherent aridity of the region (and even without the removal of the dams, the fact the river’s reservoirs are now drying up due to overuse and persistent drought associated with climate change presents a severe challenge to the region). As one of the “brute force technologies” historian Paul Josephson identified with the industrialization of
the natural world, the environmental impacts associated with dams have been (and continue to be) many and varied. They include the flooding of vast areas to create reservoirs, methylmercury contamination in reservoirs due to the decay of terrestrial vegetation, blockage of fish spawning routes, the destruction of shoreline habitat due to newly fluctuating water levels on lakes and rivers, and downstream impacts such as the drying of wetlands and shrinkage of deltas.

Early works of environmental history in the United States, particularly those studying irrigation schemes in the arid west, have tended to associate dam development with the arrogant appropriation of water systems to support capitalist greed or state developments schemes. Richard White’s landmark work, *The Organic Machine*, provided some nuance, with its move away from a purely declensionist historical narrative and its emphasis on the hybrid nature of the heavily dammed Columbia River as a product of both nature and culture, an environment that was constantly in flux, “mocking our supposed control.” Even so, it is difficult to completely ignore the will to dominate nature that is often successfully embodied in dam construction schemes. Mark Fiege’s foundational work on irrigation schemes in Idaho, for example, echoes White’s arguments about complex hybrid environments, but he still acknowledges that, “more than any other feature in the irrigated landscape, dams — massive, angular, towering structures — signified man’s ability to exert his will over wildness.”

Despite the green veneer that has been painted on hydroelectricity as one solution to climate change, one could plausibly argue that the rapidity and urgency with which human beings have colonized, manipulated, and controlled a majority of the world’s watersheds through the mass construction of dams is one of the more visible telltale signs of the Anthropocene, a new geological epoch where human activities have become the dominant contributing factor to global environmental change.

Canada is no stranger to dam development. As several historians have pointed out, Canada has been an almost uniquely enthusiastic devotee of hydroelectric power, an anomalous energy nation where hydroelectric development (which dates back to 1881 at Chaudière Falls, near Ottawa) accounted for over 90 percent of total supply by the middle of the twentieth century. Nuclear, coal, oil, and gas-fired generation of electricity cut into hydro’s dominance after World War Two, but the kinetic energy of rivers still provides 60 percent of the total supply of electricity in Canada, produced from approximately
500 generating stations, with hydro-rich provinces such as British Columbia, Manitoba, and Newfoundland and Labrador still deriving roughly 90 percent of their power needs from hydro dams. The United States abandoned mega dams a half century ago due to the extreme financial costs and environmental opposition (even engaging in dam removal as older projects reach their age limit), but provincial governments and utilities in Canada continue to pursue the development of these behemoths, most recently and notably at Site C in British Columbia and Muskrat Falls in Newfoundland and Labrador. Both projects have been subject to major cost overruns and local opposition, and the Muskrat project has threatened the ruination of the provincial economy and methylmercury contamination in an environment Indigenous people depend on for country food.

Given the ubiquity of hydroelectric dam development in Canada, it is hardly surprising that Canadian environmental historians have had much to say on the subject. A considerable amount of this work has focused on the motivations that drove the state and private capital to become such boosters of hydro development. In a series of papers on mega dams on the Peace and Columbia Rivers, Tina Loo (and, in one paper, co-author Meg Stanley) argued that these massive developments arose from the high modernist urge toward the simplification of local environments. Daniel Macfarlane also applied this theoretical position to his full-length work on the St. Lawrence Seaway, a project where high modernist ambition in the form of the Robert Moses–Robert H. Saunders Power Dam flooded and erased nine shoreline villages after construction was completed in 1958. Several historians have noted the limits of the high modernist framework: Loo and Stanley tempered their argument by acknowledging hydraulic engineers developed a great deal of specific, local knowledge of the rivers they were intent on damming; Ronald Rudin argued that the dam building efforts of the Canadian government’s Maritime Marshland Rehabilitation Administration (1948–70) always incorporated a mixture of local and expert knowledge about the Acadian salt marshes; and Chris Armstrong and Viv Nelles have warned about adopting an overly monolithic view of the state in their study of the inter-agency battle over Calgary Power’s plans to dam the Spray Lakes area of Banff National Park.

Closely aligned with the studies of state-centric high modernism are those that examine the nationalist hydro-politics of dam development and the creation of public hydro utilities, especially in
provinces such as Quebec and Newfoundland and Labrador, which have staked their autonomist political identities at least partly on the development of massive hydroelectric dams. Matthew Evenden’s work has demonstrated that the military imperatives associated with the Second World War, particularly the demand for aluminum, resulted in a massive expansion of dam projects and the consolidation of state control over hydro production. There are other approaches to dam history in Canada: Joy Parr’s work on the sensory experience of change due to dam development; Evenden’s and Jonathan Peyton’s reminders that local and inter-governmental opposition has prevented some dams from being built; and Jamie Benidickson’s emphasis on transboundary policy frameworks for watershed management. Nonetheless, the nexus between state ambition and hydroelectric development remains the dominant approach to the environmental history of dams in Canada.

Despite all of this work, Indigenous experiences of dam development have received somewhat limited attention. Loo’s account of the Bennett Dam describes the dislocation of the Tsay Keh Dene First Nation due to the lack of caribou and the downstream impact of a drying Peace-Athabasca Delta on the subsistence economy of that region’s Dene communities. Caroline Desbiens’ *Power from the North* briefly covers the impacts of the La Grande River hydro developments and the seminal James Bay and Northern Quebec Agreement on the Cree and Naskapi, but the primary focus of the book is Quebec’s nation-building vision based on northward expansionism, primarily though hydroelectric development. Armstrong and Nelles devote a chapter of their *Wilderness and Waterpower* to the remarkable resistance of the Stoney Nakoda to hydro development (and resultant flooding) on lands surrounding the Kananaskis Falls development in the 1910s, a campaign that forced Calgary Power (under a looming threat of violence) to provide cash compensation on something close to the Nakoda Nation’s terms. Peyton similarly includes a chapter in his *Unbuilt Environments* on the successful campaign of the Tahltan Nation to stop the damming of the Stikini River in the early 1980s. David Massell, in his *Quebec Hydropolitics*, combines the familiar theme of hydro-nationalism with a substantial account of historical Innu subsistence activities and their displacement due to dam development dams at Lake Manouan and Passes Dangereuses in the Saguenay region (created to power the massive Alcan aluminum smelter at Arvida, Quebec, during the Second World War).
case study, Macfarlane and Kitay have gone so far as to articulate a theory of hydraulic imperialism, whereby the state facilitated the displacement of Indigenous people through hydroelectric development and the broader assertion of control over the James Bay watershed in northeastern Ontario during the 1910s. All of these works make significant contributions to our knowledge of the political, cultural, and ideological forces that shaped the imposition of state power and environmental changes associated with hydroelectric development in Canada, but the end result of the state-centric approach is that Indigenous people’s historical experience of dams remains somewhat of an adjunct to a broader story.

Brittany Luby’s masterful Dammed is a crucial and momentous publication precisely because it goes further than any other environmental history of hydro development to place Indigenous experience at the centre of the story. The core of the book is the history of two dams in the Winnipeg River region — the Norman Dam, constructed in 1898, and the Whitedog Generating Station in 1958 — and their dramatic impacts on household economies in the Anishinaabe community of Niisachewann (or the Dalles 38C Reserve). With deep family roots and experience in the community, Luby is uniquely positioned to understand the cultural context in which her narrative is situated and also to draw on (and use appropriately) interviews with Elders who remember the complex environmental impacts associated with the dams. As an insider, Luby ably privileges the voices of her community and, by doing so, flips on its head the common tendency to position metropolitan forces as the driving force behind historical change in hinterland regions. She writes,

Being on the land and working with Elders helped me to counter Canadian constructions of space and history. From the Anishinaabe perspective, Lake of the Woods was a bustling centre, whereas Toronto was peripheral. Kenora was isolated from other Anglo-Canadian centres, but it was (and is) an Anishinaabe homeland, with Lake of the Woods serving as a political centre. To the west of Lake of the Woods is Minito Ahbee. It has been revered by Indigenous People across North America as a sacred space. For Anishinaabe families, the north shore has not been peripheral but a hotbed of economic, political, and spiritual activity. It is a space where women and men have fished, raised their children and worked for pay.
For Luby, the Anishinaabe of Dalles 38C are a “water people” deeply embedded in their homeland, cultural identity, material practices revolving around fishing and the harvest of *manomin* (wild rice) from the river, and cultural practices such as the playing of the water drum, or *mitigwakik*, to reinforce the people’s connection to the Winnipeg River basin. Her book ultimately maps a very different set of ideas about cultural identity and local water systems than those entrenched in the hydro-nationalist discourses that are the focus of so many other dam histories.

Luby’s attentiveness to Anishinaabe perspectives does not mean that she ignores the colonial practices that propelled hydraulic imperialism in the Winnipeg River Basin. *Dammed* provides a disquieting account of the Ontario and federal government’s removal, in 1915, of Anishinaabe riparian rights to waters running through reserves and from headland to headland, opening the way for hydroelectric development throughout Treaty 3 lands. As Luby suggests, the state and the provincial power utility (the Hydro-Electric Power Commission of Ontario, or HEPCO) looked at the waters of the Lake of the Woods regions through a narrow lens that envisioned only power production to support industrial development, rendering invisible the economic activities of the Anishinaabe who inhabited the watershed. One of Luby’s central arguments is that historians who have focused on treaty making and the establishment of reserves in the late nineteenth century as the root of Indigenous land dispossession in Canada miss the fact that many reserves in northern areas, among them Dalles 38C, remained economically viable for several more decades. In many cases, the hydro developments that powered industrial expansion in northern Canada (in this case, the construction of the Whitedog generating station) and propagated postwar affluence were built on the backs of these Indigenous communities, dispossessing them of their economic base and entrenching poverty as a new and prevailing reality.

Luby argues that the people of Dalles 38C were anything but passive in the face of this hydraulic imperialism, adopting multiple forms of resistance and adaptation to the construction of dams in their midst. Among many strategic responses to the dam, the Anishinaabe filed damage claims with Indian Affairs; persisted with ceremonial practices that Indian Affairs had forbidden (but which reaffirmed community ties to water, such as the aforementioned *mitigwakik*); increased their participation in the cash economy (particularly through the sale of blueberries) as the environmental impacts of the dams degraded
local production of other food sources; opened bank accounts and saved cash as a safeguard against downturns in the local economy; and obtained wage labour in the summer tourism sector or in industrial facilities, even as they faced discriminatory hiring practices. By providing such a detailed portrait of diverse Anishinaabe survival strategies, Dammed accounts for the agency of Indigenous people in relation to the dams, all the while acknowledging the imposition of a colonial framework where the benefits and costs of dam development were not distributed equally.

Dammed teaches two additional lessons that will hopefully provide cues for further historical work on dam history in Canada. The first of these is that, for all the obvious reasons historians might choose to focus on mega dams, they should not forget the small dams that also had dramatic impacts on Indigenous communities. The Norman Dam and the Whitedog generating station are hardly big facilities, producing a relatively tiny 12.8 MW and 68 MW of power when compared to hydroelectric behemoths such as the Robert-Bourassa generating station (7722 MW) in northern Quebec or the Churchill Falls dam (5428 MW) in Labrador. For the Anishinaabe of Dalles 38C, though, even these relatively small obstructions to the flow of the Winnipeg River irrevocably altered their lives and livelihoods. The fluctuating water levels associated with the dams reduced the local supply of *manomin*, reduced some fish populations below viable levels for commercial and subsistence use, and decimated aquatic mammals, especially muskrat, critical to the fur trade and food supply. Crucial winter ice roads became unstable and unreliable, compromising the ability to travel for subsistence purposes and to visit other communities. As the Whitedog station reduced the flow of the Winnipeg River, the waterway was no longer able to break down wood fibre from the Ontario–Minnesota Pulp and Paper Mill at Kenora, resulting in methylmercury contamination of fish populations. In response to the potential toxic effects of methylmercury, the Anishinaabe of Dalles 38C reduced their consumption of fish, and many Anishinaabe women stopped feeding their babies breast milk, a dietary change that undermined women’s social roles as providers of milk medicine. There were also secondary impacts as the dams ultimately enabled outsiders to migrate to new towns such as Kenora, resulting in issues with sewage and garbage contamination in the river by the 1950s. The fact that these two dams introduced such a cascading series of ecological impacts brings to mind a sobering thought: almost every mill, mine,
and resource town in northern Canada was powered by at least one small dam development, and thus there are potentially hundreds of undocumented dam histories with stories similar to those at Dalles 38C. Luby’s work points historians toward the hidden histories of small dams that carried big consequences in Indigenous territories.

The second lesson I drew from Luby’s book is that historians ought to pay more attention to the role of water systems in colonial processes, providing further case study research in order to better document processes of hydraulic imperialism. Understandably, the bulk of Indigenous histories in Canada frame the colonial experience primarily in terms of land dispossession, with a corresponding contemporary discourse that places the politics of land ownership at the centre of any discussions about reconciliation. But human communities are no less dependent on water than they are on land; all human societies live within the constellation of possibilities and constraints offered by the water system in which they reside. Perhaps the most unique contribution of Luby’s book is to place water — its life-giving properties, its kinetic energy, and its cultural significance — at the centre of her narrative of colonialism and resistance. Her work constitutes a powerful narrative account of the many ways colonial power can be imposed on water systems, either through the legal system or the biophysical appropriation of waterways for the purposes of energy production or the dumping of waste.

On this theme, Luby’s work is not completely alone. Adele Perry’s recent book *Aqueduct* has also pointed in this direction, explaining how the diversion of drinking water from Shoal Lake to Winnipeg effectively marginalized an Indigenous community (Shoal Lake 40, not far from Dalles 38C) on an artificial island and condemned them to live under a boil water advisory as local supplies became contaminated. The ample journalistic and scholarly coverage of methylmercury contamination at Grassy Narrows and the Whitedog Reserve (both also nearby and culturally connected to Dalles 38C) reinforce idea that colonialism in the Winnipeg River region was largely a water-based phenomenon. Land and water are, of course, closely connected, and it would be a mistake to draw too fine a distinction between various forms of colonial dispossession from terrestrial or aquatic environments. I would also defer to contemporary Indigenous activists on the question of whether calls for “land back” might also usefully incorporate demands for “water back.” One of the broader implications of Luby’s book, however, is that some accounting for the historical
dispossession of Indigenous people from their water systems is a prerequisite to decolonization, reconciliation, and some measure of environmental justice.

***

JOHN SANDLOS is a Professor in the Department of History at Memorial University.

JOHN SANDLOS est professeur au département d’histoire de Memorial University.

Endnotes


130
14 Jerry Bannister, “A River Runs Through It: Churchill Falls and the End of Newfoundland History,” *Acadiensis* 41, no. 1 (2022): 211–25; Caro-
line Desbiens, *Power from the North: Territory, Identity, and the Culture of Hydroelectricity in Quebec* (Vancouver: UBC Press, 2013); David Mass-
17 Loo, “Disturbing the Peace: Environmental Change and the Scales of Justice on a Northern River.”
19 See Armstrong, *Wilderness and Waterpower*, chap. 2 and 3.
20 See Peyton, *Unbuilt Environments*, chap. 3.
21 See Massell, *Quebec Hydropolitics*, chap. 1 and 2.
26 Luby, 34. This was accomplished through federal legislation: An Act to Confirm the Title of the Government of Canada to Certain Land and Indian Lands, SO 1915, c. 12.


