

# Winona LaDuke and Deborah Cowen<sup>1</sup>

## Beyond Wiindigo Infrastructure

For the Ojibwe, history and legends are passed down orally. There are the stories of Wiindigo, a giant monster, a cannibal, who killed and ate our people. Colonization was our Wiindigo.

—Bezhigobinesikwe Elaine Fleming,  
“Nanaboozhoo and the Wiindigo” (2017)

“why you telling wiindigo stories all the time?”  
“maybe because they’re about greed and evil and imbalance, and we’re all living surrounded by that.”  
“well then why you want to be surrounded by more of that?”

“i dunno. so we see the wiindigo in ourselves?”  
“gaa. you young ones forget everything nowadays. wiindigo more about the inside than the outside.”  
“so what should we be telling, then?”  
“you know.”

“i don’t think i do, know, that is.”  
“tell the ones about that strong young nishnaabekwe who wasn’t afraid of those wiindigo. who was smart and strategic. who was patient, so, so patient. waiting until just the right time. waiting, watching. tell those ones, so those young ones will know what to do. teach those ones. make it so they’ll want to listen. make it so they’ll pay attention.”

—Leanne Betasamosake Simpson, “gezhizhwazh” (2016)

*The South Atlantic Quarterly* 119:2, April 2020

DOI 10.1215/00382876-8177747 © 2020 Duke University Press

These are decisive times. We are now perilously close to planetary ecological collapse. In 2017, the Intergovernmental Panel on Climate Change announced a minuscule twelve-year window for radical global action on climate change, and as we write in summer 2019, the melting Arctic indexes an unfolding failure to steer our collective path away from apocalypse. This year, reports on the extent of species extinction added another incontrovertible measure of the evolving catastrophe. The ecological crisis is a direct result of a broader social and spiritual one. It is lived in dramatically uneven ways, with Indigenous peoples and people of color bearing the brunt of toxicity, habitat destruction, and displacement. Colonial theft and unceasing extraction proceed apace, despite, or even through, talk of reconciliation. The crisis is a direct result of an economic system predicated upon accumulation and dispossession, that denigrates the sacred in all of us. Winona calls this the *Wiindigo economy*, invoking the cannibal monster of Anishinaabe legend that “symbolizes the potentially addictive part of the human condition—when certain desires are indulged,” stimulating “more indulgence until all reason and control are lost” (L. Simpson 2011: 70). The *Wiindigo economy* is produced through routine attacks on the courage and creativity of women and the gender and sexually diverse. It holds striking concentrations of wealth and poverty. It is organized by an extraordinary expansion of military, security, and carceral power that destroys, separates, and contains peoples based on race and nationality. It is like a cancer, a cancer on Mother Earth, a cancer on our bodies; and indeed, in the world we live in today, many of us will succumb to the disease. We are a reflection of our Mother. As our climate heats up, so does the global political scene, with fascist social orders on the rise the world over. “Man’s heart away from nature becomes hard,” Standing Bear would say; we lose relationship, we isolate, and we become cruel.

And yet, despite the severity of the situation, the future is not foreclosed. We have agency, and life is magical. In Anishinaabe prophecy, this is the moment of choice, when two paths open before us. We are told there is one path that is well worn but scorched, the second green. The question is how to move off the scorched path. In this writing, we suggest that choosing a good path requires the revolutionary but also profoundly practical work of infrastructure. At the center of the *Wiindigo*’s violence and destruction is infrastructure’s seemingly banal and technical world. *Wiindigo infrastructure* has worked to carve up Turtle Island, or North America, into preserves of settler jurisdiction, while entrenching and hardening the very means of settler economy and sociality into tangible material structures. We see this in sharp relief today, with pipelines and dams and roads and prisons and

toxic water infrastructures. We know it in the struggles at White Earth and on Secwepemc territory, from Flint to Neskantaga, from Goose Bay to Pelican Bay. And we feel it across the whole length of the national border, and at the detention camps assembled in its name. The transformation of ecologies of the many into systems of circulation and accumulation to serve the few is the project of settler colonial infrastructure. Infrastructure is the *how* of settler colonialism, and the settler colony is where the Wiindigo runs free. Yet, infrastructure is not inherently colonial—it is also essential for transformation; a pipe can carry fresh water as well as toxic sludge. We suggest that effective initiatives for justice, decolonization, and planetary survival must center infrastructure in their efforts, and we highlight *alimentary infrastructure*—infrastructure that is life-giving in its design, finance, and effects. Drawing on our distinct work in communities, classrooms, courthouses, and city streets, we insist that our collective futures hinge on remaking socio-technical systems—on *building beyond* Wiindigo infrastructure.

That settler sociality and economy are enabled and reproduced by infrastructure explains our concern for socio-technical systems, but what about the Wiindigo? What can be gained from engaging infrastructure *as* Wiindigo, but also from stories that move beyond? In “Land as Pedagogy,” Leanne Simpson (2014) offers that Indigenous stories are the “theoretical anchor” of critical Indigenous studies. Barker (2018: 20) engages Simpson’s work on this question, and offers that stories “‘generate and regenerate’ meaning, made relevant by those who, in the retelling and representation of them, (re)make their relationships and responsibilities to one another, to nonhumans, to the sky, and to the earth.” Stories insist on the ethical, embodied, and affective dimensions of knowing, refusing imperial systems of knowledge that divide fact from fiction, mind from body, and the sacred from survival. Rooted in and routed through this territory, Indigenous stories can help us see and know and walk a different path. Despite settler colonial claims of outright replacement of Indigenous people and their sovereign ways of life, Indigenous ways of knowing the world survive and are seeing a powerful resurgence (A. Simpson 2014; Coulthard 2014; Estes 2019). Can stories about the Wiindigo (which for Fleming describe the experience of colonialism) and stories about “the strong young nishnaabekwe who wasn’t afraid of those wiindigo” (which Leanne Simpson figures as stories of resistance and survivance) help us reimagine the critical infrastructures of everyday life on Turtle Island?

In what follows, we combine forces to share stories of infrastructures across Turtle Island. Our discussion focuses attention on Canada, but travels to both sides of the “Medicine Line”—a term for the US-Canada border

coined by Indigenous peoples during early colonial settlement that speaks to the seemingly “supernatural manifestation” that governed settler mobilities (O’Brien 1984: 315). We begin by offering reflections on how infrastructure has long been critical to settler colonial futurity and to the destruction of Indigenous life. We then shift focus to dwell in a different set of stories, of people and communities who are assembling infrastructure otherwise. Both old and new, these other stories are anchored in creativity and freedom, in courage and in love, and offer practical and affective possibilities for transformation. With Leanne Simpson, we look to those who “[weren’t] afraid of those wiindigo,” who are “smart and strategic . . . [and] patient. We tell these stories in hopes of encouraging more people to pay attention to infrastructure, and to create technology, systems, and infrastructure for life, rather than for the Wiindigo. Infrastructure is the spine of the Wiindigo, but is also the essential architecture of transition to a decolonized future. Social and ecological transformation is movement and relies on movements, and both require infrastructure.

### Apprehending Infrastructure

And while there are infrastructures of Indigenous resistance, they confront infrastructures of settler colonialism in the form of police, prisons, dams, and oil pipelines that intend to destroy, replace, and erase.

—Nick Estes, “Freedom Is a Place” (2018)

On February 14, 2019, over a hundred big-rig trucks departed from Red Deer, Alberta, en route to Canada’s capital city. The “United We Roll” convoy monopolized national news for the six days it took them to reach Ottawa. The truckers carried messages of anger and enmity; homemade and professionally printed signs affixed to their cabs and containers read, “We Love Oil,” “Build Pipelines,” “Trudeau: Step Down, Clown,” “Liberty, Free Speech, Capitalism!” and “No Dirty Foreign Oil.” This white and masculine backlash animated by climate change denial and hyper-extractivism is diagnostic of a politics that has taken hold across the continent. Motivated by deep emotional and material investment in the expansion of oil and gas infrastructures, the truckers charged the prime minister with stunting the sector. Licia Corbella (2019), the *Calgary Herald* / Postmedia opinion columnist, described and performed the convoy’s nationalist affect. Corbella described the “Canadian flags flapping and huge signs declaring love for Canadian oil and gas,” and suggested that “it was, indeed, a strangely beautiful and, I’ll admit, somewhat

emotional sight.” The 3,500 km journey included pit stops for rallies as well as refueling. Their numbers grew as they journeyed eastward.

In fact, the convoy carried *two* prominent messages that entwined with disturbing ease: a rally for expanded oil and gas infrastructures, and a call for more investment in border infrastructures to curtail immigration. As Justin Brake (2019) reported for the Aboriginal People’s Television Network, “What began in Red Deer last week as a pro-pipeline campaign has transformed into a platform for right-wing activists who have promoted white nationalist, anti-immigrant, anti-Indigenous and other racist messages at rallies along the way.” Explicitly signaling their alignment with Trumpism south of the Medicine Line, an oft-spotted “Make Canada Great Again” hat was the popular fashion choice for this white men’s pro-carbon convoy. Red Deer had already been dealing with a surge of racist attacks on Indigenous people and people of color in the months leading up to the convoy (Michelin 2018), and media reports describe the broader emboldening of local white supremacism since Trump’s election. The Canadian Anti-Hate Network (cited in Belewett 2019) asserted that United We Roll was “entirely co-opted by the far-right including the most extreme anti-Muslim groups in Canada.” This was, furthermore, not an affair of the fringe. Canadian Conservative leader Andrew Scheer was criticized for speaking at the convoy’s rally on Parliament Hill alongside a renowned white nationalist.

The United We Roll convoy’s interest in expanding both border and pipeline infrastructures was rife with painful ironies. Unremarked in popular discourse is the fact that Red Deer, like the rest of the settler cities in the west, was founded only a little more than a century ago during the first massive colonial infrastructure invasion in this part of Turtle Island. Then like now, physical infrastructures of circulation were coupled with affective infrastructures of white supremacy as part of the settler movement westward. Red Deer took shape historically through a Canadian version of the “railroad colonialism” that Manu Karuka (2019) has elegantly documented south of the Medicine Line. The birth of Red Deer took place in 1891, when Fort Normandeau was moved to the city’s current site in order to access the newly constructed railroad. The town grew rapidly after the arrival of the rail and Red Deer was incorporated in 1913. Fort Normandeau—a key settler colonial infrastructure itself—housed the Fusiliers Mont-Royal while they fought Louis Riel and the Metis and Cree forces in the 1885 uprising.

In addition to the active military combat against Indigenous peoples and the critical military infrastructure that supported it, European settlement in

the Red Deer area involved a systematic attack on the bodies and livelihoods of plains people. The survey and sale of lands could not proceed until plains peoples' relationships to the land were severed, and the building of the railroad infrastructure served this goal. Railroads were key in the mass killing of an estimated 50 million buffalo that had roamed Turtle Island's central plains, reaching north to Alaska and the Yukon Territories and south through the state of Georgia. The life of the buffalo was deeply entangled with the life of plains people and remains so—buffalo provided food, clothing, and tools; their movements shaped the geographies and temporalities of the peoples that relied on them. In just a few decades the herds were decimated in the more northern parts of the range and the people that depended on them were suffering badly, according to colonial plan. It is well known that the most senior American military leaders saw elimination of the buffalo as a military strategy to eliminate Indians. James Daschuk (2013) has further documented how "Canadian officials used food, or rather denied food, as a means to ethnically cleanse a vast region from Regina to the Alberta border as the Canadian Pacific Railway took shape." Land was cleared to make way for the railroad but the railroad also enabled mass slaughter.

It was in the wake of this genocidal violence that land speculators, "colonization companies," and the Canadian Pacific Railway's (CPR) own internal Department of Colonization transformed the plains into real estate profits. Speculators from as far away as London, New York City, and Montreal were able to purchase tracts of land that measured millions of acres (Martin-McGuire 1998: 38). Despite the hard drive to fill the new colony, it was only white settlers who were recruited to homestead on the prairies. Entire communities of Black people, attempting to escape racial terror in the newly formed state of Oklahoma, for instance, were actively discouraged from crossing north (Foster 2019; see also Cowen, forthcoming). Anti-Blackness also underpinned the rail, and the nation; the CPR that made the settler state possible was financed in part through wealth extracted from unfree labor, especially plantations in the Caribbean and southern US states. On both sides of the Medicine Line, Chinese migrants worked—often to death—to build the transcontinental track. Hyper-exploited and then discarded—the Canadian state began enacting restrictions on Chinese migration as soon as the infrastructure was complete. Soon after its completion in the late nineteenth century, the CPR was referred to by first Canadian Prime Minister John A. Macdonald as the "spine of the nation," capturing the way the transcontinental rail literally and materially built settler jurisdiction and cemented the constitution of Canada (cf. Cowen 2018). This has its truth,

especially if we understand that nation to be a colonial one where the laying of the railroad tracks was also the laying of white supremacy. This rail enacted these racial logics and defined the collective distribution of life and death in ways that we see echoed in the afterlives of infrastructure today.

### Settler Colonial Infrastructure

We might say that energy infrastructures constitute the contemporary spine of the settler colonial nation. Federal politicians frequently draw direct comparisons between these two moments of nation building, suggesting we take lessons from the example of the past. Former leader of the federal opposition Preston Manning (2018), for instance, suggests that Canada needs “Corridor Coalitions” to get pipelines built, as the “twenty-first-century political and economic effort equivalent to the nineteenth-century effort to create the Canadian Confederation and build the original Canadian Pacific Railway.” Although the United We Roll convoy directed its anger at the prime minister, Justin Trudeau has in fact demonstrated an unfailing—almost flawless—commitment to ensuring the profitability of the fossil fuel industry and expanding the infrastructures that underpin it. The United We Roll convoy departed less than a month after the prime minister sanctioned a violent deployment of the Royal Canadian Mounted Police on the Unist’ot’en Camp, where water and land protectors have been trying to block Coastal GasLink’s work on a natural gas pipeline that would carry fracked methane to an export facility on the coast. Just a few months earlier, Prime Minister Trudeau spent \$4.5 billion<sup>2</sup> from public funds to purchase the ailing Trans Mountain pipeline from Texas-based Kinder Morgan, the offspring of Enron. He did this despite active opposition from Indigenous people, whose unceded territories surround the pipeline’s path. While Trudeau may well sound and look different than the previous neoconservative national leadership, with his claims to feminism and promises of nation-to-nation relations, the current government’s economic plans in fact align closely with the previous one’s, in particular around energy. Trudeau famously boasted that he has approved more pipelines than his conservative predecessor Stephen Harper ever did (Ibbitson 2017). Justin Trudeau has in many ways intensified some of the most violent dimensions of the previous government’s policies regarding energy, mining, and the protection of logistics systems that get those commodities to global markets.

Not surprisingly perhaps, Trudeau has prioritized investment in infrastructure that can support this activity. New infrastructure spending over

recent years amounts to at least \$180 billion under the New Building Canada Plan. The “centerpiece” of the federal government plan—the Canada Infrastructure Bank (CIB) (Stanley 2019: 2)—now calls Toronto’s financial district home. The CIB is a new kind of institutional arrangement with the purpose of facilitating transnational finance capital’s profiteering from publicly facilitated infrastructure, taking its cue from the Asian Infrastructure Bank. As the world’s entrepôt for extraction, with 75 percent of global mining companies headquartered here, Toronto’s Bay Street has become an important site of command and control of the finance-extractive-infrastructure nexus. In fact, following a risk assessment of US-based extractive companies, First Peoples Worldwide estimates that “about 70 percent of the global equity capital financing oil, gas, and mining comes from the Canadian exchange” (Portalewska 2015).

On the one hand, an economic plan built on extraction requires physical infrastructure. This is the context for the expansion of oil pipelines, rail, and road infrastructure. The expansion of border infrastructure is also funded by the New Building Canada Plan—to enhance the transnational circulation of commodities while constraining unwanted human mobility (Cowen 2014). There has, furthermore, been a marked increase in state surveillance of so called critical infrastructures, to protect them from indigenous peoples’ contestation (Pasternak and Dafnos 2018). The Canada Infrastructure Bank is marketed to Canadians as a magical means to get desperately needed sustainable infrastructure built to enable a prosperous future. Yet, a more sober analysis sees it as a tool to privatize infrastructure and extend it deeper into Indigenous territories. In a recent analysis of the CIB, Anna Stanley (2019: 2) outlines the federal government’s own explanation for the initiative, “in which it is claimed on one hand that Canada faces several medium-to long-term threats[,] including significant decline in economic per capita GDP growth, and on the other, that as a ‘massive northern territory’ heavily dependent on trade in energy and natural resources Canada faces a considerable ‘infrastructure gap’—a gap, they note[,] which would be particularly well filled by large scale ‘nation building projects.’ . . . The Bank anticipates leveraging at least 140 billion dollars of private capital for new ‘nation building,’ ‘productivity enhancing,’ ‘national economic development infrastructure,’ . . . a significant portion of which is directed toward so-called natural resource infrastructure (NRI) and specifically prioritizes investments that move resources and energy more efficiently.” Stanley (2019: 3) notes that, perhaps not surprisingly, “the Mining Association of Canada (MAC) called the 2016



announcement of the CIB ‘bold,’ ‘essential’ to the future of the mining economy in Canada, and sure to attract new investment to the sector.” In fact, as Stanley notes, the Prospectors and Developers Association of Canada (PDAC) has already determined that a lack of infrastructure is holding the industry back from exploiting the mineral wealth of the north. She explains how, in order “to lower the prohibitive costs of exploration and extraction, and ‘capitalize on the economic potential of remote and northern Canada,’ PDAC are campaigning for construction of seven ‘infrastructure development corridors’ . . . linking major geologic structures to markets.”

On the other hand, the creation of the “infrastructure bank” is as much about the demands of finance capital as it is about the creation of physical infrastructure. The CIB is a complicated beast that brings international finance capital into often monopoly ownership of “public” infrastructure. In order for institutional investors—private capital as well as the mammoth pension funds that Canada is also expert in—to be interested in infrastructure, there has to be opportunity for immediate and ongoing revenue. Even the large accounting organization KPMG raised cautions about the CIB in an internal report to the federal government, suggesting “that Canadians are unlikely to support some of the priorities of private infrastructure investors, such as new tolls on roads and bridges” (Curry 2017). In essence, the CIB subsidizes profit-driven financiers to take and hold monopolies over essential infrastructures and then rent their use back to the public. This scheme makes more sense when we consider that the CIB was designed by some of the world’s largest investment firms, like BlackRock Inc., with their histories of predatory behavior (Grant 2016).

The initial architecture for the CIB was contracted out to an advisory council made up of leaders from the world of international finance, and the model that the government subsequently proposed for the bank “was, in all essentials, identical to this proposal” (Sanger 2017). BlackRock Inc. played a particularly prominent role in the design, even helping to craft “the briefing notes and presentation about the bank that were prepared for delivery by Trudeau and his ministers at a session for foreign investors,” according to Toby Sanger (2017), who continues:

Corporations are sitting on hundreds of billions of excess cash in Canada and trillions worldwide—money they aren’t putting into productive investments. . . . So corporations are now turning to the cannibalization of public-sector assets and infrastructure through public-private partnerships or other forms of privatization, including the new infrastructure bank.

All this leads Stanley (2019: 4) to assert that the “unstated aim is to bring the aspirations of corporate capital and the settler state into functional alignment.” She diagnoses the CIB as “a fundamentally colonial institution that marshals private capital to produce and extend state jurisdiction through infrastructure development and, relatedly, accelerated resource development.” And indeed, critical scholars of finance capital diagnose its operations as predatory, constituting a form of capitalism that is “cannibalistic” (Soederburg 2010: 224).

### The Wiindigo's Spine

Given the picture we have painted of a predatory economy rooted in extraction and exploitation, it may not be a surprise that the infrastructures that corporations and settler governments deem “critical” to the provision of life are deeply toxic (Sellers 2016). Describing what she calls “*invasive infrastructure*,” Tlingit scholar Anne Spice (2018: 40) asserts that “the characterization of oil and gas pipelines as ‘critical infrastructures’ constitutes a form of settler colonial invasion.” Spice highlights the struggles of water-and-land protectors not only to defend their territories and their sovereignty, but also to challenge mainstream discourse about what counts as vital infrastructure and for whom. Spice quotes Freda Huson, spokesperson for the Wet’suwet’en encampment that was built in the path of the pipeline, who notes that “the pipelines were proposed to run through the clan’s best berry patches. By resisting pipeline construction, she explains, “what we’re doing here is protecting our critical infrastructure” (40). Indeed, Huson highlights a conception of infrastructure that is essentially alimentary; infrastructure is not simply “matter that moves other matter” (40), but rather, in its anti-colonial conception, life-giving and capable of sustaining not only the body, but the spirit and law as well.

But what might be gained by engaging these toxic and invasive infrastructures not only as colonial, but as Wiindigo? It is revealing that without naming the Wiindigo as infrastructural, Fleming (2017) offers stories of infrastructure projects to illustrate the Wiindigo’s ravages. To explain the Wiindigo to readers, Fleming describes the construction of dams on the Mississippi River, the flooding of reservations, the destruction of burial sites, wild rice beds, cranberry bogs, and villages. In earlier writing, Winona (LaDuke 1999) has defined the mainstream settler economy as “Wiindigo,” anchoring an engagement with capitalist relations within an Anishinaabe worldview. “Wiindigo Economics” or “Cannibal, or Wasichu economics,” is “an economic

system that destroys the source of its wealth, Mother Earth” (LaDuke 2018). LaDuke’s approach is rooted in a practice of relationality that understands human and more-than-human life as kin, as familial relations. In this way, apprehending the economy as Wiindigo offers an approach distinct from secular and humanist critiques of capitalism. Simpson (2011: 70) describes the Wiindigo as a “large monster-like creature” that embodies “imbalance and unhealthy relationships.” The Wiindigo is “an Ojibwe description of the spirit of excess” (LaDuke 2018). The Wiindigo is often described as a cannibal creature—devouring its own. Thus, Winona describes Wiindigo economics as “the practice of extracting every last bit of oil just because you’ve got the technology to do it, ecosystems be damned” (LaDuke 2019a). Wiindigo economics—organized by an ethos of disposability and accumulation—is profoundly destructive to many people and life-forms in the present, and to planetary survival in the longer term. The Wiindigo is “the beast that’s destroying our collective garden” (LaDuke 2019a) and now is its time.

Wiindigo economics creates havoc and destruction—pipeline spills, methylmercury contamination, toxic water, and so forth. But our task here is to think about the Wiindigo not just in the spill, but in the pipeline—not in the system’s failure, but in its smooth operation. We consider the Wiindigo in its invasion of Indigenous territory without consent, in its deepening of our collective dependence on fossil fuel extraction, and in its extension of settler political economy. If Wiindigo economics is theft and greed, *Wiindigo infrastructures* are the material systems that engineer and sustain that violence. In other words, Wiindigo infrastructures underpin social organization and its reproduction in logics of capital, property, and accumulation over life. Wiindigo infrastructures are not only built upon the predatory foundations of finance capital, they are cannibalistic—they feed upon their kin, and through them we are “combusting ourselves to oblivion” (LaDuke 2016: 243).

Today, settler governments and corporations are creative in their methods, not only doing violence *to* Indigenous people, but also *through* Indigenous people. “At the end of the fossil fuel era,” Winona (LaDuke 2019b) writes, “the plan is to transfer the liability to Native people. . . . Dressed up as ‘equity positions,’ or ‘reconciliation,’ across the continent, corporations and governments are trying to pawn off bad projects on Native people.” In a strategy we see repeated over and over again, energy and transportation infrastructures are not simply imposed upon First Nations. Rather, in a context of profoundly constrained options forged by dispossession, Indigenous people are “invited” to become project proponents and owners of Wiindigo infrastructure. We have seen this with the Muskrat Falls dam, in Labrador, and

are poised to see it repeated with the mining road in Ontario's Ring of Fire, where Indigenous peoples who were compelled to become project proponents not only have to live with the legacy of ecological destruction, but are now also saddled with deep divisions within and between communities. We see this in the recent attempt to offload a fifty-year-old coal-generating plant—Navajo Generating Station—onto the Navajo Nation, after BHP Billiton, the largest mining corporation in the world, dumped a fifty-year-old coal strip mine, with all sorts of environmental and health liabilities, on the tribe (*Red Nation* 2019).

The latest installment in the long-standing struggle over the Canadian tar sands and the government's and energy corporations' efforts to move the toxic product to market is to sell the Trans Mountain pipeline to Indigenous people. The Trans Mountain pipeline struggle, billed by some as the "Standing Rock of the North" (INET 2018), had been simmering for some time. Approved in 2016, Trans Mountain involves a \$7.4 billion investment in a new 980 km pipeline parallel to an old, existing one, almost tripling capacity for oil companies, to up to 890,000 barrels of oil per day from the Alberta tar sands to the west coast of British Columbia. Fiercely defending the project, Prime Minister Trudeau asserted his government's jurisdiction by deeming the project "national infrastructure." Based on this logic, as Winona (LaDuke 2019b) has recently written, "It makes perfect sense that a First Nation, or coalition of First [N]ations[,] should assume Canada's debt and liability on a mega project which will wreak environmental and economic havoc."

Three competing bids to buy the pipeline have emerged from Indigenous peoples—some teamed up with energy corporations—and were warmly welcomed by a federal government scrambling to offload the liability. This direction is encouraged by a government that claims sincere commitment to reconciling relations with Indigenous people and to fighting climate change. Indigenous ownership is cultivated despite the fact that Indigenous Nations from across Turtle Island have signed the Treaty Alliance against Tar Sands Expansion, with the goal of protecting lands and waters from all proposed pipeline, tanker, and rail projects (Treaty Alliance 2016). The Secwepemc Nation is a particularly significant force in the resistance, with more than half the length of the pipeline planned to run through their unceded territory. The Secwepemc Women's Warrior Society has pledged to stop any Trans Mountain development on their lands, while the Tiny House Warriors continue to assert jurisdiction through the construction of a network of little homes along the pipeline's path. Rueben George (pers. comm., July 10, 2019), of the Tsleil-Waututh Nation, a leader in the

opposition to the pipeline whose territory on the coastal waters is where the tankers will pass, calls this plan to sell the Wiindigo infrastructure to Indigenous people “a new smallpox blanket.”

But another future is possible. That’s the green path described by the prophets of the Anishinaabe, the path not yet worn. This is a path toward the regenerative economy, or again from Anishinaabe prophecy: the Eighth Fire. This may well be a time of massive investment and expansion of Wiindigo infrastructure, but Turtle Island is also a place with long histories of fighting the Wiindigo and winning. Fleming (2017) writes that there have been many generations of Wiindigo slayers among Anishinaabeg people: “Those old time Wiindigo slayers of the Termination era were wise and resilient. They united with other Indigenous American nations and organizations like the National Congress of American Indians. The American Indian Movement was formed at the end of this era[,] in 1968, and by the 1970s, the self-determination era began with huge numbers of Indigenous Americans enrolling in college, producing crops of Indigenous lawyers, authors, and activists.” Killing the Wiindigo today is possible. Like in the past, it relies upon cooperation among people determined to survive, and it relies upon finding the Achilles heel of the current system. Infrastructure is that Achilles heel. There is inspiration in global divestment campaigns, which are moving trillions out of the fossil fuel industry in the effort to defund profiteering off of toxic pipeline infrastructures—the Black Snake of ancient Lakota prophecy, the creature that would slither across the land, poisoning the water before destroying the Earth. Winona (LaDuke 2019a) reminds us to “look to the social movements emerging as water protectors block ‘Black Snakes’—that is, oil pipelines. Enbridge’s Line 3 pipeline is another year behind schedule while renewable energy moves ahead.” Through brutally hard work, these movements have systematically blocked every effort to expand pipeline infrastructure to get tar sands oil to sea. And the fight is ongoing.

### **Killing the Wiindigo: Building the Eighth Fire**

Communities are increasingly and courageously choosing the green path over the well-worn, even as it is often the path of *most* resistance. Although the Navajo Nation was invited to make a deal with the Wiindigo, in the form of an offer to purchase the aging Navajo Generating Station, they rejected it, and instead built the Kayenta Solar Project. This tribally owned solar facility is the first large-scale solar farm on Navajo Nation lands and the largest tribally owned renewable power plant in the United States. It is said to produce

enough power to serve 18,000 Navajo homes—many of which did not have electricity previously. This bold path follows almost a century of colonial energy and mining projects on their lands that left the Navajo people with an unemployment rate above 50 percent, and a median income of US\$7,500 per year. In the 1920s, on the promise that uranium, oil, gas, and coal leases would bring in millions in royalty revenues and create thousands of jobs for the community, the Navajo Nation's first Tribal Council signed agreements with energy companies. In the 1970s, the Navajo Nation provided enough energy to fuel the state of New Mexico thirty-two times over, yet 85 percent of the Navajo households had no electricity. Today, Navajo people live in the shadows of massive utilities infrastructures that service power companies and settler cities, as most live without power and clean water.

This long history makes the visionary work of the Navajo Nation in economic and infrastructural transition all the more impressive. In 2009, the Navajo Tribal Council passed the first green economy legislation of any tribal government, creating a Green Economy Fund and Commission. Even earlier, in 2001, young people from across Navajo and Hopi communities created the Black Mesa Water Coalition (BMWC) to address environmental justice and health issues within their communities. "It's not only about transitioning our utility," Nicole Alex of BMWC explains, "but also, how are we going to transition this society that has been impacted, and how are we going to transition this economy that has been devastated by energy development?" Indeed, the BMWC espouses an approach to infrastructure rooted in decolonization and environmental justice and captured in the slogan, "power without pollution and energy without injustice" (Chorus Foundation 2016). While the process has not been smooth or simple, and Navajo scholar Andrew Curley (2018) has offered a deeply critical engagement with early initiatives toward the green economy, the transition toward renewable energy is clearly underway. The Navajo Nation has enough energy from solar to power not only their own reservation, but much of the Southwest, and with efficiency and transition, the power lines that used to move coal-generated electricity can move renewable energy onto the grid.

On the White Earth reservation in northern Minnesota, Honor the Earth, a national Native organization, is also building beyond Wiindigo infrastructure. At White Earth, which holds one of the poorest counties in the state, and where a quarter of tribal income is spent on energy, a series of initiatives are underway to address energy justice through remaking infrastructure. The community manufacturing venture Eighth Fire Solar quite literally embodies Anishinaabe prophecy of a possible future beyond colo-

nial destruction, investing not only in renewable energy retrofits but also in the production of infrastructure itself. The facility's name reflects the choice between the well-worn, scorched path of the status quo and one that is green and unworn. The Eighth Fire will be lit when the green path is chosen and a better future is formed. The facility manufactures solar photovoltaic panels that can be mounted on the south side of homes to reduce heating costs by about 20 percent. This work on renewable energy is one part of Honor the Earth's larger vision for the next economy, which involves food sovereignty and a new textiles economy rooted in industrial hemp production.

Fiber hemp farming has become a cornerstone of work on White Earth over the last few years because of its multiple benefits and multiplier effects. Hemp has three times the tensile strength of cotton and uses a fraction of the water and chemicals associated with other textiles. Cannabis cultivation was once common on the continent before being deliberately suppressed by settler governments—this long history of use is captured in the very word “canvas,” which derives from “cannabis.” Minnesota used to have eleven hemp mills, providing most of the clothing, canvas, and rope needs of the region, as well as combined hemp with flax for linen. A local textile economy is possible; the hemp renaissance is here. Winona's Hemp and the Anishinaabe Agriculture Institute are working regionally on restoring hemp as a part of an integrated sustainable economy. In North America, many First Nations see hemp as a part of an integrated sustainable economy. “We want to be at the table, not on the menu,” is a mantra of Winona's Hemp, in the restoration of tribal hemp economies. All of this requires infrastructure; in this case, manufacturing infrastructure and the infrastructure to move these products to market.

North of the Medicine Line, in the heartland of the Wiindigo energy industry, Alberta First Nations are also becoming leaders in solar power, and through that, becoming energy independent. At Lubicon Lake, Beaver Lake Cree Nation, Louis Bull Tribe, Fort McKay, and countless other communities, Indigenous people are making the transition to renewable infrastructure as part of assertions of self-determination. In Manitoba, Fisher River Cree Nation is building a seven-acre solar farm, constructed entirely by Indigenous workers. This massive shift to green infrastructure across Indian country is taking shape in a context where the vast majority of remote Indigenous communities in Canada—more than 80 percent of the three hundred communities—are already reliant on micro-generation of electricity (Lovekin 2017), but with micro-grids that are frequently supplied by costly, dirty, unreliable, and insecure diesel generators that depend on transporting fuel and

equipment long distances via semipermanent infrastructure like ice roads (Weis and Illinca 2010). The shift to renewables is not only about the physical toxicity of the diesel generators, but also centrally about the colonial dependencies they sustain.

To be clear, fossil fuel economies shackle First Nations to the vagaries of international markets and politics, an endless source of economic and social stress. Enlightened vision for the future and energy security necessitates the creation of local renewable energy and massive efficiency. As Robert Stefanelli et al. (2019: 95) report, many Indigenous peoples “are developing renewable energy in their Territories to: break free of colonial ties, move towards energy autonomy, establish more reliable energy systems, and reap the long-term financial benefits that clean energy can provide.” The motivation for this transition is at once ecological and social—it stems from “political self-determination resulting from a desired independence from colonial institutions such as the Department of Crown Indigenous Relations and Northern Affairs and the Department of Indigenous Services” (101). Adrian A. Smith and Dayna Nadine Scott (forthcoming) raise important questions about the sourcing of rare earth minerals for the manufacture of photovoltaics, and about proprietary legal arrangements surrounding these kinds of large-scale renewable energy projects that can reproduce rather than elide capitalist logics. Nevertheless, they argue that “the involvement of First Nations in the ownership and control of large-scale renewable energy projects, as well as the emergence of community-based energy cooperatives, holds out the promise of ‘democratization’ of energy generation, distribution and governance.” Energy independence is a key means of asserting autonomy from the state and industry so that community priorities can guide decision-making (Stefanelli et al. 2019; Rezaei and Dowlatabadia 2016). Mi’kmaw renewable energy specialist David Isaac has been helping Indigenous communities to transform their power supply for the last twenty years. Isaac worked with Fisher River on their solar farm and sees this kind of infrastructure as a model for First Nations across the country, but also for sustainable community development more broadly. “The community of the future,” Isaac suggests, “is going to be like an Indigenous community, in the sense that hyper-localized power will be generated [by] decentralized utilities from a harmonic source of energy instead of extractive” (Monkman 2019).

Indigenous communities are also reassembling infrastructure to address the chronic problems of food security that plague northern and remote communities, and which concentrate myriad health challenges, from hunger and malnutrition to diabetes. A number of communities are



investing in agricultural infrastructure to grow vegetables and fruits and raise chickens, in order to expand food sovereignty. Garden Hill First Nation—a fly-in community 600 km north of Winnipeg—has been building a pathbreaking food security project. The Meechim Farm includes a food market, vegetable farm, chicken coops, and agricultural training and education programs for young people. They call their educational initiatives for youth “school-to-farm” in a direct critique and reworking of the notorious “school-to-prison pipeline” that circulates especially Black and Indigenous people between educational and carceral infrastructures. The infrastructure question for the Meechim Farm is not simply metaphorical—it has been a central challenge for cultivating food and food security in remote communities and it has also been key to their innovative approach. In a discussion of the Garden Hill Initiative, Shirley Thompson (n.d.) explains that “the lack of infrastructure for food systems contributes to food insecurity and poverty in many remote areas world-wide.” Thompson explains the “farm-in-a-box” approach that Garden Hill has taken to building infrastructure and capacity, where a shipping container “is loaded with materials to start a farm home-stand, with the container serving as the building skeleton for the greenhouse and chicken brooder as well as the storage for farm equipment.” In Garden Hill, infrastructure underpins the transformation of the food system.

Seven hundred kilometers north of Thunder Bay, in Ontario’s far north, the Oji-Cree community of Kitchenuhmaykoosib Inninuwug (KI) is taking charge of the complex logistics systems that bring them outrageously priced food, often past the “best before” date. Food and medical supplies are notoriously expensive and in short supply in the community, as they are often loaded on a series of flights that take days to arrive from the south. The leadership has implemented price caps on the three retailers that service the thousand community members, while also taking charge of distribution systems—collectivizing and reorganizing them. In partnership with Lac Seul First Nation, KI created a regional distribution center at the Sioux Lookout airport—an en route stop for flights to the community. The twenty-thousand-square-foot hangar stores and dispatches food, bulk medical and education supplies, and other basic necessities. The strategy—to put people and kin before profits—is unusual to say the least in an era of globalized, advanced capitalist logistics (Cowen 2014). Saving cost as well as emissions, the initiative will fill unused cargo space on planes destined for KI. As Indigenous peoples restore seeds, more food grows. We restore our genetic ties to our ancestral foods and become stronger. As Elizabeth Hoover and Rowen White (2019: 333–34) write in the *New Farmer’s Almanac*,

Across Turtle Island, there is a growing intergenerational movement of Indigenous people proud to carry the message of the grand rematriation of seeds and foods back into our Indigenous communities. Some of these seeds have been missing from our communities for centuries, carried on long journeys in smoky buckskin pouches, on the necks of peoples who were forced to relocate from the land of their births, their ancestral grounds. Generations later, these seeds are now coming back home to communities of origin, from the vaults of public institutions, seed banks, universities, seed keeper collections, and some lying on dusty pantry shelves of foresighted elders, seeds patiently sleeping and dreaming. Seeds waiting for loving hands to patiently place them into welcoming soil once more so that they can continue to fulfill their original agreement to help feed the people. . . . In the seed movement, we have begun to use the word *rematriation*, instead of the more patriarchal *repatriation*, as it relates to bringing these seeds home again. In many communities, including our Mohawk tradition, the responsibility of caring for the seeds over the generations is ultimately within the women's realm. Both men and women farm and plant seeds, but their care and stewardship are part of the women's bundle of responsibility. So the word *rematriation* reflects the restoration of the feminine seeds back into the communities of origin. The Indigenous concept of rematriation can also encompass the reclaiming of ancestral remains, spirituality, culture, knowledge, and resources. It simply means back to Mother Earth, a return to our origins, to life and cocreation, honoring the life-giving force of the Divine Feminine.

### **Solutionary Rail**

Alimentary infrastructure changes the world. The time to deconstruct the fossil fuels rail system is now, and to the extent that the railroads are the emblem and system of widespread destruction of Indigenous lands, buffalo, and a way of life, they can also be transformative. Technology can be appropriated and infrastructure remade. Trains are efficient; metal on metal creates less friction than rubber on the road. Trains move lots of loads and should move safe stuff. We could harness the power and possibilities of rail to transform the economy. Worldwide, electricity serves nearly a quarter of railroad track miles and supplies over one-third of the energy that powers trains. Forty-one percent of China's rail lines are electrified; in Italy it is 68 percent. But in the US and Canada, less than 1 percent of tracks are electrified. There is no time like the present to change that. In terms of diesel engines, 30–35 per-

cent of the energy in the fuel makes it to the wheels. Supplying electricity directly from an overhead power line means 95 percent of the electricity taken from the power grid is employed by the wheels. No more than 5 percent is lost through the engine transformer and overhead wires. That saves money and energy, and that's smart.

A group south of the Medicine Line has developed a plan called "Solutionary Rail," which proposes a new, green, and potentially decolonized "spine" for the USA. Behind this initiative is an organization literally called the *Backbone Campaign* (backbonecampaign.org), and its members see their work as directly addressing environmental justice through infrastructure. They frame their approach to electrifying American rail networks as part of a paradigm shift. For the Backbone Campaign, "One paradigm idolizes capital, gives corporations rights, and considers everything For Sale. It commodifies people, democracy, communities, and the planet itself. The paradigm we fight for is one in which people communities and nature and our obligation to future generations are considered sacred, and clearly NOT for sale."

Railroads are a unifying system, and railroads can lead a transition to a clean economy. "Unlike other heavy, long-haul transportation vehicles such as ships, planes, and semitrucks," the Backbone Campaign report notes, "trains can be easily electrified, and electricity is increasingly coming from clean sources such as sun and wind. Rail is already the most efficient form of ground transportation, and it has an unparalleled capacity to provide clean freight and passenger mobility" (Moyer and Maza 2016). The Solutionary Rail plan includes provisions for track modernization and is particularly committed to urban sustainability. This would be achieved in part through a proposal to put renewable energy transmission access along the same power lines as the electric rail would use for its own power. Renewable energy, coming out of windy prairies, is stranded power right now; we need to get it on the grid. Solutionary Rail would thus also revolutionize other modes of transportation—for instance, making it possible to have zero emission maritime ports. This is again an issue of environmental justice, as it is most often lower-income communities of color that are located adjacent to ports, where dramatically elevated levels of asthma in children have been documented (Perez et al. 2009). The Solutionary Rail plan also includes provisions for what they call "right-of-way justice" for Indigenous people, with a commitment to renegotiate easements where there are outstanding grievances and claims.

Communities and movements are building physical systems for a future beyond Wiindigo infrastructure in the areas of energy, transportation, and food sovereignty, but they are also rebuilding social infrastructures, to

help heal people trying to survive racism and colonialism. Initiatives are underway across Turtle Island to remake the intimate and affective infrastructures of everyday life, to cultivate social beings and relations that can usher in the Eighth Fire. Leanne Simpson highlights the necessity of this work on ourselves, and the reorientation of desire away from the violent accumulation and reckless consumption of Wiindigo worlds. Simpson (2016) writes:

without the weight of large gaping holes in their beings, people would no longer be willing to pay for disconnection. with nothing to feed, the entire system would fall apart. so while that other one was out carousing, protesting, or pontificating to anyone who would listen, gezhizhwazh was at work as a bami ondaadiziike, circling around those birthing women to protect that ceremony, foiling those interventions, protecting the circle. for now, her battle with the wiindigo was in its resurgence stage. gezhizhwazh was building an army—a diffuse, scattered group of souls that could see through the wiindigo illusion, because they were whole.

No doubt, physical and affective infrastructures are often one and the same, and this is part of our point. Renewable Energy, efficiency, and local food systems entail healthy and reaffirming social organization and relations—the material and spiritual worlds cannot be segregated when “the economy” is *how we live*. We need a renaissance. This renaissance of thinking and this society will not be financed like the last one, by slavery, hyper-exploitation, and the pillaging of the western hemisphere and Africa; it will be financed by the divestment from fossil fuels, and by forcing corporations to pay for their mess, before they go bankrupt.

We are inspired by so many initiatives to rebuild social infrastructure—especially within Black, Indigenous, migrant, Two Spirit, queer, and feminist worlds, but one example worth highlighting is the Radical Monarchs. This multiracial initiative aims to “create opportunities for young girls of color to form fierce sisterhood, celebrate their identities, and contribute radically to their communities.” The group was founded in Oakland, California, in 2014, by two moms who wanted to create an affirming and empowering space for their daughters and other young girls of color, explicitly welcoming trans girls into the fold. Anayvette Martinez and Marilyn Hollinquest envisioned the group as a radical alternative to the scout movement, itself born directly out of imperialism with the goal of instilling military discipline in young boys (see Cowen 2008). Like Simpson, Martinez and Hollinquest understood the importance of spiritual and mental well-be-

ing as a foundation for social transformation and decolonization. In fact, the Radical Monarchs ([radicalmonarchs.org](http://radicalmonarchs.org)) work to create a space for girls, “so that they stay rooted in their collective power, brilliance, and leadership in order to make the world a more radical place.” The initiative looks forward to cultivating a future of powerful women’s leadership in communities of color, but it also honors courageous leaders and initiatives from the past; for example, incorporating the beret of the Black Panther movement into its uniform. Like in the Girl Scouts, Radical Monarchs can earn badges for completing particular kinds of learning and skills training, but unlike in the Scouts, their badges are awarded for units on topics such as “LBGTQ allyship, environmental activism and disability justice.” The monarch butterfly is furthermore an inspiring creature in this meditation on moving beyond Wiindigo infrastructure. The monarch is not only expert in full system transformation, but also builds its own infrastructure for the transition from one life form to another. Like others of their species, monarchs create the chrysalis that holds them as they pupate from caterpillar to butterfly. And the cells that cause that transformation are called the imago cells; they are transformative cells. The word *imago* shares the same root as the word *imagination*. What might we learn from monarchs about metamorphosis through autonomous infrastructure?

### Infrastructure Otherwise: Building beyond Wiindigo

As we wrap up our writing in the summer of 2019, an extraordinary coalition of social and labor movements, including Black Lives Matter Oklahoma City, the Women’s March OK, and the International Union of Painters and Allied Trades, come together behind the leadership of the Indigenous Environmental Network in fighting Wiindigo infrastructure (Falcon 2019). This time, it is not a pipeline or dam that is at the center of struggle, but a migrant detention camp expansion and the deepening violence of US carceral and border infrastructure. Indigenous protectors who converged on Fort Sill—a planned migrant camp—announced the success of their efforts: “Fort Sill will not be reopened as a concentration camp for our relatives trying to cross the so-called ‘border’” (Falcon 2019). Across the United States, Indigenous people’s movements are connecting the dots between the long histories of colonial dispossession and containment on Turtle Island, and President Donald Trump’s current experimentation with concentration camps and family separations. At another major action in McAllen, Texas, Native Americans

traveled from across the country to protest and call for the immediate end to these camps of loss and anguish. Oglala Lakota and Chicano journalist Simon Moya-Smith (2019) highlights “the same racism with a different name in a different century, and many of the descendants of the very same people brutalized by Columbus and those who followed in his footsteps locked in new chains.”

Thinking with struggles like these against the carceral border regime, and with others that implicitly or explicitly center socio-technical systems, we have offered a way to diagnose the contemporary crisis as not only colonial and capitalist but as *infrastructural*. We have outlined how the expansion and reproduction of settler colonial systems of value are literally, physically, enabled by infrastructure. We have furthermore tried to suggest that it is not only the technical or physical aspects of coloniality that rely on infrastructure—feelings, ideas, and attitudes that produce racism and white supremacy are also material systems of social reproduction that sanction the extension of the means of life to some, often through their withdrawal from others. “Social infrastructures” like the police protect the operations of coloniality, causing premature death. As Ruthie Wilson Gilmore (2007: 60–66) has elaborated, white supremacy is both an “infrastructure of feeling” that organizes affect and identification, and is itself *infrastructured* through access to clean water, mobility, shelter, and “protection” from those whose premature death is the condition of possibility for settler futurity. Indeed, Gilmore aptly describes the mass infrastructural abandonment of Black and poor people across the US, and we could say the same for remote Indigenous communities.

Finally, we have anchored our engagement with Infrastructure in Indigenous story and prophecy that diagnose the contemporary crisis as spiritual as well as material. More specifically, the Anishinaabe story of the Wiindigo helps us to see a path forward. Despite its ferocity, the Wiindigo can still be killed. The Diné, or Navajo, talk about needing a new generation of monster slayers—that’s this generation. The Wiindigo cannot claim a monopoly on infrastructure. Socio-technical systems are not inherently good or evil; pipelines can carry fresh water as well as toxicity. Infrastructure is how sociality extends itself; it is how life is provisioned or curtailed. In its most immediately material and graspable forms, infrastructure underpins and enacts sustenance and reproduction. Building it beyond Wiindigo, building alimentary infrastructure, is the slow, transformative feminist work of social re/production. It is the return of life forces. “They tried to bury us, they didn’t know we were seeds.”<sup>3</sup>

## Notes

For his inspiration, we dedicate this writing to the late Randy Kapeshesit. We remember you . . . and continue the path you outlined for us.

- 1 Winona LaDuke, Anishinaabe writer and economist, loves and works on the White Earth reservation, and is the executive director for Honor the Earth. Deborah Cowen is a geographer at the University of Toronto, a settler on the lands subject to the Dish with One Spoon Wampum, and deeply committed to the transformative potential of infrastructure.
- 2 All figures are in Canadian dollars unless otherwise noted.
- 3 Widely cited as a Mexican proverb because of its frequent use by the Zapatistas and then in response to the loss of the Ayotzinapa 43, this verse has since been traced to the Greek poet Dinos Christianopoulos and the text “ΜΙΚΡΑ ΠΟΙΗΜΑΤΑ—Τὸ Κορμὶ καὶ τὸ Σαράκι.”

## References

- Barker, Joanne. 2018. “Territory as Analytic: The Dispossession of Lenapehoking and the Subprime Crisis.” *Social Text*, no. 135: 19–39.
- Blewett, Taylor. 2019. “United We Roll Protest Convoy Set to Reach Parliament Hill on Tuesday.” *Ottawa Citizen*, February 19. [ottawacitizen.com/news/local-news/united-we-roll-protest-convoy-set-to-reach-parliament-hill-on-tuesday](http://ottawacitizen.com/news/local-news/united-we-roll-protest-convoy-set-to-reach-parliament-hill-on-tuesday).
- Brake, Justin. 2019. “Indigenous Rights Activists Confront Yellow Vests as Pro-pipeline Convoy Reaches Ottawa.” APTN National News, February 19. [aptnnews.ca/2019/02/19/indigenous-rights-activists-confront-yellow-vests-as-pro-pipeline-convoy-reaches-ottawa/](http://aptnnews.ca/2019/02/19/indigenous-rights-activists-confront-yellow-vests-as-pro-pipeline-convoy-reaches-ottawa/).
- Chorus Foundation. 2016. “Claiming Power: Stopping Coal and Going Green at Black Mesa.” Medium, July 8. [medium.com/chorus-foundation/claiming-power-stopping-coal-and-going-green-at-black-mesa-4936a21d6c59](https://medium.com/chorus-foundation/claiming-power-stopping-coal-and-going-green-at-black-mesa-4936a21d6c59).
- Corbella, Licia. 2019. “United We Roll Convoy a Beautiful Sight as It Heads to Ottawa.” *Calgary Herald*, February 14. [calgaryherald.com/news/local-news/corbella-united-we-roll-convoy-a-beautiful-sight-as-it-heads-to-ottawa](http://calgaryherald.com/news/local-news/corbella-united-we-roll-convoy-a-beautiful-sight-as-it-heads-to-ottawa).
- Coulthard, Glen. 2014. *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. Minneapolis: University of Minnesota Press.
- Cowen, Deborah. 2008. *Military Warfare: The Soldier and Social Citizenship in Canada*. Toronto: University of Toronto Press.
- Cowen, Deborah. 2014. *The Deadly Life of Logistics: Mapping Violence in Global Trade*. Minneapolis: University of Minnesota Press.
- Cowen, Deborah. 2018. “The Jurisdiction of Infrastructure: Circulation and Canadian Settler Colonialism.” *Funambulist*, no. 17: 14–19.
- Cowen, Deborah. Forthcoming. “Following the Infrastructures of Empire: Notes on Cities, Settler Colonialism, and Method.” *Urban Geography*.
- Curley, Andrew. 2018. “A Failed Green Future: Navajo Green Jobs and Energy ‘Transition’ in the Navajo Nation.” *Geoforum* 88: 57–65.
- Curry, Bill. 2017. “Infrastructure Bank Risks Slowing Down Projects, Internal Report.” *Globe and Mail*, May 11. [theglobeandmail.com/news/politics/be-extremely-careful-in-launching-infrastructure-bank-internal-report-warns-ottawa/article34952796/](http://theglobeandmail.com/news/politics/be-extremely-careful-in-launching-infrastructure-bank-internal-report-warns-ottawa/article34952796/).

- Daschuk, James. 2013. "When Canada Used Hunger to Clear the West." *Globe and Mail*, July 19. [www.theglobeandmail.com/opinion/when-canada-used-hunger-to-clear-the-west/article13316877/](http://www.theglobeandmail.com/opinion/when-canada-used-hunger-to-clear-the-west/article13316877/).
- Estes, Nick. 2019. "'Freedom Is a Place': Long Traditions of Anti-Colonial Resistance in Turtle Island." *Funambulist*, no. 20. [thefunambulist.net/articles/freedom-place-long-traditions-anti-colonial-resistance-turtle-island-nick-estes](http://thefunambulist.net/articles/freedom-place-long-traditions-anti-colonial-resistance-turtle-island-nick-estes).
- Falcon, Jennifer K. 2019. "Victory." Indigenous Environmental Network. [www.mynewsletterbuilder.com/email/newsletter/1414050934?fbclid=IwARoFHF4AjAnbrfD377WWKw7hCEZnNegSk9kyxqNeEWyAAXbfToFhHjUBUTI](http://www.mynewsletterbuilder.com/email/newsletter/1414050934?fbclid=IwARoFHF4AjAnbrfD377WWKw7hCEZnNegSk9kyxqNeEWyAAXbfToFhHjUBUTI).
- Fleming, Bezhigobinesikwe Elaine. 2017. "Nanaboozhoo and the Wiindigo: An Ojibwe History from Colonization to the Present." *Journal of American Indian Higher Education* 28, no. 3. [tribalcollegejournal.org/nanaboozhoo-wiindigo-ojibwe-history-colonization-present/](http://tribalcollegejournal.org/nanaboozhoo-wiindigo-ojibwe-history-colonization-present/).
- Foster, Cecil. 2019. *They Call Me George: The Untold Story of Black Train Porters and the Birth of Modern Canada*. Windsor, ON: Biblioasis.
- Gilmore, Ruth Wilson. 2007. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley: University of California Press.
- Grant, Jason. 2016. "BlackRock Accused of 'Predatory Lending' in Suit Over \$844K Late Fee." *New York Law Journal*, August 15. [www.law.com/newyorklawjournal/almID/1202765090000/BlackRock-Accused-of-Predatory-Lending-in-Suit-Over-844K-Late-Fee/](http://www.law.com/newyorklawjournal/almID/1202765090000/BlackRock-Accused-of-Predatory-Lending-in-Suit-Over-844K-Late-Fee/).
- Hoover, Elizabeth, and Rowen White. 2019. "Our Living Relatives: Maintaining Resilience and Seed Diversity in Native American Communities." In *The New Farmer's Almanac*, vol. 4, Greenhorns. White River Junction, VT: Chelsea Green.
- Ibbitson, John. 2017. "Trudeau's Foreign Policy vs. Harper's: There Is Little Difference." April 14. [theglobeandmail.com/news/politics/trudeau-taking-foreign-policy-cue-from-tory-playbook/article34241539/](http://theglobeandmail.com/news/politics/trudeau-taking-foreign-policy-cue-from-tory-playbook/article34241539/).
- INET (Indigenous Network on Economies and Trade). 2018. "Standing Rock of the North: An Updated Summary Risk Assessment of the Trans Mountain Pipeline Expansion." April 13. [docs.wixstatic.com/ugd/934d11\\_4666c5875ffa4a0daf1281474788109d.pdf](https://docs.wixstatic.com/ugd/934d11_4666c5875ffa4a0daf1281474788109d.pdf).
- Karuka, Manu. 2019. *Empire's Tracks: Indigenous Nations, Chinese Workers, and the Transcontinental Railway*. Berkeley: University of California Press.
- LaDuke, Winona. 1999. *All Our Relations: Indigenous Struggles for Land and Life*. Cambridge, MA: South End.
- LaDuke, Winona. 2016. *Recovering the Sacred: The Power of Naming and Claiming*. Cambridge, MA: South End.
- LaDuke, Winona. 2018. "Winona LaDuke Calls for Indigenous-Led 'Green New Deal' as She Fights Minnesota Pipeline Expansion." *Democracy Now!*, December 7. [www.democracynow.org/2018/12/7/winona\\_laduke\\_calls\\_for\\_indigenous\\_led](http://www.democracynow.org/2018/12/7/winona_laduke_calls_for_indigenous_led).
- LaDuke, Winona. 2019a. "How to Build the Zero-Carbon Economy." In *These Times*, April 22. [inthesetimes.com/features/green-new-deal-zero-carbon-economy-plan.html](http://inthesetimes.com/features/green-new-deal-zero-carbon-economy-plan.html).
- LaDuke, Winona. 2019b. "Reconciliation Pipeline: How to Shackle Native People." *APT National News*, July 13. [aptnews.ca/2019/07/13/reconciliation-pipeline-how-to-shackle-native-people/](http://aptnews.ca/2019/07/13/reconciliation-pipeline-how-to-shackle-native-people/).
- Lovekin, Dave. 2017. "Unlocking Clean Energy for Indigenous Communities." Pembina Institute blog, February 24. [www.pembina.org/blog/unlocking-clean-energy-opportunities-indigenous-communities](http://www.pembina.org/blog/unlocking-clean-energy-opportunities-indigenous-communities).



- Martin-McGuire, Peggy. 1998. *First Nation Land Surrenders on the Prairies, 1896–1911*. Monograph prepared for the Indian Claims Commission. [publications.gc.ca/site/eng/9.833886/publication.html](http://publications.gc.ca/site/eng/9.833886/publication.html).
- Michelin, Lana. 2018. "Is Racism Becoming More Overt Lately in Red Deer?" *Red Deer Advocate*, June 28. [www.reddeeradvocate.com/news/is-racism-becoming-more-overt-lately-in-red-deer/](http://www.reddeeradvocate.com/news/is-racism-becoming-more-overt-lately-in-red-deer/).
- Monkman, Lenard. 2019. "Manitoba's New 'Utility Scale' Solar Farm Aims to Spark First Nations Interest in Green Energy." CBC News, June 20. [www.cbc.ca/news/indigenous/fisher-river-cree-nation-solar-power-1.5180646](http://www.cbc.ca/news/indigenous/fisher-river-cree-nation-solar-power-1.5180646).
- Moya-Smith, Simon. 2019. "Trump's Immigration Policy Is Caging Indigenous Children. This Is the America Native People Know." NBC News, July 28. [www.nbcnews.com/think/opinion/trump-s-immigration-policy-caging-indigenous-children-america-native-people-ncna1035451?fbclid=IwAR1cpUHeWbBM5VgfR3WgvK7mIOC6znKOTh-Kk88C9tpWkIUvgxzh6Ybp6Wc](http://www.nbcnews.com/think/opinion/trump-s-immigration-policy-caging-indigenous-children-america-native-people-ncna1035451?fbclid=IwAR1cpUHeWbBM5VgfR3WgvK7mIOC6znKOTh-Kk88C9tpWkIUvgxzh6Ybp6Wc).
- Manning, Preston. 2018. "To Build Pipelines, We Must Create Coalition Corridors." *Globe and Mail*, December 16. [theglobeandmail.com/opinion/article-to-build-pipelines-we-must-create-coalition-corridors/](http://theglobeandmail.com/opinion/article-to-build-pipelines-we-must-create-coalition-corridors/).
- Moyer, Bill, and Patrick Mazza. 2016. Solutionary Rail. Backbone Campaign.
- O'Brien, Sharon. 1984. "The Medicine Line: A Border Dividing Tribal Sovereignty, Economics, and Families." *Fordham Law Review* 53, no. 2: 315–50.
- Pasternak, Shiri, and Tia Dafnos. 2018. "How Does a Settler State Secure the Circuitry of Capital?" *Environment and Planning D: Society and Space* 36, no. 4: 739–57.
- Perez, Laura, N. Künzli, E. Avol, A. M. Hricko, F. Lurmann, E. Nicholas, F. Gilliland, J. Peters, and R. McConnell. 2009. "Global Goods Movement and the Local Burden of Childhood Asthma in Southern California." Supplement, *American Journal of Public Health* 99, no. S3: S622–28.
- Portalewska, Anna. 2015. "How We Make Progress, How We Have Change: Rebecca Adamson." *Cultural Survival Quarterly* 39, no. 1. [www.culturalsurvival.org/publications/cultural-survival-quarterly/how-we-make-progress-how-we-have-change-rebecca-adamson](http://www.culturalsurvival.org/publications/cultural-survival-quarterly/how-we-make-progress-how-we-have-change-rebecca-adamson).
- Red Nation. 2019. "Unplug Navajo Generating Station, Demand Diné Liberation." January 6. [therednation.org/2019/01/06/unplug-navajo-generating-station-demand-dine-liberation/](http://therednation.org/2019/01/06/unplug-navajo-generating-station-demand-dine-liberation/).
- Rezaei, Maryam, and Dowlatabadi, Hadi. 2016. "Off-Grid: Community Energy and the Pursuit of Self-Sufficiency in British Columbia's Remote and First Nations Communities." *Local Environments* 21, no. 7: 789–807.
- Sanger, Toby. 2017. "The Canada Infrastructure Bank and the Perversities of Predatory Capital." *Canadian Dimension* 51, no. 3. [canadiandimension.com/articles/view/the-canada-infrastructure-bank-and-the-perversities-of-predatory-capital](http://canadiandimension.com/articles/view/the-canada-infrastructure-bank-and-the-perversities-of-predatory-capital).
- Sellers, Chris. 2016. "Piping as Poison: The Flint Water Crisis and America's Toxic Infrastructure." *Conversation*, January 25. [theconversation.com/piping-as-poison-the-flint-water-crisis-and-americas-toxic-infrastructure-53473](http://theconversation.com/piping-as-poison-the-flint-water-crisis-and-americas-toxic-infrastructure-53473).
- Simpson, Audra. 2014. *Mohawk Interruptus: Political Life across the Borders of Settler States*. Durham, NC: Duke University Press.
- Simpson, Leanne Betasamosake. 2011. *Dancing on Our Turtle's Back: Stories of Nishnaabeg Re-creation, Resurgence, and a New Emergence*. Winnipeg: ARP Books.
- Simpson, Leanne Betasamosake. 2014. "Land as Pedagogy: Nishnaabeg Intelligence and Relational Transformation." *Decolonization: Indigeneity, Education, and Society* 3, no. 3: 1–25.

- Simpson, Leanne Betasamosake. 2016. "gezhihwazh." *Fantasy Magazine*, no. 60. [www.fantasy-magazine.com/new/new-fiction/gezhizhwazh/](http://www.fantasy-magazine.com/new/new-fiction/gezhizhwazh/).
- Smith, Adrian A., and Dayna Nadine Scott. Forthcoming. "'Energy without Injustice'? Indigenous Ownership of Renewable Energy Generation." In *Environmental Justice, Sustainable Development, and the Social Pillar*, edited by Sumudu Atapattu, Carmen Gonzalez, and Sara Seck. Cambridge: Cambridge University Press.
- Soederburg, Susanne. 2010. "Cannibalistic Capitalism: The Paradoxes of Neoliberal Pension Securitization." In *Socialist Register 2011: The Crisis This Time*, edited by Leo Panitch, Greg Albo, and Vivek Chibber, 224–41. London: Merlin.
- Spice, Anne. 2018. "Fighting Invasive Infrastructures: Indigenous Relations against Pipelines." *Environment and Society: Advances in Research* 9, no. 1: 40–56.
- Stanley, Anna. 2019. "Aligning against Indigenous Jurisdiction: Worker Savings, Colonial Capital, and the Canada Infrastructure Bank." *Environment and Planning D: Society and Space*. doi.org/10.1177/0263775819855404.
- Stefanelli, Robert D., et al. 2019. "Renewable Energy and Energy Autonomy: How Indigenous Peoples in Canada Are Shaping an Energy Future." *Environmental Reviews* 27, no. 1: 95–105.
- Thompson, Shirley. n.d. "Growing a Farm in a Fly-In First Nation Community Using Shipping Containers for Building Infrastructure and Capacity." [umanitoba.ca/faculties/engineering/departments/ce2p2e/alternative\\_village/media/16th\\_NOCMAT\\_2015\\_submission\\_112.pdf](http://umanitoba.ca/faculties/engineering/departments/ce2p2e/alternative_village/media/16th_NOCMAT_2015_submission_112.pdf).
- Treaty Alliance. 2016. Treaty Alliance against Tar Sands Expansion. [www.treatyalliance.org](http://www.treatyalliance.org).