

# **Indigenous Food Systems, Environmental Justice, and Settler-Industrial States**

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2015. In *Global Food, Global Justice: Essays on Eating under Globalization*. Edited by M. Rawlinson & C. Ward, 143-156, Cambridge Scholars Publishing.

## **Abstract**

Environmental injustices impacting Indigenous peoples across the globe are often described as wrongful disruptions of Indigenous food systems imposed by settler-industrial states such as the U.S. I will discuss how focusing on Indigenous food systems suggests a conception of the structure of environmental injustice as interference in Indigenous peoples' collective capacities to self-determine how they adapt to metascale forces, from climate change to economic transitions. This conception of environmental justice can be contrasted to conceptions focusing on wrongfully disproportionate allocations of environmental hazards. I conclude by making a connection between environmental justice, the movements of global settler-industrial states, and the food and environmental justice issues of other populations, such as African-Americans in the Detroit, Michigan area.

## **Introduction**

Indigenous peoples are the roughly 400 million people in the world who exercise cultural and political self-determination in territories dominated by occupying newcomer nations, such as the U.S. or Ecuador (Anaya 2004; de la Cadena and Starn 2007; Niezen 2003; Sanders 1977). Indigenous peoples are among the populations who struggle against environmental injustice, which generally refers to the grave moral problem of how environmental hazards—from dirty water to indoor air pollution—tend to burden already vulnerable populations, including people of color, women, poor

people, and people with disabilities (Adamson, Evans, and Stein 2002; Shrader-Frechette 2002; Mohai, Pellow, and Roberts 2009; Brulle and Pellow 2006). In the U.S., for example, studies have demonstrated time and again that communities of color tend to be located nearer than white communities to hazardous facilities such as waste incinerators. Communities of color in the U.S. also have relatively less social and economic capital and fewer legal resources to resist these siting decisions and to reform environmental policy on their behalf. Similar patterns of injustice have been detected in other parts of the world (Mohai, Pellow, and Roberts 2009; Bowen 2002; Shrader-Frechette 2002; Pellow 2007). According to the view of injustice just outlined, the structure of environmental injustice involves institutional arrangements in a society that systematically limit the access of communities of color to the minimally decent levels of clean, healthy, and safe environments that privileged populations take for granted. By “structure of injustice,” then, I mean the particular institutional arrangements that work systematically to inflict hazards on and deny goods (e.g., clean air, green spaces, etc.) to certain populations.

Indigenous peoples usually endure structures of environmental injustice tied to the unmitigated violence of European and Asian colonial and settler invasions, capitalist exploitation of resources, and the anti-Indigenous territorial dominance nation states and subnational governmental units (e.g. municipalities, provinces). Military aggression and the degradation of large landscapes—through deforestation and commodity agriculture, planned flooding (e.g., dams), mining, industrial air, water and soil pollution, and nuclear energy and weapons development—engendered multiple environmental hazards for which Indigenous peoples are particularly at risk relative to privileged colonial and settler populations (Weaver 1996; Grinde and Johansen 1995; Whyte 2011; Coates 2004). For example, the Aamjiwnaang First Nation in the Great Lakes region has about 850 members and is within 25 kilometers of 62 major industrial facilities, from oil refineries to manufacturing (the region is often called “Chemical Valley” and is near Sarnia,

Ontario). The resulting air quality issues affect First Nation members disproportionately, as some 40% of Aamjiwnaang residents must use inhalers and asthma affects approximately 22% of children and 17% of adults. Chemical contamination have also “interfered with the community’s cultural life, affecting hunting, fishing, medicine gathering, and ceremonial activities” (Hoover et al. 2012, 1646; MacDonald and Rang 2007). The environmental destruction in Chemical Valley and elsewhere benefited colonial and settler societies at the expense of aspects of Indigenous peoples’ quality of life including their health, cultural integrity and freedom to exercise self-determination.

The problem of environmental hazards to Indigenous food systems is a striking theme in advocacy and scholarship on Indigenous environmental injustice in territories dominated by what I will refer to as sustained settler-industrial campaigns. Briefly, settler-industrial campaigns refer to global waves of settlers, such as those forming the U.S. or Canadian nations, who continue to deploy strategic tools and weapons to establish permanent roots in Indigenous territories with the hopes of inscribing homelands for themselves in those territories (LaDuke 1999; Allen 1992; Chrystos 1995; Tuck 2013; Kauanui 2008; Maracle 1996; Morgensen 2011; Rifkin 2011; Ross 1998; Smith 2005; Veracini 2010; Wolfe 2006; Hoogeveen 2014; Simpson 2014). As a means of carving out settler homelands from Indigenous homelands, waves of settlers harnessed industrial means, from military technologies to large-scale mineral and fossil fuel extraction operations to sweeping landscape-transforming regimes of commodity agriculture. Settler-industrial *states* are the corresponding polities, from federal nation state governments to local municipalities and subnational provincial governments, that create and enforce laws, policies, and jurisprudence that serve to protect and incubate the homeland-inscribing process from Indigenous resistance and resurgence in such territories. Besides the U.S. and Canada, the literature on settler-colonialism typically includes others as what I am calling settler-

industrial states, including New Zealand, South Africa, and Australia (Veracini 2010).

In the context of relations between settler-industrial states and Indigenous peoples, the structure of environmental injustice is rarely discussed as the moral failure of states' allocation of environmental hazards and goods; instead, the structure is tied to notions of wrongful disruption of Indigenous food systems. As is well known through groups such as *Honor the Earth* and actions such as the *Declaration of Nyéléni* on food sovereignty, Indigenous environmental justice advocacy is inseparable from the resurgence of Indigenous food systems (Adamson 2011; LaDuke 1999; Via Campesina 2007). In this essay, I put forward some of my own broad thoughts about the structure of environmental injustice in cases occurring at the intersection of Indigenous food systems and global settler-industrial campaigns. In these cases, the structure of injustice does not so much turn on the issue of institutional arrangements promoting biased allocations of environmental hazards, but rather on the issue of settler-industrial interference with Indigenous collective capacities to self-determine how Indigenous peoples will adapt to metascale forces such as climate change and economic transition.

I will begin with a discussion of environmental injustice and Indigenous food systems, referring to cases of Indigenous struggles against settler-industrial states. From there, I will offer some thoughts on how the structure of environmental injustice concerns disruptions of collective capacities to adapt to metascale forces. The conclusion section will connect these thoughts to other communities beyond Indigenous peoples who face “seemingly” different concerns about injustice. Though in the bulk of my published work I focus primarily on Indigenous forward-looking advocacy, institution-building, and tactics for resurgence, in this essay, I will home in exclusively on identifying structures of injustice. Where I can, I will reference the implications of this essay for Indigenous resistance and resurgence. As with all of my work, I write primarily from *one* Potawatomi and North American perspective, though I will

reference other Indigenous peoples and locations around the globe. So readers should see my ideas as suggestive and not in any way authoritative—even with respect to Potawatomi and other Anishinaabe peoples.

## **Environmental Justice and Indigenous Food Systems**

### *Environmental Justice and Food*

Food and environmental quality are quite obviously connected in a number of ways, as environmental hazards can affect the quality, abundance, and price of food, among other impacts. Yet environmental justice does not always emphasize food as an explicit theme. The United States Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” EPA sees justice as “achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work” (Environmental Protection Agency 2013). The Principles of Environmental Justice refer to food once, in principle 4: “Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food” (Delegates to the First National People of Color Environmental Leadership Summit 1991). Shrader-Frechette’s comprehensive book describes environmental justice as requiring “both a more equitable distribution of environmental goods and bads and greater public participation in evaluating and apportioning these goods and bads” (Shrader-Frechette 2002, 2). Food is not singled out in any way. Bryner’s catalogue of approaches to environmental justice assessment, including “civil rights,” “distributive justice and ethics,”

“public participation,” “social justice,” and “ecological sustainability,” does not reference the presence of food in the more detailed descriptions of each approach (Bryner 2002).

Scholars have noted this apparent separation of food and environmental justice. Gottlieb and Fisher, for example, discuss how “community food security and environmental justice continue to remain separate movements, despite parallel goals, a potential common language, and intersecting agendas” (Gottlieb and Fisher 1996, 23). Joni Adamson claims that it is rarely recognized that Indigenous environmental justice movements have little interest for 1960s environmentalist concepts, such as wilderness, and instead emphasize “concepts connected to Indigenous agroecological farming traditions” (Adamson 2011, 214). I raise the lack of explicit thematic reference to food not to suggest that environmental justice definitions need to be all things to all relevant themes. Rather, I simply seek to indicate that many of the more visible theories of environmental justice have not explicitly referenced the relationship between food and environmental justice.

### *Indigenous Food Systems and Collective Capacities*

For Indigenous peoples, an informal review of environmental justice advocacy and scholarship reveals quite a bit about food and the environment in terms of Indigenous food systems. Before I discuss a sample of this advocacy and scholarship in the next subsection, I will supply some definitions of what I will mean by the concepts in this essay. To begin with, food systems are complex chains of food production, distribution, consumption, and the recirculation of food refuse. The environment figures prominently in food systems at each of these stages, from soil and other growing conditions that affect the nutritional and taste profiles of foods, to weather conditions that increase transportation costs, to pollution that affects the safety of foods harvested from fresh and salt water bodies. *Indigenous* food systems refer to specific *collective capacities* of particular Indigenous peoples to cultivate and tend, produce,

distribute, and consume their own foods, recirculate refuse, and acquire trusted foods and ingredients from other populations.

Here, the concept of collective capacities aims to describe an ecology, i.e. an ecological system, of interacting humans, nonhuman beings (animals, plants, etc.) and entities (spiritual, inanimate, etc.), and landscapes (climate regions, boreal zones, etc.) that are conceptualized and operate purposefully to facilitate a collective's (such as an Indigenous people's) adaptation to metascale forces (see also Figueroa 2006 on "environmental heritage" and Werkheiser 2015 on "community capacities"). Metascale forces refer to disruptions and perturbations to systems that require those systems to adapt and adjust. They may be associated with rising or declining average temperatures or changes in patterns of precipitation (i.e. climate change) to transcontinental trade with or invasions by other populations that can radically transform quality of life. They may be human-induced (anthropogenic) or based on complex earth systems over which humans have little influence (e.g., the medieval warm period). Like most conceptions of ecology (including agroecology) today, I use the term ecology not to designate a system always seeking to bounce back toward some equilibrium. Rather, an ecology refers to systems that are organized in ways that reflect more or less suitable adaptations to various metascale forces over previous time (and what counts as suitable depends on perspective). In many cases these systems have evolved so that they are resilient to many of the challenges they have faced over time. But newer challenges that fall outside that range, including global environmental change and the intervention of other human groups, may interfere with, perturb or degrade the ability of the traditional system to provide valued aspects of a collective's quality of life, such as cultural integrity, freedom, food security, public health, among many other potential aspects. From various human perspectives, we can think about the suitability of the collective capacities of our societies to adapt to certain metascale forces in ways that enhance or hinder our quality of life. From now on, I will refer to collective

capacities and ecologies interchangeably since collective capacities—such as Indigenous food systems—are really ecological systems.

Collective capacities are related to justice in at least one key respect. They often represent *unique, hard to replace* means through which collectives can exercise self-determination in adapting to disruptive metascale forces. Self-determination refers to a collective's having the option to control how its constituent members adapt so as to protect the valued aspects of the members' quality of life as much as is feasible given some metascale forces may be rather overwhelming. The means are *unique* in the sense that they are tailored to the needs and aspirations of populations living in particular environments. The means are *hard to replace* because having to adopt new means or the means of another collective in too rapid a fashion is often harmful. Consider Indigenous peoples in the 19<sup>th</sup> century U.S. sphere who were forced to relocate to regions far away from their homelands. They literally had to change their food systems, or collective capacities, "overnight." The rapidity of the change of ecology exacerbated hunger, malnutrition, poor health, poverty, and increasing dependence on the U.S. settler state. Though at the time, many peoples in North America were adapting to dramatic demographic and economic shifts, Indigenous peoples' option to self-determine how to adapt was curtailed when the U.S. imposed its own control over Indigenous adaptation. In the long term, many of these same Indigenous populations suffered and continue to suffer from relatively higher average rates of diabetes, poverty and other harms to quality of life than members of the U.S. settler society. Indigenous food systems, then, are collective capacities for Indigenous peoples to self-determine how they adapt to metascale forces. Indigenous food systems do not necessarily offer "perfect" adaptations to metascale forces; however, when other collectives are involved, those collectives can disrupt Indigenous food systems in ways that inflict preventable harms, as in forced relocation.

*Environmental Justice and Indigenous Food Systems*

Consider a number of representative and well-known cases of environmental injustice in relation to Indigenous food systems (conceived as collective capacities). The Mohawk Indian Territory of *Akwesasne* (straddling the U.S. and Canada) has for years faced exposures to toxicants, from polychlorinated biphenyls (PCBs) to dioxins, because the territory is downriver from major industrial facilities permitted by U.S. and Canadian settler-industrial states (Hoover 2013). Tribal environmental professionals and community members have criticized outsiders who only see the impacts as environmental when in fact the pollution disrupts Mohawk food systems. In one piece, a group of Mohawk employees and community members, including Mary Arquette and Maxine Cole, discuss how, “when traditional foods such as fish are no longer eaten, alternative diets are consumed that are often high in fat and calories and low in vitamins and nutrients. This type of dietary change has been linked to many health problems such as type II diabetes, heart disease, stroke, high blood pressure, cancer, and obesity. Consequently, serious health problems can result when, in the case of Akwesasne, traditional foods are no longer consumed, even if there is little or no exposure to toxic substances” (Arquette et al. 2002, 261). Environmental injustice is experienced as environmental hazards that disrupt Indigenous food systems, encouraging dependency on settler-industrial foods to which adaptation is difficult without incurring harms.

Offshore oil drilling is a major environmental justice issue in the arctic because accidents and leaks can produce environmental hazards that would normally not occur. In one case I recently read about, drilling threatens the Inupiat peoples’ longstanding food systems, in which whale hunting figures as a prominent activity, along with hunting walruses and seals. Yet the Inupiat community also depends on jobs from the oil industry, and onshore jobs are declining. The article quotes Edward Itta, a former Inupiat mayor, who describes this dilemma. He said his community initially rejected offshore drilling because it could damage their food systems. However, as a leader he ultimately had to support offshore

drilling, stating: “My biggest responsibility was maintaining the economic well-being of the borough, and that largely has to do with maintaining oil in the pipeline.” The stakes are high, though. Itta sees whaling as not just important for distribution of food, “We have a culture that has survived one of the harshest environments on earth for thousands of years, and that culture is really what’s at stake[...] No one person can catch a whale. It takes a whole community. Because of the whale, we share, we are very close, we come together. Without it, our way of life—what we pass on to our kids and grandkids—would be diminished” (Birger 2012). Injustice here, too, is experienced as a settler-industrial induced disruption to food systems that serve as collective capacities of Inupiat peoples to self-determine how they adapt to metascale forces such as the convergence of global industries on Alaska.

The environmental issues Māori face with the New Zealand settler state are sometimes discussed in terms of disruptions to subsistence food systems. Coombes discusses environmental justice issues in relation to the Treaty of Waitangi. “Agents of the Queen of England and chiefs from most *iwi* (tribes) signed the treaty in 1840, protecting Māori rights to retain and manage their resources. The Treaty provides a template for justice and legitimacy in environmental management, but discrepancies in the English and Māori versions and discords between its three articles weaken its protective mechanisms. The Māori text of Article II upholds Māori *rangatiratanga* (chieftainship) over their lands, resources, and food gathering spaces. Conversely, the English text of Article I transferred sovereignty to the Queen of England, even though the Māori version forfeited only *kawanatanga* or limited governance. This noncorrespondence between Crown *kawanatanga* (Article I) and Māori *rangatiratanga* (Article II) leads to tension in the implementation of Treaty provisions” (Coombes and Hill 2005, 139). One junior scholar interprets the results of land grab precipitated by this interpretative issue as Māori ending up with either too little land or land not suitable for subsistence food

production: Shirley writes that “...traditional food had been intensive to procure, but other foods like flour, pork, and potatoes were easier to cultivate. This innutritious diet increased [Māori] susceptibility to disease, which often led to death—indeed, there was a clear link between land dispossession and health related death rates in this period.” Shirley goes on to discuss urban relocation and “the proliferation of European methods of intensive farming, which also reduced employment opportunities. New urban lifestyles meant the Māori diet had to change[...] This coincided with a new reliance on fast food chains and supermarkets, creating even more problems for Māori health [...] and overeating. Issues of being underweight were quickly replaced with issues of obesity” (Shirley 2013, 58-60). Coombes, in another work focusing on cities, explores the compound issue of how pan Māori urban communities are perceived as having weaker treaty rights to clean up pollution to restore and engender subsistence fishing because they are perceived as being “out of place” by contrast to Māori who live in rural areas (Coombes 2013). In the case of Māori peoples, then, a key way of understanding environmental injustice is as harms to their food systems, or collective capacities to exercise self-determination.

It is widely known that the Navajo territory has struggled with environmental injustice stemming from energy and weapons industries, from health effects on Navajos working in uranium mines to the current dependence on the Navajo Generating Station for jobs. Tactically in the 1920s and 1930s, the U.S. settler-industrial campaign “established” a nontraditional governmental procedure in the Navajo Nation that could sign energy and other extraction leases without the free, prior and informed consent of community members. As Powell points out: “A decade later, federal agents mandated a calculated livestock reduction among Navajo herders, revealing another energy story.” She goes on to discuss how due to fear of soil erosion affecting power generation of the Hoover Dam, “federal agents decimated entire herds of Navajo sheep, crippling Navajo families[...] Moreover, as signifiers of Navajo identity, sheep

literally embodied energy—through their flesh as sustenance, their wool as warmth, and the practice of herding as a central livelihood activity. The political ecology of livestock reduction and the near destruction of a way of life was, in the end, intimately tied to power generation for the growing urban Southwest” (Powell 2015, 60-61). For Navajo today, the continued dependence on hazardous energy production represents a bind they are in because the U.S. has effectively destroyed the other options they have, one of which was the sheep-centered economy. The Diné Policy Institute (DPI) at the Navajo Nation in a recent report discusses many more forms of environmental justice centered around food. The report describes a “general trend” in the “decline of indigenous Diné foods and the increase of non-native and highly processed, high calorie foods in the Dine Diet. This decline has been so substantial that in the contemporary Navajo Diet, the only “traditional” foods consumed on a daily basis are tortillas and/or fry-bread, which only became part of the Diné Diet with the forced removal to Fort Sumner. Even sheep, the symbol of Navajo culture for the past century are facing considerable decline in the Navajo Diet in the 21st century. In addition to dietary changes, the shift in Diné life and society also include the breakdown of self-sufficiency, Diné knowledge, family and community, and detachment from land. These changes did not occur by chance, but were fostered by a series of American interventions and policies (the process of colonization); namely forced removal, the livestock reduction, boarding schools, relocation, and food distribution programs, along with the change from subsistence lifestyles to wage based society and integration into American capitalism” (Diné Policy Institute 2014, 51). For Powell and DPI, environmental issues, from health issues associated with uranium mining to relocation, are associated with disruptions of Navajo food systems.

Many Indigenous peoples in the Pacific Northwest region of North America have been struggling to rekindle fish populations damaged in a large part due to industrial dams, such as those on the Columbia River. For example, Indigenous peoples in the Pacific

Northwest used to be dependent on the Columbia River and its tributaries for fishing species such as salmon. Not only did they consume the salmon, but they also traded fish for other goods from other parts of North America with other Indigenous peoples. Some of fisheries along the Columbia River are known to have supported Indigenous peoples for thousands of years, as well as being some of the best fisheries ever to have existed in North America. Katrine Barber writes that the area around the falls got busy during the “spring and fall salmon runs. Entire bands from throughout the Northwest traveled to the mid-Columbia to trade, socialize, and fish with local residents. Both women and men traded goods and strengthened their relations with neighboring tribes[...] From the south came obsidian [...] from the north, dentalia, blankets, and beads; the east, pipestone, buffalo meat, and horses; and, hailing from the west, wappato, an important root food; central to this network was the abundance of salmon” (Barber 2005, 22-23). When the Cold War started, the U.S. federal government considered dam projects as a possible source of energy for expanding agriculture and industry. The Columbia River was a prime location for large-scale dams (White 1995), which led to the creation of the Dalles Dam whose reservoir inundated the ancient fishery at Celilo Falls. In this case, Indigenous peoples affected by the environmental destruction caused by damming lost trusted populations for trade alongside the loss of some of the food sources themselves.

The above referenced examples are well-known. Furthermore, any grey or peer reviewed resource on Indigenous environmental injustice often includes robust discussions of disruptions of Indigenous food systems. Energy development and mineral extraction through mining in the Great Lakes region is perceived as a threat primarily to hunting, fishing, and gathering rights that Indigenous peoples in the territory made sure were protected by the treaties they made with the U.S. (Smith 1996; Robyn and Camacho 1998; Perry and Robyn 2005). Gwich'in in the arctic report finding long-range pollutants, arriving from as far away as South Africa and

from local industrial activities, getting into their food chain, leading to high levels of PCBs, DDT, mercury, and radioactive waste. Similar to Akwesasne, Norma Kassi, speaking of her Gwich'in community, says: "We cannot, however, simply change our diet. If we were to change suddenly and start eating store-bought foods more, then disease would increase and our rate of death would be higher, because it would be too rapid a change, too much of a shock to our systems" (Kassi 1996, 80). Hydroelectric development affected the James Bay Cree's hunting, fishing, and trapping systems (Sam-Cromarty 1996; Gedicks 1993). The Klamath Tribe was restricted by the U.S. Forest Service in its use of fire, which was a collective capacity for cultivating landscapes for food production (Norgaard 2014; Norgaard, Reed, and Van Horn 2011). And the examples can go on.

In all the cases in this subsection, it is important to recognize that something additional is at stake, besides the facts that Indigenous peoples bear disproportionate burdens of environmental hazards than privileged settler populations. Environmental injustice involves interference of Indigenous food systems. In every example, one of the major problems at stake is the threat to Indigenous food systems as collective capacities to exercise self-determination in ways that protect aspects of quality of life such as cultural integrity, health and trusted relations for acquiring foods and ingredients from other populations. Moreover, settler states put Indigenous peoples in the position of making tough tradeoffs such as choosing jobs in fossil fuel extraction and other mining industries. I will now turn in the next section to speculate on some more specific ideas for what this structure of injustice looks like in relation to global waves of sustained settler-industrial "campaigning."

### **Settler-Industrial Campaigns Targeting Adaptation**

In the cases described in the previous section, disruptions to Indigenous food systems encumber collective capacities of

Indigenous peoples to exercise self-determination, which leads to problems with protecting environmental quality, guarding cultural integrity, and avoiding harmful tradeoffs imposed by U.S., Canadian, and other settler-industrial states. I will speculate in this section that the cases suggest that what often gets referred to as environmental injustice—wrongfully disproportionate burdens of environmental hazards or denials of environmental goods—represents only one dimension of the structure of environmental injustice against Indigenous peoples. But what is the particular structure of injustice that can be said to *wrongfully* interfere with Indigenous food systems beyond bias in the allocation of hazards? Again, by “structure of injustice,” I mean the particular form that works systematically to dismantle Indigenous food systems on behalf of the interests of settler-industrial societies. In this section, I will suggest that the structure of injustice involves a form of wrongful interference with Indigenous capacity to adapt that is specific to certain waves of settlement. In particular, I will define and discuss how the structure of interference is tied to the *homeland-inscription* process of settlement that motivates settler populations to curtail Indigenous self-determining control over how Indigenous peoples adapt to metascale forces.

To begin with, states such as the U.S., Canada, and others with which I am less familiar, such as New Zealand and Australia, can be understood as part of the larger global wave of settlement and industrialization gearing up for what at this point has been hundreds of years. Settlement is different from metropolitan and other forms of colonization. Settlers come to permanently inscribe a homeland of their own into Indigenous territorial homelands; settlers do not, as in metropolitan or “center/periphery” forms of colonialism, seek primarily or only to extract wealth and harness labor to a central homeland located somewhere else, even if they do so along the way at various points when inscribing homelands (Veracini 2010).

Inscribing a homeland is a wide-ranging and physical endeavor. For a territory to emerge as a meaningful homeland for settlers, the origin, religious and cultural narratives, social ways of life, and

political and economic systems (e.g., property) have to be physically engraved and embedded into the waters, soils, air, and other environmental dimensions of the territory or landscape. That is—and to return to concepts defined earlier in relation to Indigenous peoples—settler *ecologies* have to be inscribed so that settlers can exercise their own collective capacities. Again, ecologies are systematic arrangements of humans, nonhuman beings (animals, plants, etc.) and entities (spiritual, inanimate, etc.), and landscapes (climate regions, boreal zones, etc.) that are conceptualized and operate purposefully to facilitate a collective's (such as an Indigenous people's and now a settler society's) adaptation to metascale forces. For settler societies, the metascale forces involve the global economic trends that positioned them to occupy territories in climate regions in which they have either little or only three or four generations of experience. In this sense, waves of settlement seek to incise their own ecologies required for their own collective capacities to flourish in the landscapes they seek to occupy permanently.

Yet, for settlers, the territories were already inscribed with Indigenous ecologies required for Indigenous collective capacities to flourish. The Indigenous ecologies bear witness—whether settlers understand a little bit or not at all—to origin, religious and cultural narratives, societal ways of life, and political and economic systems that owe nothing to those same aspects of the homelands settlers seek to inscribe. For settlers, Indigenous ecologies delegitimize many things, including settlers' claims to have honorable and credible religious “missions,” universal property rights, and exclusive political and cultural sovereignty. So as to remove any markers or physical barriers challenging their legitimacy, settlers systematically seek to erase the ecologies required for Indigenous collective capacities, such as Indigenous food systems.

Settlement, then, is a sustained *campaign* of settlement into Indigenous territories. Though adequate words can be hard to find, I use the term *campaign* to connote the strategic, comprehensive (from cultural imperialism to economic exploitation to sexual

violence), continuous (resolute in the goal of sustained, permanent settlement), and militaristic dimensions of settlement. In all these dimensions, settlement seeks to erase Indigenous peoples' collective capacities as a means of incising settler ecologies. In doing so, the goal of settler campaigns is actually to eliminate themselves *as settlers* (Allen 1992; Chrystos 1995; LaDuke 1999; Kauanui 2008; Maracle 1996; Miranda 2002; Tuck 2013; Morgensen 2011; Rifkin 2011; Ross 1998; Smith 2005; Simpson 2014; Veracini 2010). Settlers seek to render the territory *their* homeland, which literally involves making manifest the permanence and/or inevitability of their relationship to the landscape, from settler origin stories that seek to justify their arrival and development of the land to the political formation of their own polities, from national governments to municipal and subnational governments, that serve to protect and incubate the inscription process. Indigenous peoples, then, are entirely forgotten or rendered invisible in the minds of settlers, or believed to have descendants today who are just fully assimilated citizens of the settler states, or subject to egregiously widespread sexual violence and murder (Smith 2005) and to being treated as "sacrifice zones" for national military interests, or romanticized and stereotyped either as victims of complete genocide who have no forms of collective self-determination today, or as shamanistic guides or noble savages. Weaver refers to these settler tactics using a psychological trope as the "attraction repulsion" relationship between settler and Indigenous societies (Weaver 1996). All of these phenomena are well documented in literatures in Indigenous Studies and now Settler-Colonial Studies.

The inscription of homelands in settler societies such as the U.S. and Canada is interconnected with the very industrial activities that factor importantly into environmental degradation and anthropogenic climate change (Cuomo 2011; Hoogeveen 2014). Likely due in part to settlers' lack of experience in that land, as well as cultural and economic values associated with their expectations for a certain quality of life, the settler homeland engenders collective capacities through rather unsustainable means: deforestation,

extraction, water and air pollution, commodity agriculture, urban sprawl, widespread automobile adoption, and so on. These means are both built into the settler narrative of a homeland (e.g., narratives of Europeans coming to work hard in U.S. or Canadian industries) but are also sometimes hidden in plain sight (e.g., narratives of recreation and natural beauty that mask histories of landscape degradation or underlying sources of weapons or energy that remain invisible to many settlers, such as uranium mining or fracking areas). The industrial inscription of the settler homeland forms the background conditions needed for settler collective capacities to flourish in Indigenous territories. Industrialization, then, is tied to settler ecological systems of relationships connecting humans, nonhuman beings and entities (often taken just to be inanimate resources), and collectives (e.g., forests to be flattened for agriculture, hills to be defaced for mining, places of beauty to be distanced from human non-recreational use such as Indigenous uses, etc.).

The industrialist-settler campaigns, then, refer to the various global settlements combining military, commercial, and cultural expansion of European states and emergent states (e.g., the U.S.), among others with which I am less familiar. The fallout of the industrial-settler campaigns is that, as Indigenous peoples, we continue to exercise political and cultural self-determination, even though there are now these states, such as the U.S. and Canada, that are perceived by most people as the preeminent sovereigns in the places where Indigenous communities live, work, and play. The campaigns have reshaped the landscape to such a degree that it is hard to recognize anything Potawatomi or Māori about the landscapes. Today we now have Indigenous-settler politics that involve a number of institutions occurring at the intersection of settler homeland inscription and Indigenous homeland resurgence. For example, many Indigenous peoples in North America appeal strategically to U.S. legal principles and interpretations of treaties to protect Indigenous lifeways and homelands from settlement (Whyte 2014). These spaces are referred to in various ways by Indigenous

studies scholars as contact zones, third space, and middle ground, spaces of dialogue, among others (Bruyneel, 2007; Johnson, 2008; Corntassel and Witmer, 2008; White, 1991; Larson et al., 2008; Tsosie, 2007; Nadasdy, 2005; Richmond et al., 2013). Indigenous resurgence involves politics asserting Indigenous visions of ecologies that support Indigenous collective capacities no matter what forms of settler-industrial resistance are imposed on these visions (Coulthard 2014). As Corntassel claims, resurgence concerns acting in ways that “reclaim and regenerate one’s relational, place-based existence by challenging the ongoing, destructive forces of colonization” (2012, 88). Though I cannot delve into the concept and literatures of resurgence in any depth in this paper, I do want to note here that resurgence can be understood as a methodology for responding to the particular dynamics of settlement by contrast to other forms of colonization and oppression.

The structure of injustice against Indigenous peoples, then, involves the ways in which settler-industrial campaigns interfere with Indigenous collective capacities, such as Indigenous food systems, through the homeland-inscription process. Structurally, this process is wrongful for how it imposes harms to Indigenous capacities to adapt to metascale forces. Indeed, Indigenous food systems are built to adjust in support of the wellbeing of the community to a number of metascale forces. Indigenous adaptive capacities are not some kind of equilibrium-based system. Here, I want to make a distinction between adaptivity and actual adaptation. Actual adaptation just refers to what a particular collective does in response to metascale forces. Adaptivity, rather differently, is part of overall collective capacity and refers to the idea that adapting to metascale forces is more suitable when Indigenous peoples already have certain aspects of a system in place—even in cases where they realize they have to transition out of a particular traditional or other system to protect community members’ quality of life (Colombi 2012; Troster 2002). All peoples, then, have a right to build up adaptivity as a key part of their collective capacities, especially when adaptive capacities are unique and hard to replace means through

which collectives can exercise self-determination in adapting to disruptive metascale forces. Again, the *means* are unique in the sense that they are tailored to the needs and aspirations of populations living in particular environments; they are hard to replace because forcing a population to adopt the means of another society too rapidly is potentially hazardous in the short and long term. This hearkens back to the quote by Kassi: “We cannot, however, simply change our diet. If we were to change suddenly and start eating store-bought foods more, then disease would increase and our rate of death would be higher, because it would be too rapid a change, too much of a shock to our systems” (Kassi 1996).

The structure of injustice is an interference with Indigenous food systems that perpetrates a kind of wrongful anti-adaptivity. This structure of injustice is often embedded within how settler-industrial states use law and policy mechanisms that protect and incubate the homeland-inscribing process. Treaty-making is an example of this in most settler states. In the treaty of Waitangi, I interpret the scholars I cited earlier as claiming that Māori understood the agreement as allowing for their adaptive capacity; but the settlers understood the treaty differently. Comparable issues occurred in Canadian and U.S. treaty making (Stark 2010, 2012; Theriault 2013; Whyte 2014). Or in the case of Navajo government imposed by the U.S., the goal of the U.S. was to limit the Navajo’s capacity to do anything but facilitate the settler energy industry. More specifically, settler-industrial polities engender laws and policies that simultaneously facilitate their own adaptation while blocking Indigenous self-determination of their own collective capacities to adapt.

Environmental justice in relation to food points to a structure of environmental injustice in which settler-industrial state institutions are arranged to bolster their own adaptivity at the expense of Indigenous adaptivity. The blocking of Indigenous adaptivity imposes preventable harms. First, settler-industrial campaigns target Indigenous adaptive capacities that play a pivotal role in sustaining Indigenous peoples’ landscapes, which are cultivated in ways that do

not reflect conceptions of settler homelands. Second, settler laws and policies enable settler adaptation—even if ultimately unsustainable in the future—and reduce Indigenous capacity to adapt without incurring great harms. Settler society does this both by destroying the physical landscape on which Indigenous food systems are based and by imposing laws and policies that, on the Indigenous side, are rigid and fixed—hence anti-adaptive.

Environmental injustice, when related to Indigenous food systems, is structured according to how settler-industrial societies inscribe homelands in Indigenous territories. They specifically target the adaptive collective capacities of Indigenous peoples, such as Indigenous food systems, and create conditions by which Indigenous peoples can no longer adapt without being eliminated and erased. Facing these kinds of injustice, it is no surprise that Indigenous environmental justice advocacy is based on resistance to settler-industrial food systems and the resurgence of Indigenous food systems. Organizations such as *Honor the Earth* seek to put in practice Indigenous supply chains and trade networks along with contemporary communications, science and transportation technologies for foods such as wild rice that sustained Anishinaabe people for hundreds of years. Indigenous peoples with treaty rights use those rights to protect their capacity to subsist commercially and culturally from the same fish populations that their people depended on since time immemorial. Indigenous peoples with traditional burning practices are seeking to rekindle those practices along with their own use of science as the basis for how food is produced. Again, in this essay, my focus was more on looking at the structure of injustice. But what I am suggesting here in closing this section is that much Indigenous environmental justice advocacy is food-based, and it attempts to engender the resurgence of the collective capacities that are specifically targeted by settler-industrial campaign.

## **Concluding Thoughts: Environmental Justice and Food**

I offer this conception of the structure of environmental injustice in relation to global and transnational settler-industrial campaigns. While my references are to Indigenous peoples, I think the analysis of industrialist-settler states, environmental justice, and food systems can be in dialogue with other communities that would not typically refer to themselves as Indigenous. Consider African-American communities in the U.S. sphere that are also subject to settler-industrial campaigning through segregation, gentrification, predatory policing, and other administrative policies that leach funds from their communities to support settler municipalities. While problems such as segregation or gentrification are often looked upon as civil rights issues, there are some groups that perhaps see them in ways that can be at least compared to the settler-industrial issues I have described here.

The city of Detroit Michigan, for example, experienced industrial trends starting in the 1950s that precipitated the decline of the streetcar system and population shifts to suburbs. Many African-American Detroiters were segregated from the suburbs. Now a city of about 700,000 residents, down from over 2 million at its height, roughly 80% of Detroiters are African-American. 30% of Detroiters live below the poverty line and 1 in 5 lack adequate transportation options. African-American Detroiters in particular live on average 1.1 miles farther from supermarkets than residents of mostly white neighborhoods. According to research conducted by the Detroit Environmental Agenda (Yu et al. 2013), “in 2011, over half of Michigan’s children with lead poisoning lived in Detroit” and “the city’s asthma hospitalization rate is the highest in the tri-county area.” Detroit is home to at least 12 facilities that were out of compliance with federal regulations by the end of 2012. University of Michigan researchers found that “Detroit is home to 5 of the top 25 most polluted zip codes in the state, including 48217, which has a toxic burden level 46 times the state average” (Ibid., 14-15).

Most Detroiters rely on relatively expensive and unhealthy foods purchased from approximately 1,000 food retailers found mostly in

impoverished neighborhoods, such as liquor stores, gas stations, party stores, dollar stores, bakeries, pharmacies, and convenience stores. 69.1% of Detroiters are obese or overweight; 21% of Detroit's youth are overweight. Detroiters die from heart disease at a rate 50% higher than the national average (White 2011). Now, certain parts of Detroit are being settled by newcomers with jobs dependent on the industrial economy, creating the phenomena of gentrification as property values go up and businesses more appropriate to their lifestyles open. Some heavily gentrified parts of Detroit are even being renamed, and settlers reshape the cityscape to reflect ways that lifelong and intergenerational Detroiters cannot understand (Woods 2014; .

African-American organizations such the Detroit Black Community Food Security Network (DBCFSN) and D-Town Farm are actively expressing views tying environmental justice to food systems issues and human rights. DBCFSN board member Monica White discusses how members of these organizations feel they “cannot count on others to provide them with healthy foods because availability to such food is based on race and class privilege” (White 2010, 199). Malik Yakini, founder of the DBCFSN, argues, regarding African-Americans, that “much of our traditional food culture has been lost over the past generation, due to the rush towards convenience in the post-World War II period, and then the fast food proliferation which occurred in Detroit and other places throughout the country” (Wallace 2011). The *Be Black and Green* website, inspired by Yakini, seeks to network, support, and promote Black farmers, gardeners, and food activists in Detroit and beyond. The philosophy behind the website is to advocate “African self-determination” and “to build a Black Food Sovereignty movement.” Yakini argues: “Be Black and Green is a call to reclaim our agricultural heritage. It is a call to embrace our ancestral mandate to recognize the interconnectedness and interdependence of all things and to work always for the greatest good. It implores us to dare to use our own cultural experience as the foundation for

forward movement. It situates us within our own historical continuum” (Be Black and Green 2014).

The African-American community has created important organizations that seek to engender environmental justice through African-American food systems. DBCFSN founded the D-Town Farm, which “utilizes sustainable, earth-friendly food production techniques to produce thousands of pounds of high-quality fresh produce each year” (White 2010, 196). Yakini sees the goal as grasping “larger control over the food system” and “[building] self-reliance in our community” (Ibid.). DBCFSN has also created the U-Jamma Food Buying Club and engaged in numerous actions to influence the Detroit City Council. These activities led to the creation of the Detroit Food Policy Council, which seeks to bolster the conditions needed for groups such as African-American Detroiters to cultivate unique collective food relations in ways that do not limit other groups’ ability to do so (Ibid.). White claims that organizations associated with Be Black and Green, such as the DBCFSN, D-Town Farm, and others, also are viewed as a first step in building partnerships with other community-based organizations, as well as public agencies, so that residents can work to rebuild their city (White 2011). She argues that, while the work of D-Town Farm is certainly in “agreement with humanitarian agencies and human rights advocates that all citizens should have access to healthy food,” there is far more to it than having enough healthy food. This is because “they are not interested in relying on governmental or humanitarian bodies to deliver this food. Instead, they choose to provide food for themselves and their community. In providing an alternative behavioral option to dependence on the state, they prefer to act in ways that demonstrate agency and empowerment” (White 2010, 206). This is largely because relying solely on a state that has been notoriously white supremacist may not be the best strategy for assuring community survival.

I highlight the case of African-American Detroiters because the organizations I discussed are cultivating adaptive collective capacities to cope with metascale forces such as the industrialization,

segregated abandonment, and gentrification of Detroit. While it is not my place to go into too much detail here, we can see the same markings of settler-industrial campaigning as afflicting the homelands of Indigenous peoples. Detroit, the industrial city, was created to facilitate a homeland for white people in a number of ways; it is also true that white flight to the suburbs is another form of settlement; so too is the current trend toward gentrification. Leaders such as Yakini and White claim that these settler populations cannot be trusted to distribute food or environmental goods and bads to African-Americans. So their goal is to foster resurgence through African-American collective capacities for self-determining their communities' and neighborhoods' adaptation to metascale forces. As with Indigenous peoples, surviving—and flourishing—involves protecting adaptive capacities that can foster community life when facing the inevitable presence and influence of settler-industrial reality.

## References

- Adamson, Joni. 2011. "Medicine Food: Critical Environmental Justice Studies, Native North American Literature, and the Movement for Food Sovereignty." *Environmental Justice* 4 (4): 213-219.
- Adamson, Joni, Mei Mei Evans, and Rachel Stein, eds. 2002. *The Environmental Justice Reader: Politics, Poetics, Pedagogy*. Tucson, Arizona: University of Arizona Press.
- Allen, Paula G. 1992. *The sacred hoop: recovering the feminine in American Indian traditions*. Boston: Beacon Press.
- Anaya, James. 2004. *Indigenous Peoples in International Law*. New York, New York: Oxford University Press.
- Arquette, Mary, Maxine Cole, Katsi Cook, Brenda LaFrance, Margaret Peters, James Ransom, Elvera Sargent, Vivian Smoke, and Arlene Stairs. 2002. "Holistic Risk-Based Environmental

- Decision-Making: A Native Perspective.” *Environmental Health Perspectives* 110 (2): 259-264.
- Barber, Katrine. 2005. *Death of Celilo Falls, The Emil and Kathleen Sick Lecture-Book Series in Western History and Biography*. Seattle: Center for the Study of the Pacific Northwest in association with University of Washington Press.
- Be Black and Green. *Planting the Seeds of the Urban Tomorrow* 2014. [www.bebblackandgreen.com](http://www.bebblackandgreen.com) (accessed 4-14-15).
- Birger, Jon. 2012. “Why Shell Is Betting Billions to Drill for Oil in Alaska.” *Fortune*. May 24.
- Bowen, William. 2002. “An Analytical Review of Environmental Justice Research: What Do We Really Know?” *Environmental Management* 29 (1): 3-15.
- Brulle, Robert J., and David .N. Pellow. 2006. “Environmental Justice: Human Health and Environmental Inequities.” *Annual Review of Public Health* 27: 103-124.
- Bruyneel, Kevin. 2007. *The Third Space of Sovereignty: the Postcolonial Politics of U.S.-Indigenous Relations*. Minneapolis, MN, USA: University of Minnesota Press.
- Bryner, Gary. 2002. “Assessing Claims of Environmental Justice.” In *Justice and Natural Resources*, edited by K.M. Mutz, G.C. Bryner and D.S. Kenney. Washington, DC: Island Press.
- de la Cadena, Marisol and Orin Starn, eds. 2007. *Indigenous Experience Today*. New York, New York: Bloomsbury Academic.
- Chrystos. 1995. *Fire power*. Vancouver, ON, Canada: Press Gang Publishers.
- Coates, Kenneth. 2004. *A Global History of Indigenous Peoples: Struggle and Survival*. New York, New York: Palgrave Macmillan.
- Colombi, Benedict J. 2012. “Salmon and the Adaptive Capacity of Nimiipuu (Nez Perce) Culture to Cope with Change.” *The American Indian Quarterly* 36 (1): 75-97.
- Coombes, Brad L. 2013. "Māori and Environmental Justice: The Case of ‘Lake’ Otara." In *Indigenous in the City: Contemporary Identities and Cultural Innovation*, edited by E.J. Peters and C. Andersen. Vancouver, British Columbia, Canada: UBC Press.

- Coombes, Brad L, and Stephanie Hill. 2005. “‘Na whenua, na Tuhoe. Ko DoC te partner’—Prospects for Comanagement of Te Urewera National Park.” *Society and Natural Resources* 18 (2): 135-152.
- Corntassel, Jeff. 2012. "Re-envisioning Resurgence: Indigenous Pathways to Decolonization and Sustainable Self-Determination." *Decolonization: Indigeneity, Education & Society* 1 (1): 86-101.
- Corntassel, Jeff. and Witmer, Richard C. 2008. *Forced federalism: Contemporary Challenges to Indigenous Nationhood*, Norman, OK, USA: University of Oklahoma Press.
- Coulthard, Glenn. 2014. *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. Twin Cities, MN, USA: University of Minnesota Press.
- Cuomo, Chris J. 2011. “Climate Change, Vulnerability, and Responsibility.” *Hypatia* 26 (4): 690-714.
- Delegates to the First National People of Color Environmental Leadership Summit. 1991. “Principles of Environmental Justice.” Paper read at First National People of Color Environmental Leadership Summit, October 24-27, Washington, DC.
- Diné Policy Institute. 2014. Diné Food Sovereignty. <http://www.dinecollege.edu/institutes/DPI/Docs/dpi-food-sovereignty-report.pdf> (accessed 4/14/15).
- Environmental Protection Agency. *Environmental Justice* 2013. <http://www.epa.gov/environmentaljustice> (accessed 8/14/2013).
- Figueroa, Robert M. 2006. "Evaluating Environmental Justice Claims." In *Forging Environmentalism: Justice, Livelihood, and Contested Environments*, edited by Joanne Bauer, 360-376. New York: M.E. Sharpe.
- Gedicks, Al. 1993. *The New Resource Wars: Native and Environmental Struggles against Multinational Corporations*. Boston, MA: South End Press.
- Gottlieb, Robert, and Andrew Fisher. 1996. “Community Food Security and Environmental Justice: Searching for a Common Discourse.” *Agriculture and Human Values* 13 (3): 23-32.

- Grinde, Donald A., and Bruce E. Johansen. 1995. *Ecocide of Native America: Environmental Destruction of Indian Lands and Peoples*. Sante Fe, New Mexico: Clear Light.
- Hoogeveen, Dawn. 2015. Sub-surface Property, Free-entry Mineral Staking and Settler Colonialism in Canada. *Antipode* 47: 121-138.
- Hoover, Elizabeth. 2013. "Cultural and Health Implications of Fish Advisories in a Native American Community." *Ecological Processes* 2 (1): 1-12.
- Hoover, Elizabeth, Cook, Katsi, Plain, Ron, Sanchez, Kathy, Waghiyi, Vi, Miller, Pamela, Dufault, Renee, Sislin, Caitlin and Carpenter, David O. 2012. "Indigenous peoples of North America: environmental exposures and reproductive justice." *Environmental Health Perspectives* 120 (2):1645-1649.
- Johnson, Jay T. 2008. "Indigeneity's Challenges to the White Settler-State: Creating a Thirdspace for Dynamic Citizenship." *Alternatives: Global, Local, Political* 33: 29-52.
- Kassi, Norma. 1996. "A Legacy of Maldevelopment." In *Defending Mother Earth: Native American Perspectives on Environmental Justice*, edited by J. Weaver. Maryknoll, New York: Orbis Books.
- Kauanui, J. Kēhaulani. 2008. Native Hawaiian decolonization and the politics of gender. *American Quarterly* 60: 281-287.
- LaDuke, Winona. 1999. *All Our Relations: Native Struggles for Land and Life*. Cambridge, Massachusetts: South End Press
- Larson, Eric, Johnson, Zachary and Murphy, Monique. 2008. Emerging Indigenous Governance: Ainu Rights at the Intersection of Global Norms and Domestic Institutions. *Alternatives: Global, Local, Political* 33: 53-82.
- MacDonald, Elaine, and Rang, Sarah. 2007. *Exposing Canada's Chemical Valley: An Investigation of Cumulative Air Pollution Emissions in the Sarnia, Ontario Area*. An Ecojustice Report. <http://www.environmentalhealthnews.org/ehs/news/2012/2007-study.pdf> (accessed 4/10/15).
- Maracle, Lee. 1996. *I am woman: A Native perspective on sociology and feminism*. Vancouver, B.C. Canada: Press Gang Publishers.

- Miranda, Deborah A. 2002. Dildos, hummingbirds, and driving her crazy: searching for American Indian women's love poetry and erotics. *Frontiers: A Journal of Women Studies*. 23: 135-49.
- Mohai, Paul, David Pellow, and J. Timmons Roberts. 2009. "Environmental Justice." *Annual Review of Environment and Resources* 34: 405-430.
- Morgensen, Scott L. 2011. *Spaces between us: queer settler colonialism and indigenous decolonization*. Minneapolis, MN, USA: University of Minnesota Press.
- Nadasdy, Paul. 2005. "The Anti-Politics of TEK: The Institutionalization of Co-Management Discourse and Practice." *Anthropologica* 47: 215-231.
- Niezen, Ronald. 2003. *The Origins of Indigenism: Human rights and the Politics of Identity*. Berkeley, California. University of California Press.
- Norgaard, Kari. 2014. "The Politics of Fire and the Social Impacts of Fire Exclusion on the Klamath." *Humboldt Journal of Social Relations* 36: 73-97.
- Norgaard, Kari, Ron Reed, and Carolina Van Horn. 2011. "A Continuing Legacy: Institutional Racism, Hunger and Nutritional Justice on the Klamath." *Cultivating Food Justice: Race, Class, and Sustainability*: 23-46.
- Pellow, David N. 2007. *Resisting Global Toxics: Transnational Movements for Environmental Justice*. Cambridge, Massachusetts: MIT Press.
- Powell, Dana E. 2015. "The Rainbow Is Our Sovereignty: Rethinking the Politics of Energy on the Navajo Nation." *Journal of Political Ecology* 22: 54.
- Richmond, Laurie, Middleton, Beth R, Gilmer, Robert, Grossman, Zoltan, Janis, Terry, Lucero, Stephanie, Morgan, Tukoroirangi and Watson, Annette. 2013. "Indigenous Studies Speaks to Environmental Management." *Environmental Management* 52: 1041-1045.

- Rifkin, Mark. 2011. *When did Indians become straight?: kinship, the history of sexuality, and Native sovereignty*. New York, NY, USA: Oxford University Press.
- Ross, Luana. 1998. *Inventing the savage: the social construction of Native American criminality*. Austin: University of Texas Press.
- Perry, Barbara and Robyn, Linda. 2005. "Putting Anti-Indian Violence in Context: The Case of the Great Lakes Chippewas of Wisconsin." *American Indian Quarterly* 29 (3/4): 590.
- Robyn, Linda, and David E. Camacho. 1998. "Bishigendan Akii: Respect the Earth." In *Environmental Injustices, Political Struggles*, edited by D. Camacho. Durham, North Carolina: Duke University Press.
- Sam-Cromarty, Margaret. 1996. "Family Closeness." In *Defending Mother Earth: Native American Perspectives on Environmental Justice*. Maryknoll, New York: Orbis Books.
- Sanders, Douglas E. 1977. *The Formation of the World Council of Indigenous Peoples*. The International Secretariat of International Work Group for Indigenous Affairs, Copenhagen, Denmark
- Shirley, Lara. 2013. "Is Māori Food Sovereignty Affected by Adherence, or Lack Thereof, to *Te Tiriti O Waitangi*?" *Future of Food: Journal on Food, Agriculture and Society* 1 (2): 57-63.
- Shrader-Frechette, K.S. 2002. *Environmental Justice: Creating Equality, Reclaiming Democracy*. Oxford: Oxford University Press.
- Simpson, Audra. 2014. *Mohawk interruptus: Political life across the borders of settler states*: Durham, NC, USA: Duke University Press.
- Smith, Andrea. 2005. *Conquest: Sexual Violence and American Indian Genocide*. Boston, MA, USA: South End Press.
- Smith, Justine. 1996. "Custer Rides Again—This Time on the Exxon Valdez." In *Defending Mother Earth: Native American Perspectives on Environmental Justice*, edited by J. Weaver. Maryknoll, New York: Orbis Books.
- Stark, Heidi Kiiwetinepinesiiik. 2010. "Respect, Responsibility, and Renewal: The Foundations of Anishinaabe Treaty Making with the United States and Canada." *American Indian Culture and Research Journal* 34 (2): 145-164.

- . 2012. “Marked by Fire: Anishinaabe Articulations of Nationhood in Treaty Making with the United States and Canada.” *The American Indian Quarterly* 36 (2): 119-149.
- Theriault, Sophie. 2013. “Canadian Indigenous Peoples and Climate Change: The Potential for Arctic Land Claims Agreements to Address Changing Environmental Conditions.” In *Climate Change and Indigenous Peoples: The Search for Legal Remedies*, edited by R. Abate and E. Kronk. Cheltenham, UK: Edward Elgar.
- Trosper, Ronald L. 2002. “Northwest Coast Indigenous Institutions That Supported Resilience and Sustainability.” *Ecological Economics* 41: 329-344.
- Tsosie, Rebecca A. 2007. “Indigenous people and Environmental Justice: the Impact of Climate Change.” *University of Colorado Law Review* 78: 1625-1677.
- Tuck, Eve, and Rubén A Gaztambide-Fernández. 2013. “Curriculum, replacement, and settler futurity.” *Journal of Curriculum Theorizing* 29 (1).
- Veracini, Lorenzo. 2010. *Settler Colonialism*. New York: Palgrave Macmillan.
- Via Campesina. 2007. Declaration of Nyéleni. *Nyeleni.org*.
- Wallace, Hannah. 2011. Malik Yakini of Detroit’s Black Community Food Security Network. *Civileats.com*, December 19th. <http://civileats.com/2011/12/19/tft-interview-malik-yakini-of-detroits-black-community-food-security-network/> (accessed 4-14-2015).
- Weaver, Jace. 1996. *Defending Mother Earth: Native American Perspectives on Environmental Justice*. Maryknoll, New York: Orbis Books.
- . 1996. “Notes from a Miner’s Canary.” In *Defending Mother Earth: Native American Perspectives on Environmental Justice*, edited by J. Weaver. Maryknoll, New York: Orbis Books.
- Werkheiser, Ian. 2015. “Community Epistemic Capacity.” *Social Epistemology* (forthcoming 2015): 1-20.

- White, Monica. 2011. "D-Town Farm: African American Resistance to Food Insecurity and the Transformation of Detroit." *Environmental Practice* 13: 406-417.
- White, Richard. 1995. *The Organic Machine: The Remaking of the Columbia River*. New York: Hill and Wang.
- . 1991. *The Middle Ground: Indians, empires, and republics in the Great Lakes region, 1650-1815*, Cambridge, U.K. : Cambridge University Press.
- Whyte, Kyle P. 2014. "A Concern About Shifting Interactions between Indigenous and Nonindigenous Parties in U.S. Climate Adaptation Contexts." *Interdisciplinary Environmental Review*.
- . 2011. "Environmental Justice in Native America." *Environmental Justice* 4 (4): 185-186.
- Wolfe, Patrick. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of Genocide Research* 8 (4): 387-409.
- Woods, Ashley. 2014. "Detroit Doesn't Need Hipsters To Survive, It Needs Black People." *Huffington Post*. [http://www.huffingtonpost.com/2014/03/10/saving-detroit-thomas-sugrue-hipsters\\_n\\_4905125.html](http://www.huffingtonpost.com/2014/03/10/saving-detroit-thomas-sugrue-hipsters_n_4905125.html) (accessed 4/8/15).
- Yu, Sandra, Gloria Rivera, Sandra Turner-Handy, Todd Scott, Matthew Naimi, Simone Sagovac, Joel Heeres, and Margaret Weber. 2013. *The Detroit Environmental Agenda*. <http://detroitenv.org/read-the-report/> (accessed 3/1/15).