

Chapter 2

A History of Ecojustice and Sustainability: The Place Where Two Rivers Meet



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2.1 Mamaroneck Land Acknowledgement

I am writing to you from the Village of Mamaroneck, New York, a place that gets its name from the Munsee Lenape language of the people who first lived in the region. Mamaroneck is a coastal village and town on the Long Island Sound in Westchester County, New York. According to local lore, the area that is now the town of Mamaroneck was “purchased” from the Native American Chief, *Wappaquewam*, and his brother, *Manhatahan*, of the Siwanoy tribe, by an Englishman, John Richbell, in 1661. As with many other places, there is a memorial plaque and artwork commemorating this event. There is some disagreement about the historical accuracy of the tribe name, Siwanoy, which may be a corruption of *Siwanak*, or “salt people.” Due to removal, intermarriage, assimilation, and erasure of the Native American people from the area, we cannot know for sure if the name is one that was given to people living in this area by settlers rather than one that the people used for themselves at the time.

The name, Mamaroneck, is most likely derived from the Munsee, *maamaalahneek* which means “striped stream,” which comes from *maamaaleew*, “to be striped.” I wondered if the river may have been called striped because, towards the mouth of the river, where it flows into the Mamaroneck Harbor and the Long Island Sound, both freshwaters from the land and saltwater from the sea meet and mix. Then, I came across a reference that stated that Mamaroneck means, “the place where the sweet waters fall into the sea” (Scarsdale Inquirer, 1936).

I begin with this land acknowledgment because I am about to share a chapter that explores the history of the ecojustice and sustainability movements. I cannot write about this history and these issues without acknowledging the ways in which they

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intersect with the place I am writing from. Mamaroneck exists as a result of settler colonialism. Today, parts of the Village that have historically had issues with flooding are under a deeper threat due to climate change. The Village sits on both sides of the Mamaroneck River, which is joined by the smaller Sheldrake River before emptying into the Long Island Sound. In September 2021, the Village suffered catastrophic flooding during the remnants of Hurricane Ida. One Mamaroneck resident died and there were more than 150 water rescues, 535 flooded homes, 1000 people displaced, 310 abandoned cars, and \$93 million in Village, residential, and commercial damage (Edwards, 2021). Mayor Tom Murphy said, “As we know, global warming is getting worse. The storms are coming with greater rapidity and greater intensity. And here in the Village of Mamaroneck, especially in some of the neighborhoods that abut the rivers, [we] are at the epicenter, the bullseye, the cutting edge of climate change” (News 12 Bronx, 2021).

Ecojustice is salient to this story because Mamaroneck has about 19,000 residents, 65% of whom identify as White only, 5% Black, 4% Asian, and 25% Hispanic or Latino of whom 15% identify as White (US Census, 2019a). The median household income is \$102,000, and the median home value is \$623,000. Twenty-five days after the flood, New York State Senator Chuck Schumer announced that they had secured federal approval for the Mamaroneck and Sheldrake River Flood Risk Management Project (News 12 Bronx, 2021). This \$100 million project will deepen and widen the rivers to slow flooding and remove bridges that currently constrict river flow.

Climate resiliency is a central ecojustice and sustainable development issue, and we have to ensure that the poor who are most vulnerable have adequate support for mitigation and adaptation efforts. When Hurricane Maria hit the island of Puerto Rico in 2017 with devastating force, a report from researchers at George Washington University’s Milken Institute found that there were more than 2975 excess deaths in the 5 months following the hurricane (Santos-Burgoa et al., 2018). Importantly, they compared the number of deaths in each month to the comparable number in prior years and they took into account the number of people who left the island after the disaster. Dean, Lynn R. Goldman (2018), explained:

We do not know the exact circumstances around each of the 2,975 excess deaths that occurred. Many factors – disruption in transportation, access to food, water, medications, power, and other essentials – may have contributed. In interviews, we heard many heart-breaking stories of families struggling to obtain emergency health care, power for medical devices, prescription drugs, or even food and drinking water. This is why we were not surprised to find that the highest rates of excess deaths occurred among those living in the poorest municipalities, as well as those over the age of 65, especially men.

In Loiza, Puerto Rico, a town of comparable size to Mamaroneck, with a population of 25,400 and a median income of \$17,900 (US Census Bureau, 2019b), Amnesty International (2018) reported that a year later, 350 houses still had blue tarps covering the roofs. Thus a year after the disaster, American citizens living in this town still needed roofs! It is not hard to find headlines that show how the poor and marginalized are grievously and disproportionately impacted by climate change, the pandemic, or other environmental issues.

In the rest of this chapter, I provide a history of the sustainability and ecojustice movements, primarily in the United States. This history serves as a basis for understanding the discourses that are taken up in this volume. I begin with a sketch of the roots of the concept of sustainability and the early years of the environmental justice movement from 1962 to the early 1970s when the term ecojustice came into use. The third section picks up in 1979 with the case of *Bean v. Southern Waste Management* and moves through the early 1990s. The fourth part brings us up to the present day. In these sections, I seek to demonstrate how two streams of thought and action: ecojustice and sustainability have come together and inform each other in contemporary times.

2.2 Sustainability: A Concept Rooted in Forest Management

Jeremy L. Caradonna (2014) provides a history of sustainability that begins in Seventeenth-Century Europe when forests were on the decline. Timber and other forest products formed the basis of a pre-industrial economy that needed wood for hearth and home, for cooking and heating, for fruits, nuts, berries, fodder, glue, tanning products, glass-making, metal-work, charcoal, hunting, and importantly, ship-building. Populations were growing, placing further demands on a dwindling resource that was urgently needed for naval and state power. In 1664, John Evelyn, a founding member of the Royal Society in England wrote *Sylva, or a Discourse of Forest Trees, and the Propagation of Timber in His Majesty's Dominions*,¹ in which he decried the loss of woodlands and offered recommendations to replant and reforest the landscape. In 1669, Jean-Baptiste Colbert, the minister of Finances under Louis XIV in France issued *Ordonnance sur le fait des Eaux et Forêts*,² “a forest code that became the model of ‘rationalized’ state forestry for governments all over Europe and beyond” (Caradonna, 2014, p. 34).

Inspired by Colbert’s treatise, in 1713 Hans Carl von Carlowitz, a royal mining administrator of Saxony, Germany, wrote a forestry manual, *Sylvicultura oeconomica, oder haußwirthliche Nachricht und Naturmäßige Anweisung zur wilden Baum-Zucht*.³ This text explored the intensive cultivation of wild trees and forests, including seed collection, planting, and harvesting, and thus, for the first time, proposed the concept of sustained-yield forestry. For example, Carlowitz wrote, “We must aim for a continuous, resilient, and sustainable use, because [forests] are an indispensable thing, without which the country and its forges could not exist” (Carlowitz, 1713, p. 106, in Caradonna, 2014).

¹Evelyn, J. (1664). *Sylva, or a Discourse of Forest Trees, and the Propagation of Timber in His Majesty's Dominions*. London: Allestry and Martyn.

²Colbert, J. (1669). *Ordonnance sur le fait des Eaux et Forêts*. Paris: Chez P. Le Petit, 1669.

³Carlowitz, H.C. (1713). *Sylvicultura oeconomica, oder haußwirthliche Nachricht und Naturmäßige Anweisung zur wilden Baum-Zucht*. Leipzig: Braun.

It is important to note that during this time, many Indigenous societies were already using forests resiliently and sustainably and had done so for thousands of years. For example, in *Changes in the Land*, William Cronon (1983) explains that Native Americans in New England lived sustainably in part because the people took advantage of seasonal abundances by moving from inland areas where they hunted game and harvested nuts, berries, and many other plants, to the coast where they could take advantage of fish spawns and shellfish beds. Their hunter-gatherer lifestyle reduced human demands on the ecosystem and made sure no species of plants or animals were overused. Taking advantage of the ecological diversity available as the seasons unfolded, including a wide array of medicinal plants, allowed Native Americans to thrive.

In southern New England, where agricultural practices were adopted, grain could be stored through winter making starvation less of a problem and these Native American groups had larger population densities. They worked the ground with clamshell hoes, raising heaps in which they sowed the seeds stored from the previous harvest. Their low-impact methods left the soil more intact and less prone to erosion. In addition, they interplanted corn, squash, and beans, allowing each crop to contribute to the success of the others. The squash kept weeds to a minimum and preserved soil moisture, the corn served as a pole for the beans, and the beans as we now know, fixed nitrogen, enriching the soil. When fields became less productive, in about 8–10 years, they moved to another location. Summer camps were located near the fields and winter camps were located in areas where game animals would be more plentiful. By moving camps, they could take advantage of new fuel sources which were needed for cooking and heating.

Another forest management practice involved burning extensive areas once or twice a year in spring and fall to keep the forests open and park-like. According to Cronon (1983), this practice resulted in “a forest of large, widely spaced trees, few shrubs, and much grass and herbage.” With reduced fuel on the ground, the low-temperature fires burned quickly and extinguished themselves, rarely burning out of control. The practice of selective burning made hunting and travel through the forests easier, allowed plants to grow more lushly in the nutrient-rich soils, created conditions favorable for berries and other foods, produced edge and meadow habitat with lush growth to support a variety of wildlife, such as elk, deer, hare, turkey, and quail, and reduced plant diseases, pests, and fleas. Thus, burning purposefully created abundant game and foods for hunting and gathering.

In a similar way, Jared Diamond (2011) describes how people have lived sustainably in the highlands of New Guinea for about 46,000 years, raising pigs and chickens and growing taro, bananas, yams, sugarcane, and sweet potatoes, with terraced gardens, vertical drainage ditches, and other agricultural practices uniquely suited to a region prone to earthquakes, landslides, and as much as 400 inches of rain per year. Central to the New Guineans’ success is their practice of silviculture, or the intentional planting and careful nurturing of the casuarina tree on a large scale, from which they obtain the bulk of their wood products for homes, fences, utensils, weapons, and fuel. The tree is a fast-growing hardwood with root nodules that fix nitrogen and a heavy leaf fall that together enrich the soil. The trees reduce erosion,

provide shade, and are enjoyed for the sound they make when the wind blows through their leaves. Also during this time, the Tokugawa Shogunate in Japan addressed deforestation by urging people to plant seedlings, conducting forest inventories, regulating the use of wooded areas, developing forest plantations, and engaging in forest practices to address the imbalance between cutting and producing trees (Diamond, 2011). Finally, places like India, China, and Taiwan also developed state-sponsored forest conservation efforts similar to those in Europe (cf. Grove, 1997).

Richard H. Grove (1997) documents further lessons that were learned during the colonial period as rapidly deforested tropical islands such as Jamaica, St. Helena, St. Vincent, Barbados, and Mauritius showed the adverse impacts of deforestation on the local climate, flora, fauna, and hydrology in a relatively short period of time. The denuded landscapes were hotter and more prone to drought and erosion. Although island conservation efforts were driven primarily by economic concerns, such as impacts on sugar production, island bureaucrats were among the first people to realize that human activity can have an impact on the local climate (Grove, 1997). Thus, Caradonna (2014, p. 45) notes that “sustainability [at this time] traces its roots primarily to imperialists...who cared *very little* about nature or social justice and *very much* about state power, industrialization, and profit.”

The industrial revolution and colonialism were marked by a rapacious appetite for natural resources and rapid depletion of forests in colonial territories and the United States. Gifford Pinchot, the first chief of the US Forest Service, pushed for sustainable forestry, or the management of forests for natural resource consumption (Caradonna, 2014). Pinchot had studied at the forestry school in Nancy, Germany, and his leadership set the precedent for managing federal lands from a utilitarian and economic perspective which valued forests for their timber and natural resources rather than their beauty and other ecosystem services. By the 1900s, critics such as George Perkins Marsh, who condemned the reckless destruction of the natural world, and John Muir, who advocated for the preservation of wild places, widely denounced the focus on utilitarian and economic perspectives (Caradonna, 2014). As we will see in the next section, these utilitarian and economic perspectives also came into conflict with poor, Latino, Black, and Indigenous communities who were bearing the brunt of the impacts of industrialization on the environment.

2.3 Civil Rights, Ecojustice, and Environmental Protection

In many ways, the ecojustice movement in the US was born out of an ongoing struggle for civil and human rights that coalesced around issues of environmental racism (cf. Garcia, 2016; Bullard & Johnson, 2009). Environmental justice seeks equal treatment with respect to environmental laws and regulations, whereas ecojustice, or ecological justice, recognizes and tries to address the deeper social issues and ecological concerns embedded in environmental problems within communities (Maranda & Bermel, 2020).

In 1962, two different labor organizations formed in rural California to secure better wages, health care, and living conditions for farmworkers, the Agricultural Workers Organizing Committee (AWOC), led by Larry Itliong, a Filipino labor organizer, and the National Farm Workers Association (NFWA), led by César Estrada Chávez and Dolores Huerta, Mexican labor organizers (Garcia, 2016). The passing of the Civil Rights Act in 1964 galvanized Latinx and Filipino communities that had been organizing around themes of racial and social justice. In September 1965, AWOC initiated a series of strikes against grape growers in Delano, CA. A week later, the NFWA began to strike in solidarity with the AWOC. Then, in 1966, the two organizations merged to create the United Farm Workers Organizing Committee (UFWOC). The organization embraced nonviolent means of protest. For example, in the Spring of 1966, Chávez organized a pilgrimage from Delano to Sacramento, CA. While his supporters sang Mexican protest songs, Chávez walked barefoot along the highways to draw converts and media attention to the cause. Dr. Martin Luther King sent Chávez a telegram saying, “Our separate struggles are really one – a struggle for freedom, for dignity and for humanity” (Ott, 2019).

Chávez and his supporters began organizing boycotts of grape products, especially wine and table grapes sold in stores, an approach that was widely regarded as a turning point in the movement (Garcia, 2016). The boycotts spread across the country. For example, in 1968, Dolores Huerta appealed to unions at the Port of New York and New Jersey and they were able to block the delivery of grapes to New York City. They also initiated secondary boycotts of large chain stores selling table grapes, such as the A & P, and were successful in getting the chain to stop selling grapes in all 430 of its stores. Similar boycotts in other cities were also successful. The Toronto mayor declared November 23, 1968, “Grape Day,” and announced that the government would no longer purchase any grapes in solidarity with the farmworkers. In Cleveland, OH, Mayor Carl Burton Stokes, the first African American to be elected mayor of a major U.S. city, also ordered all government facilities to stop serving grapes.

As the boycott dragged on and striking farm workers were subject to egregious, racist attacks, some supporters became impatient and began advocating violence (Kim, 2017). Chávez began a 25-day hunger strike following the example of Mahatma Gandhi. His fast stopped talk of violence and attracted further support from Dr. Martin Luther King, who wrote another telegram to him, saying, “I am deeply moved by your courage in fasting as your personal sacrifice for justice through nonviolence” (Ott, 2019).

In 1969, Chávez gave testimony before the Subcommittee on Labor of the Senate Committee On Labor And Public Welfare. He said,

An especially serious problem in agricultural employment is the concerted refusal of growers even to discuss their use of economic poisons or pesticides. There are signs that several members of Congress are becoming increasingly aware of the dangers posed by economic poisons to human life and to wildlife, to the air we breathe and the water we drink (Chávez, 1969).

The grape boycott stopped the sale of grapes in New York City, Boston, Detroit, Chicago, Philadelphia, Montreal, and Toronto and in 1970 led to the first contract

between growers and farmworkers in California. Importantly, the contract included protection from pesticides. Thus, the movement brought national and international attention to the issue of pesticide use and its effects, not only on farmworkers, but on their families and communities, and on the consumers who would eat the tainted grapes and grape products.

In 1968, Black sanitation workers in Memphis began protesting economic and job-safety issues, bringing together labor and civil rights issues (US EPA, 2015a). Focused on the dignity of the Black person, the ongoing strike was not resolved until after Martin Luther King was assassinated and the mayor agreed to engage in collective bargaining. In 1969, the Young Lords, a group of mostly Puerto Rican activists in New York City, organized around the condition of the streets in “El Barrio,” a predominantly Puerto Rican neighborhood in East Harlem (Gandy, 2002). Matthew Gandy (2002) explained, “Piles of garbage were...routinely ignored by the city’s sanitation department, in stark contrast to the pristine sidewalks of affluent districts in downtown Manhattan.” In July 1969, The Lords launched the “garbage offensive.” Equipped with brooms and garbage bags, they began cleaning the streets of their community. By August, the Lords began setting the trash on fire and barricading the streets to protest the piles of garbage that remained uncollected. The activists would go on to address other environmental health issues, such as lead paint and tuberculosis rates in the community.

In 1970, the National Environmental Protection Act was passed. This groundbreaking United States legislation is considered the “Magna Carta” of environmental legislation (cf. Mandelker, 2010). The stated goals of the legislation were, “...to create and maintain conditions under which [humans] and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations...” The legislation established that an environmental review process would be needed for all federal actions, such as the construction of airports, buildings, military complexes, or highways. Despite its goals, the legislation relied heavily on impact statements and underestimated the ways in which the complexity of ecological systems might make it difficult to predict the impacts of projects (Mandelker, 2010). For example, Lapping (1975) noted

Ultimately, full compliance with NEPA's Section 102 may be impossible. The ability to measure impact implies the ability to describe an environmental system. It is inherent in the understanding of ecosystem dynamics that change is the most basic and significant quality of real-world ecosystem behavior.

In addition, early impact statements focused mostly on environmental impacts and not as much on impacts on people. For example, Bhatia and Wernham (2008) called for integrated health impact statements developed by public health institutions since aside from toxic exposures environmental impact statements rarely addressed human health in a comprehensive way.

Meanwhile, at a 1970 conference on “War Crimes and the American Conscience,” Arthur Galston, an American plant biologist, and bioethicist proposed the term, *ecocide*, to mean “the willful and permanent destruction of [an] environment in which a people can live in a manner of their own choosing” (Zierler, 2011). Galston and

other scientists had been lobbying at home and abroad against the use of Agent Orange as a defoliant during the Vietnam War and considered its use on par with other crimes against humanity. Also in 1970, the first Earth Day was celebrated, and by the end of that year, the Environmental Protection Agency (EPA) would be established and other new environmental laws, including the National Environmental Education Act, the Occupational Safety and Health Act, and the Clean Air Act. The Clean Water Act would follow in 1972. Importantly, these laws were not passed solely for the sake of the environment, rather they were instigated by concerns for the impact of environmental degradation on human well-being (Salkin et al., 2012). The Marine Mammals Protection Act in passed in 1972 and the Endangered Species Act in 1973 began to focus on habitat areas and the function of habitats as ecosystems.

While the environmental movement was expanding, the ecojustice movement also began to grow due to community and ecumenical interest in environmental and social justice issues. Rather than choosing between issues of conservation or poverty, churches and campus ministry programs began to pursue both ecological and economic justice goals (Gibson, 2004). As William Gibson (2004, p. 3) eloquently maintained, “Concern for the earth and its myriad creatures and systems should not, must not, be a turning away from the cause of oppressed and suffering people.” Ecojustice has been defined as, “the condition or principle of being just or equitable with respect to ecological sustainability and protection of the environment, as well as social and economic issues” (Oxford English Dictionary). Although not explicitly mentioned in this definition, at its outset, ecojustice was very much an ethic that viewed environmental health and wholeness as “inseparable from human well-being” (Hessel, 2004, p. xii.).

For example, in 1971, Norman J. Faramelli, an Episcopal minister, wrote:

Environmental quality can be achieved by either expansive applications of pollution control technology, or by a long-range reduction in the production of material goods. In either case, there will be severe repercussions on the poor. The neglect of the poor, and the impact of specific ecology solutions on them, are among the weakest links in the ecology movement. Thus, the relationship of ecological responsibility to economic justice needs to be explored (1971, p. 218).

Faramelli (1971) made it clear that there would be costs to achieving environmental quality and that these costs would not be borne equally by the affluent and the poor. Technological solutions would increase the costs of production, which could be passed on to the consumer through increased prices (Option 1), or costs could be borne by the taxpayer if solutions were funded through government subsidies (Option 2), since reducing corporate profits (Option 3) was not likely. Faramelli explained:

The American dream is rooted in a three-pronged syndrome - an active process of acquisition, consumption, and disposal. The net result of this process is dissatisfaction which we try to solve by repeating the cycle. Hence, an insatiable material appetite makes the wheels of American progress go around (Faramelli, 1971, pp. 225–226).

Environmental activists increasingly understood that surging rates of consumption, in the nation, and indeed the world, were unsustainable. At the same time, the environmental movement was increasingly criticized for being a predominantly White, affluent movement (Faramelli, 1971; See also Ghoche & Udoh, [this volume](#); Betancor et al., [this volume](#)). A growing distinction was also being made between environmentalism, which focused on reducing human impacts to the environment, and environmental justice, which focused on remediating the impacts of pollution and environmental degradation on communities (both human and nonhuman) suffering adverse impacts from human activity (Carder, 2017).

In 1972, *The Club of Rome* founded by Aurelio Peccei in 1968, published *The Limits to Growth* (Meadows et al., 1972). This text among others at the time, such as Ernst F. Schumacher's (1973) *Small is Beautiful: Economics as if people mattered*, and Ezra J. Mishan's *The Cost of Economic Growth*, highlighted the costs of growth (questioning the idea that all economic growth and development are inherently good), critiqued economic models ignoring the environment (so-called externalities), derided useless metrics and measurements (such as GDP, a crude measure of economic activity rather than the actual health or resilience of the economy), and denounced technology worship (the idea that all technology was essentially benign without determining whether it would allow humans to live within biophysical limits) (Caradonna, 2014).

In 1977, the National Academy of Sciences (NRC, 1977, p. viii) released a report, *Energy and Climate*, in which they stated, "The principal conclusion of this study is that the primary limiting factor on energy production from fossil fuels over the next few centuries may turn out to be the climatic effects of the release of carbon dioxide." The report acknowledged that heat, particulates, and especially carbon dioxide (CO₂) from energy production and use had the potential to modify the global climate. In addition the report called for further research on climate, carbon dioxide, the atmosphere-ocean-biosphere system, world population, energy consumption, potential renewable resources, potential impacts of climate change on food and water resources, and the development of better climate models.

2.4 Ecojustice, the Fight for Healthy Communities and Sustainable Development

In 1979, a group of African American homeowners in suburban Houston protested the building of Whispering Pines Sanitary Landfill in their community (Bullard, 1990). The landfill site would be 1500 feet from a local public school and within two miles of six schools. Although the lawsuit, *Bean v. Southern Waste Management*, led by Linda McKeever Bullard, ultimately failed, it was the first case to charge environmental discrimination. In 1982, a case in Warren County, North Carolina drew national coverage. More than 500 arrests of environmentalists and civil rights activists were made during protests of a polychlorinated biphenyl (PCB) landfill

planned for construction in a rural African American community. The protests did not succeed in halting construction.

In 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed (US EPA, 2013a). Superfund sites consist of “uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment” (US EPA, 2013a; See also Bower & Rodriguez, [this volume](#)). CERCLA gave the EPA the authority to identify responsible parties and ensure their participation in the cleanup. Meanwhile in 1981, NASA (National Aeronautics and Space Administration) scientists, James Hansen et al. (1981) published their findings regarding global climate trends. They noted that globally, the “temperature rose by 0.2 °C between the middle 1960’s and 1980, yielding a warming of 0.4 °C in the past century. This temperature increase is consistent with the calculated greenhouse effect due to measured increases of atmospheric carbon dioxide.” Earlier studies had already concluded that the increased CO₂ was primarily from burning fossil fuels (NRC, 1977). The study also established the ways in which climate models and confidence in the findings were improving.

Two studies at this time drew a clear link between race and the siting of hazardous waste landfills. The first, *Solid Waste Sites and the Black Houston Community* (Bullard, 1983), conducted by Dr. Robert Bullard (husband to Linda McKeever Bullard) investigated the location of municipal waste disposal facilities in Houston. Although African Americans only made up 25% of the population of Houston, all five city-owned dumps, 80% of city-owned incinerators, and 75% of privately-owned landfills were located in Black neighborhoods. The second, a 1983 U.S. General Accounting Office study, *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities*, confirmed that three out of four of the commercial hazardous waste landfills in Region 4, which includes eight Southern states, were located in majority African American communities. In addition, the percent of people with income below the poverty level in the four communities ranged from 26% to 42%, and of those, 90–100% were Black.

Meanwhile, in 1986, César E. Chávez started a new boycott with a famous *Wrath of Grapes* speech. In the speech, Chavez said, “The worth of humans is involved here” (Chávez, 1986). He also noted:

We farm workers are closest to food production. We were the first to recognize the serious health hazards of agriculture pesticides to both consumers and ourselves...Our first contracts banned the use of DDT, DDE, Dieldrin on crops, years before the federal government acted. Twenty years later, our contracts still seek to limit the spread of poison in our food and fields (Chávez, 1986).

Chávez (1986) called for an immediate ban on the use of Parathion, Phosdrin, Dinoseb, Methyl Bromide, and Captan in grape production; a testing program for pesticide residues on grapes; free and fair elections for farmworkers to decide whether to organize and negotiate contracts; and good faith bargaining.

A third study of toxic wastes, completed in 1987, *Toxic Wastes and Race in the United States*, by the United Church of Christ (UCC) Commission for Racial Justice, expanded the documentation of unequal and discriminatory siting of toxic waste facilities across the United States. This study concluded that “Race proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities. This represented a consistent national pattern (UCC, p. xii).” Paul Mohai et al. (2009, p. 406) explain, “. . . hundreds of studies conclude that, in general, ethnic minorities, [I]ndigenous persons, people of color, and low-income communities confront a higher burden of environmental exposure from air, water, and soil pollution from industrialization, militarization, and consumer practices.”

In 1987, the report of the Brundtland Commission, *Our Common Future* (WCED, 1987), was released by the United Nations. This report famously defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” It is important to note that up to this point, development focused on three pillars, peace and national security, economic prosperity, and human rights; however, with the addition of the modifier, sustainable, the idea took hold that development must also protect and restore the environment (Salkin et al., 2012). At the same time, the term, sustainable development, was seen as problematic because development generally implied economic growth; however, such growth often happened at the expense of ecological sustainability goals. (See Robinson, 2004).

In 1988, West Harlem Environmental Action (WE-ACT) was founded to address local environmental justice issues, including the construction of the North River Sewage Treatment Plant and a bus depot across from an intermediate school and a large housing development. Planners originally sited the sewage plant near 72nd street, a predominantly white, upper-middle-class neighborhood, but due to technical problems and community resistance, they relocated the site to West Harlem. The plant spanned eight blocks along the Hudson River, from 137th street to 145th street. From the beginning, West Harlem residents dealt with foul odors that were particularly potent during the summer months, itchy eyes, shortness of breath, asthma, and other respiratory conditions. WE-ACT sued the NYC Department of Environmental Protection for operating the plant and in 1993, they won a \$1.1 million settlement. To this day, driving by if the plant is belching remains unpleasant. Bullard (1990) made it clear that NIMBY, “not in my backyard,” often resulted in PIBBY, “put in Black’s backyards.”

Also in 1988, The United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) established the Intergovernmental Panel on Climate Change (IPCC), which published its first assessment report in 1990. This global group joined prominent US scientists, such as NASA scientist James Hansen, to form a working group of several hundred scientists from 25 countries. They concluded that “emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse” and that “Business-as-Usual (Scenario A) emissions. . . [could result in] a rate of increase of global mean temperature during the next century of about 0.3 °C per decade” (IPCC,

1990, p. xii). Although uncertainties were recognized regarding the specific timing, magnitude, and regional patterns of climate change, nevertheless, warming, sea-level rise, and climatic changes were expected. At the same time, Pearce et al. (1989, p. 10) laid out *A Blueprint for a Green Economy* for the United Kingdom in which they noted:

When our demand for resources and environmental services starts to outstrip the planet's capacity to provide them, then the problems we are storing up for ourselves become exceptionally serious...The underlying cause is a way of life which is out of step with the long-term health of the planet. The solution requires us to dig deep into our reserves of human ingenuity: to challenge our own cultural beliefs, economic assumptions, and policy frameworks.

According to the authors, a green economy requires a system of environmental accounting that respects: “the four interdependent ‘securities’ of nature – energy security, water security, food security, and climate security” (p. 22). They explained,

All overlap in complex ways. For example, if we put huge areas of fertile land over for production of biofuels to gain energy security or increase climate security, what will be the effects on food and water security? Failing to understand how these things mesh together ultimately damages us all (p. 22).

Pearce et al. (1989) recognized the inherent tensions regarding what to prioritize among the four interdependent securities—energy, water, food, and climate—and the concomitant desire to foster economic and social development.

2.5 EcoJustice and Indigenous Communities: Shared Concerns

In 1990, the Indigenous Environmental Network (IEN) was formed with the goal of “building the capacity of Indigenous communities and tribal governments to develop mechanisms to protect [their] sacred sites, land, water, air, natural resources, the health of both [their] people and all living things, and to build economically sustainable communities (IEN, 2012).” During this time, as with the above cases, many tribal communities were being targeted for large, toxic, municipal, and hazardous waste dumps or nuclear storage facilities. At the same time, industrial and mineral development on tribal lands was contaminating the soil and water. Indigenous communities began organizing to resist these incursions on tribal lands. Also in 1990, Dr. Robert Bullard published *Dumping in Dixie*, a book that documented the efforts of five grassroots efforts of Black communities in the South to address environmental justice issues including, the siting of municipal landfills and incinerators, a lead smelter, and hazardous waste facilities (See also Cook et al., [this volume](#)).

That same year, Richard Moore, director of the SouthWest Organizing Project, a grassroots advocacy group in Albuquerque, N.M., sent a letter to the Executive Directors of the top ten environmental conservation groups, including the Sierra Club and the National Resources Defense Council (Durlin, 2010). “Signed by 100

cultural, arts, community and religious leaders – all people of color – ...the letter charged the organizations with a history of ‘racist and exclusionary practices,’ a lack of in-house diversity, and an all-around failure to support environmental justice efforts” (Durlin, 2010). The letter caught many of the directors by surprise but was pivotal in helping some groups begin incorporating environmental justice advocacy, such as the Sierra Club.

A year later, delegates from Puerto Rico, Canada, Central, and South America, and the Marshall Islands drafted and adopted 17 Principles of Environmental Justice at the First National People of Color Environmental Leadership Summit in Washington, D.C. (Alston, 2010). Reporting on the summit, Alston (2010, p. 15) noted, “Delegates detailed numerous examples where the unilateral policies, activities, and decision-making practices of environmental organizations have had a negative impact on the social, economic, and cultural survival of communities of color in the United States and around the world.” The principles affirmed the sacredness of Mother Earth, demanded that public policy be based on mutual respect and justice for all peoples, called for ethical and responsible use of land and resources and protection from nuclear testing, toxic/hazardous wastes, and poisons, as well as the right to political, economic, cultural, and environmental self-determination and participation in decision-making. Importantly, the gathering and discussion of ongoing struggles “dispel[led] the myth that people of color are not interested in or active on issues of the environment” (Alston, 2010, p. 15; also see Patterson et al., [this volume](#)).

In 1992, a report from the Environmental Equity Group of the EPA, *Environmental Equity: Reducing Risk for All Communities*, concluded, “The evidence indicates that racial minority and low-income populations are disproportionately exposed to lead, selected air pollutants, hazardous waste facilities, contaminated fish tissue, and agricultural pesticides, in the workplace” (US EPA, 1992). The report defined environmental equity as an examination of the differential risk burden borne by low-income and racial minority communities and how governmental agencies respond. As a result of the recommendations in this report, the office of Environmental Equity was established and later renamed the Office of Environmental Justice in 1994.

Also in 1992, Bunyan Bryant and Paul Mohair, who had established an Environmental Justice program at the University of Michigan, published *Race and the Incidence of Environmental Hazards*, a collection of 16 articles that exposed examples of environmental inequity from consumption of toxic fish from the Detroit River, the fallout from hazardous waste incineration in Louisiana, pesticide exposure among farmworkers, and the effect of uranium production in Navajo communities. The authors pushed back against the idea that laws and environmental regulations equally protected all communities from harmful pollutants.

That same year, the United Nations Conference on Environment and Development, also known as the Earth Summit, was held in Rio de Janeiro in June 1992. As part of this summit, nations endorsed *Agenda 21*. The report of the summit clearly noted:

Poverty and environmental degradation are closely interrelated. While poverty results in certain kinds of environmental stress, the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances (UNCED, 1992).

The recommendations of Agenda 21 were non-binding but they called for nations to act locally and in partnership with other nations to foster more sustainable development (UNCED, 1992). Also in 1992, William E. Rees and Mathis Wackernagel (Rees, 1992; Wackernagel & Rees, 1996) developed the concept of an “ecological footprint,” or how much land is required to support the standard of living of a city’s population. Rees (1992) made it clear that the ecological footprint of a city is several orders of magnitude larger than the geographical footprint.

In 1993, the National Environmental Justice Advisory Council (NEJAC) was established as an advisory committee to the EPA, with representatives from the community, academic institutions, industry, and environmental, Indigenous, and government groups. A central objective of NEJAC was “to improve the environment or public health in communities disproportionately burdened by environmental harms and risks” (US EPA, 2015b). In 1994, President William Clinton issued Executive Order 12898, which required federal agencies to incorporate environmental justice as part of their missions (US EPA, 2013b), and in 1995 the first Interagency Public Meeting on Environmental Justice was held.

Globally, the first United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) took place in April 1995 in Berlin, Germany (United Nations Climate Change, n.d.-a). These meetings would be held annually to review implementation and emissions inventories submitted by the Parties (nations). Later that year, the IPCC Second Assessment Report was issued in December 1995 which affirmed the science of climate change (IPCC, 1995). The report noted that “carbon dioxide remains the most important contributor to anthropogenic forcing of climate change...” (p. xi). In addition, “projections of future global mean temperature change and sea level rise confirm the potential for human activities to alter the Earth’s climate to an extent unprecedented in human history” (p. xi). In 1996, The Kyoto Protocol, adopted in 1997, set emissions targets for six greenhouse, carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulfur hexafluoride (SF₆); however, the United States did not ratify the Kyoto protocol (UNCC, n.d.-b).

While COP6 was being held at the Hague in 2000, an alternative meeting of community activists from around the world gathered for the first Climate Justice Summit (Karlner, 2000). Karlner reported, “Speaker after speaker described the human rights violations and environmental devastation wrought by the fossil fuel industry as well as the industry’s responsibility for the global dynamic of climate change.” Meanwhile, in 2001, Warren County, North Carolina finally secured state and federal funding to remediate the PCB landfill they had protested unsuccessfully back in 1982 (see above), and in 2002, the Second National People of Color Environmental Leadership Summit was held in Washington, D. C. A report following the summit explained, “Summit II should have been a proud display of what had

been accomplished by the original networks, organizations, and leaders of color that had come together for the First Summit;” however, the overall feeling was that as environmental justice became more bureaucratized, and part of the EPA, grassroots voices and concerns were sidelined (Martinez, 2003). Tools and resources for environmental justice, established by President Clinton’s Executive Order 12898, were used to grow the EPA, and fund research and environmental justice programs at universities rather than address local issues. The Indigenous Caucus at the summit highlighted the ways in which the United States continued to violate legal and moral obligations to Indigenous peoples and called for an end to unsustainable energy policies, mining practices, and oil development, as well as greater protection from pollution and destruction of waters, forests, and sacred sites in Indigenous territories (SRIC, 2003).

In 2005, the World Summit on Social Development affirmed three goals of sustainable development: economic development, social development, and environmental protection. The first two goals, economic and social development were not supposed to come at the expense of the third, environmental protection. A report of the 59th session of the General Assembly of the United Nations (UN, 2005, p. 51) noted that both halves of the term, sustainable development, should be given “their due weight.” A year later, former Vice President, Al Gore’s documentary, *An Inconvenient Truth* (Guggenheim, 2006) aired. The documentary explained the science behind global warming, the relentless rise of CO₂ in the atmosphere, the ongoing loss of ice caps on mountains worldwide, such as Kilimanjaro in Africa, the Himalayas in Nepal, and the Alps in Italy, and the retreat of glaciers in Glacier National Park and the Columbia Glacier in Alaska. Gore noted, “There are good people who are in politics, in both parties, who hold [global warming] at arm’s length because if they acknowledge it and recognize it, then the moral imperative to make big changes is inescapable.” The film is credited with waking many people up to the issue, helping young people grow up knowing the facts about global warming and taking action, spurring individuals and businesses to change and become more sustainable, and engaging more people in speaking up about climate change and teaching others (The Climate Reality Project, 2016; see also Pfirman & Winckler, [this volume](#)).

2.6 Coming Up to the Present: Climate and Indigenous Environmental Justice

In 2007, the report, *Toxic Race and Wastes at Twenty: 1987–2007* (Bullard et al., 2007, p. viii) concluded that “people of color are found to be more concentrated around hazardous waste facilities than previously shown.” Key findings from the report were:

- Racial disparities for people of color as a whole exist in nine out of 10 U.S. EPA regions (all except Region 3, the Mid-Atlantic Region).

- Forty of the 44 states (90%) with hazardous waste facilities have disproportionately high percentages of people of color in circular host neighborhoods within three kilometers of the facilities.
- In metropolitan areas, where four of every five hazardous waste facilities are located, people of color percentages in hazardous waste host neighborhoods are significantly greater than those in nonhost areas (57% vs. 33%) (pp. x–xi).

The authors concluded, “[t]he current environmental protection apparatus is ‘broken’ and needs to be ‘fixed.’ The current environmental protection system fails to provide equal protection to people of color and low-income communities” (p. xii).

One of the difficulties with securing legal remedies and environmental justice is that it can be difficult to prove racist intent. For example, Section 2 of the 1965 Voting Rights Act focused on discrimination that “results in the denial or abridgment of the right of any citizen to vote” on the basis of race and ethnicity, and a 1972 amendment included membership in a language minority group (US DOJ, 2021). While voter registration rates surged, problems remained due to gerrymandering, annexation, and other practices that limited Black people from voting (US DOJ, 2017). Also, “the Supreme Court required that any constitutional claim of minority vote dilution must include proof of a racially discriminatory purpose, a requirement that was widely seen as making such claims far more difficult to prove” (US DOJ, 2017). Thus in 1982, “Congress amended Section 2 to provide that a plaintiff could establish a violation of the Section without having to prove discriminatory purpose” (US DOJ, 2017). Nevertheless, since the same story (discrimination), different context (environmental justice issues) was repeated over and over, there was a dire need for a concerted effort to better enforce existing laws, to remediate toxic sites, and address the disparate impacts that continued to affect Black, Latinx, and Indigenous communities.

Also in 2007, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) called for “Free, Prior and Informed Consent (FPIC)” (UN, 2008). Article 19 declares:

States shall consult and cooperate in good faith with the [I]ndigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them. (p. 8)

According to the UN, FPIC allows Indigenous people “to give or withhold consent to a project that may affect them or their territories.” The US was one of four nations, including Canada, Australia, and New Zealand to vote against the declaration and the last of the four nations to change their position (UN, n.d.). President Barack Obama announced support for the declaration in 2010 (US DOS, n.d.). While the announcement affirmed the moral and political force of the UNDRIP, it also stated that the document was not “legally binding,” that it was “aspirational” and would be “achieve[d] within the structure of the U.S. Constitution, laws, and international obligations, while also seeking, where appropriate, to improve our laws and policies” (p. 1).

Progress with sustainability was made in 2009 when the Federal Partnership for Sustainable Communities was formed. The six “livability principles” of this partnership between the US EPA, the Department of Housing and Urban Development, and the Department of Transportation were to: (1) provide more transportation choices; (2) promote equitable affordable housing; (3) enhance economic competitiveness; (4) support existing communities; (5) coordinate and leverage federal policies and investment, and (6) value communities and neighborhoods (US EPA, 2013c). The partnership mobilized funding for sustainability projects across the country, streamlined federal regulations and policies to support sustainable development, and aligned and coordinated agency priorities. On the other hand, the 2009 UN Climate Change Conference was considered disastrous, with no agreements or meaningful plans to reduce greenhouse gases adopted by the attendees (Caradonna, 2014).

In 2010, a *Symposium on the Science of Disproportionate Environmental Health Impacts* explored the factors that contribute to disparate and “adverse health outcomes [such] as elevated blood lead, asthma, preterm births, and morbidity and mortality from cardiovascular diseases” (Nweke et al., 2011, p. S19) for racial and ethnic minority, Indigenous, and low-income populations in the United States. The symposium explored the state of scientific knowledge for seven factors that contribute to disparate health outcomes, including unique exposure pathways, multiple and cumulative environmental burdens, physical infrastructure, diminished capacity to participate in decision-making, vulnerability and susceptibility, proximity to sources of environmental hazards, and chronic psychosocial stress. Methods to assess the factors and incorporate the data into community-based decision-making processes were presented. Importantly, they recognized that collaborative and holistic approaches were needed to address the root causes of environmental justice issues as well as their disparate health impacts. Also in 2010, the Global Alliance for the Rights of Nature (GARN) was formed. The alliance states, “Rather than treating nature as property under the law, the time has come to recognize that natural communities have the right to exist, maintain and regenerate their vital cycles” (GARN, 2021).

The Rio +20 Conference on Sustainable Development in 2012 and its report, *The Future We Want* (UNCSD, 2012), reaffirmed the Rio Principles of 1992, committed to poverty eradication, and urged all Parties to fulfill their pledges to sustainable development goals. The report acknowledged “that climate change is a cross-cutting and persistent crisis,” and emphasized that “combating climate change requires urgent and ambitious action, in accordance with the principles and provisions of the United Nations Framework Convention on Climate Change” (p. 8). The report also committed to a green economy in the context of sustainable development goals. Although the term, green economy, was not defined in the report, the UN has defined it elsewhere as low carbon, resource-efficient, and socially inclusive (Pearce et al., 1989; UNEP, 2011).

In 2014, the EPA launched a mandatory *Introduction to Environmental Justice Online* training course for all agency staff and managers. The course provided an overview of environmental justice and the EPA’s role in fostering healthy

communities. Over 17,000 EPA employees completed the training in the first year (US EPA, 2015a). Also in 2014, the EPA Office of Environmental Justice collaborated with the American Indian Environmental Office to create and issue a document, *EPA Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples* (US EPA, 2014). The report served to “clarify and integrate environmental justice principles in a consistent manner in the Agency’s work with federally recognized tribes and [I]ndigenous peoples” (US EPA, 2014, p. 1). In that same year, *Indian Country Today* reported that an incredibly disproportionate number, 532 out of 1322, of Superfund sites in the US were located on Indian lands (Hansen, 2014).

In 2015, Pope Francis released an encyclical, *Laudato Si, On Care for Our Common Home*, in which he stated,

The continued acceleration of changes affecting humanity and the planet is coupled today with a more intensified pace of life and work which might be called “rapidification”. Although change is part of the working of complex systems, the speed with which human activity has developed contrasts with the naturally slow pace of biological evolution. Moreover, the goals of this rapid and constant change are not necessarily geared to the common good or to integral and sustainable human development (p. 15).

Pope Francis cited an urgent need to address pollution, waste, a “throwaway culture,” lack of access to clean drinking water, loss of biodiversity, a decline in the quality of human life, the breakdown of society, and global inequality while recognizing the climate as a “common good.” Importantly, common goods are those that cannot be had without cooperation, which in the case of local and global climate must happen across social, cultural, and ethnic differences, borders, nations, and regions.

Also in 2015, The American Heart Association issued a report prepared by Echo Hawk Consulting, *Feeding Ourselves: Food Access, Health Disparities, and the Pathways to Healthy Native American Communities*. The report enumerated the challenges Native communities face with health disparities and food insecurity resulting from their forced separation from traditional lands and U.S. Indian policies that have led to inordinately high rates of obesity and diabetes among other health concerns. For example, childhood obesity exceeded 50% in many communities, and 80% of adults aged 20–74 were obese. As a comparison, recent studies in New York City place childhood obesity rates at 22–27% (Columbia University Mailman School of Public Health, n.d.).

The Dakota Access Pipeline (DAPL) project also made the headlines in 2015 (See McKibben, 2016). Originally, the pipeline was routed to cross the Missouri River near Bismarck, North Dakota. Concerns that an oil spill could damage the water supply for the State’s capital prompted a move of the pipeline south of the capital and just north of the Standing the Rock Sioux Reservation. The Standing Rock Sioux Tribe passed a resolution regarding DAPL, which was to be constructed on historically unceded land and under the Lake Oahe reservoir that provides their drinking water (Camp of the Sacred Stones, 2015). The tribe invoked the 1868 Fort Laramie Treaty (US National Archives, n.d.) and cited the harms, including threats to public health and welfare, destruction of valuable cultural resources, and

abrogation of their right to “undisturbed use and occupation” of their lands. The Standing Rock Sioux Tribe cited multiple federal violations in the permitting process (Camp of the Sacred Stones, n.d.). The disproportionate impacts of rerouting the pipeline went against Executive Order 12898. Not designating the Missouri aquifer as a “high-consequence area” went against the Pipeline Safety and Clean Water Acts. Finally, a lesser environmental assessment was conducted instead of an in-depth environmental impact statement, which went against NEPA, and the fact that historical ceremony and burial grounds would be impacted went against Executive Order 13007 on Protection of Sacred Sites. The resolution called on the Army Corps of Engineers (ACE) to reject the permit for the pipeline.

Despite the Standing Rock Sioux Tribe’s resolution, plans moved forward for the pipeline’s construction, and a wide-scale, grassroots movement emerged in response with a camp erected at Standing Rock, youth rallies, petitions, relays, and protests in Washington D.C. (Hersher, 2017). Locally, these protests were met with an increasingly militarized response. In 2016, the EPA issued another report, *Promising Practices for Environmental Justice Methodologies in NEPA Reviews* (US EPA, 2016a), which ironically cited the following:

Meaningful engagement efforts with potentially affected minority populations, low-income populations, and other interested individuals, communities, and organizations are generally most effective and beneficial for agencies and communities when initiated early and conducted (as appropriate) throughout each step of the NEPA process (p. 8).

The Standing Rock Sioux tribe argued they had not had opportunities for free, prior, informed consent to the pipeline project (UN, 2008). Thus, clear contradictions between stated policy intentions and actual implementation of environmental justice guidelines continued to exacerbate instances of environmental injustice.

For example, the EPA publication of an *Environmental Justice 2020 Action Agenda* (US EPA, 2016b) in August 2016 laid out three main goals:

- Deepen environmental justice practice within EPA programs to improve the health and environment of overburdened communities;
- Work with partners to expand positive impact within overburdened communities; and
- Demonstrate progress on significant national environmental justice challenges.

Despite the promise of this document, the incoming Trump administration did not support environmental justice, ecological justice, or sustainability goals. The EPA Environmental Justice timeline (US EPA, 2015a), which had seen a flurry of activity in the years prior, came to a sudden halt in 2016. In January 2017, in one of his first actions as President, Donald J. Trump issued a memorandum for the Army Corps of Engineers to expedite the environmental review of the DAPL project, and 2 weeks later, the easement was granted and construction resumed (Naylor, 2017; Hersher, 2017).

The DAPL case highlights several fundamental differences between mainstream environmental justice or ecojustice and Indigenous environmental justice. One of the main differences hinges on Indigenous beliefs about land and water as sacred,

not to be despoiled, but held in trust and care for present and future generations (Gilio-Whitaker, 2019). Unlike Western conceptualizations that require sacred things to be set apart, as with the National Park System (the majority of which came at the expense of Indian removal) Indigenous perspectives advocate for respect and responsibility toward the natural world and relationships that foster reciprocity between humans and nature, positioning humans as part and parcel of nature, not in dominion over it (Gilio-Whitaker, 2019). A rallying cry for the DAPL struggle was, “Water is life. *Mní Wičóni*” (Weston, 2017), which was literally understood as, water is alive. Indigenous environmental justice also encompasses distributive justice (equal protection), corrective justice (addressing damages), social justice (fairness in meeting basic needs), and procedural justice (meaningful participation in decision-making) (Jarratt-Snider & Nielsen, 2020). Karen Jarratt-Snider and Marianne O. Nielsen (2020) provide three additional aspects that frame Indigenous environmental justice, (1) Native American tribes are governments, not ethnic minorities, with a unique political and legal status; (2) Native peoples have deep connections to traditional homelands that are central to their identities and cultural survival; and (3) Native peoples suffer from the ongoing effects of colonization, including land dispossession, destruction of sacred sites, loss of subsistence rights, and the detrimental effects of environmental contamination including the land and water.

Sadly, DAPL was only the first of many actions during this period that placed people and the environment in harm’s way. The Trump administration also oversaw more than 100 rollbacks of environmental protection rules, including withdrawing from the Paris Climate Agreement in 2017, weakening limits on carbon dioxide emissions from power plants in 2019 and cars and trucks in 2020, as well as removing protections from more than half the nation’s wetlands and removing restrictions on mercury emissions from power plants in 2020 (Popovich et al., 2020). In 2019, the Department of the Interior opened federal land for oil and gas leasing by weakening the Endangered Species Act and the Department of Energy loosened efficiency standards for products (Popovich et al., 2020). In September 2021, Trump officials relocated the Environmental Justice Office from the Office of Enforcement and Compliance Assurance to the Office of Policy, purportedly to improve efficiency; however, critics were concerned that the move would politicize the office (Perls, 2020). The EPA also changed the name of the Office of Sustainable Communities to the Office of Community Revitalization (Perls, 2020).

In January 2021, in one of his first acts as President, Joseph R. Biden wrote a letter to rejoin the Paris Climate Agreement (Biden, 2021). President Biden followed this action with Executive Order 14008 (2021), which lays out a bold vision for addressing both climate change and environmental justice issues:

It is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying union jobs and economic growth, especially

through innovation, commercialization, and deployment of clean energy technologies and infrastructure.

Importantly, Biden notes, “Successfully meeting these challenges will require the Federal Government to pursue such a coordinated approach from planning to implementation, coupled with substantive engagement by stakeholders, including State, local, and Tribal governments.” The timing of these actions was crucial since the sixth IPCC report was issued in August 2021 which noted, “It is unequivocal that human influence has warmed the atmosphere, ocean, and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere have occurred (IPCC, 2021, p. 5).” In November 2021, COP 26 was held in Glasgow which affirmed four pillars of climate action: adaptation, finance, and mitigation, and collaboration and kept the goal of limiting climate change to 1.5 °C within reach (UNFCCC, 2021). The Glasgow Climate Pact was agreed to by 200 countries in attendance and the rulebook for the Paris Climate Agreement was finalized, which includes the norms for establishing carbon markets (UNFCCC, 2021).

While a full history of ecojustice, environmental justice, sustainability, and their intersections with climate justice would take a volume of its own, this select history of key events and ideas in these movements makes clear the need to develop more comprehensive and just approaches to economic, ecological, and social development. Ecojustice emphasizes the role of just participation in decision-making and free, prior, informed consent, as well as repairing the ecological harms and disparate health effects of economic development and pollution on the communities that have been impacted. History shows that these communities are predominantly Black, Latinx, Indigenous, and low-income. Environmental justice focuses on rules, regulations, and laws, but history also shows that litigation can be a slow, incremental approach to ensuring just outcomes and mitigating environmental justice issues. Sustainability brings forward the ideas of ecological conservation, preservation, and restoration as necessary aspects of economic development. Furthermore, sustainability comprises both a process and a goal that communities and nations have to engage in and work towards (NRC, 2011). Increasingly, sustainability acknowledges the need to balance economic growth with planetary limits in mind with respect to energy, sustainable design and green building, urbanization, transportation, higher education and research, business and finance, as well as equality, democracy, social justice, and well-being (Caradonna, 2014). Indigenous framing and values make it clear that we must consider the seventh generation as we plan for the present (Gilio-Whitaker, 2019).

The COP 26 agreements provide signs of hope that, together, we will become more climate-resilient and build towards a more sustainable and just future. Furthermore, they position ecojustice and Indigenous environmental justice as frameworks that have the potential to bring together concerns for social and environmental justice, including ecological sustainability; social and economic justice; inclusive, healthy, and safe communities; enough food; and potable water in ways that affirm the interdependence and relatedness of all people and all kinds of biodiversity.

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