ENVIRONMENTAL JUSTICE: HISTORY AND IMPACTS

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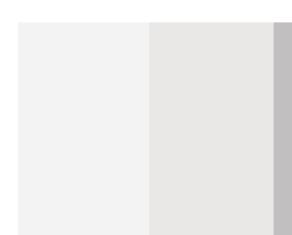


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Introduction

This essay examines the evolution and impact of the environmental justice movement. It begins by tracing its origin and growth, highlighting key milestones, groundbreaking studies and pivotal research efforts which helped launch the movement. The essay presents three distinctive case studies of environmental injustice across the U.S.: Cancer Alley in Louisiana, Love Canal in New York, and Hunter's Point in California. These case studies illustrate the stark realities of environmental injustices experienced by marginalized communities, showcasing the enduring struggles despite notable court victories and federal interventions. The analysis continues by reviewing contemporary initiatives taken to address environmental injustices, emphasizing state and federal policy reform, and the work of grassroots organizations. Finally, the essay concludes by reaffirming the urgency of comprehensive action in addressing environmental injustices.

Origins

The U.S. 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." This is a commonly and legally accepted definition, but it is one of many ways to define a movement that has evolved over decades (EPA, 2024).

Although marginalized groups have protested the environmental exploitation of their land and communities for decades (Office of Legacy Management, n.d.), the environmental justice movement first gained widespread recognition in 1982 (University of Michigan, 2023). In that year in Warren County, North Carolina, an area with a poor, rural, predominantly Black population was chosen to site a hazardous waste landfill along with 6,000 truckloads of soil laced with toxic pollutants, including PCBs (polychlorinated biphenyls) (Office of Legacy Management). In response to the state's decision, residents, environmentalists and civil rights activists organized demonstrations and expressed their concerns over these toxic chemicals leaching into nearby drinking water supplies. Over a six week period of marches and non-violent street protests, more than 500 people were arrested (Atwater, 2022).

While the Warren County demonstrations were not successful in preventing the landfill's construction, they captured national attention and motivated other low-income, minority communities grappling with environmental injustices to take action. The event even sparked the emergence of a new faction within Civil Rights Movements and several leading figures in the environmental justice movement emerged from this struggle. They recognized that the environment presented another area in the pursuit of justice and adopted similar strategies of marches, petitions, alliances, community empowerment, and nonviolent direct actions in their advocacy (Skelton et al., 2023).

In the following years, several studies were conducted that examined the correlation between minority communities and environmental hazards (Perez et al., 2015). In 1993 The U.S. General Accounting Office performed the study, "Siting Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities." In 1987, Reverend Benjamin Chavis, a prominent figure in the Civil Rights Movement, led the United Church of Christ Commission for Racial Justice to publish a report titled "Toxic Wastes and Race in the United States." The authors of both studies concluded that race was the single most important factor in predicting the placement of hazardous waste sites (Perez et al., 2015) – even more powerful than poverty, land values, and home ownership (Bullard, 2001).

In 1983, sociologist, author, and professor Dr. Robert Bullard published a groundbreaking case study entitled "Solid Waste Sites and the Black Houston Community." Through this study he examined waste disposal practices in Houston, Texas. His data revealed that the majority of waste sites, such as landfills and incinerators, were located in predominantly Black neighborhoods. Although only one fourth of Houston's population was Black, 82 percent of the garbage in the city was dumped into these areas. His work led to the publication of his 1990 book Dumping in Dixie: Race, Class and Environmental Quality. The book expands on the major economic, social, and psychological impacts associated with the placement of noxious facilities. After its release, Dr. Bullard was regarded as "The Father of Environmental Justice " (Internet Encyclopedia of Philosophy, n.d.).

Milestones and Growth of the Movement

The environmental justice movement has grown significantly over the past four decades (Farber. 2023). In 1991, more than 1,000 people attended the First National People of Color Environmental Summit in Leadership Washington D.C. sponsored by the United Church of Christ Commission (Pacific Northwest, n.d.). At this event nearly 300 Black, Native, Latino, Pacific Islander, Asian American, and other minority activists shared accounts of the environmental injustices their communities were experiencing. These stories include Black residents pushed out of their neighborhoods because of hazardous pollution levels, farmworkers forced to live in residences constructed on top of chemical waste grounds, Indigenous groups fighting against mining and nuclear testing on their land, and Asian immigrants experiencing respiratory issues due to years of factory work (Rubiano, 2021). After four days of discussion among the attendees, the "Principles of Environmental Justice" were developed. This document includes 17 precepts outlining the fundamental rights and values central to the movement which are still used todav to guide research. activist movements, policy decisions (Pacific and Northwest, n.d.). The summit in 1991 represented an expansion of environmental justice issues to encompass a range of concerns such as transportation, housing, gender issues, and educational inequalities (Perez, et al, 2015).

"Principles of Environmental Justice"

- 1. Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2. Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3. Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 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.
- 5. Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self determination of all peoples.
- 6. Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7. Environmental Justice demands the right to participate as equal partners at every level of decision making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8. Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9. Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

Both federal and state elected officials have taken action to address environmental injustices through programs, legislation, and policy changes. In February 1994, President Bill Clinton signed Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The order mandated every federal agency to integrate environmental justice into its mission and to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States." In response to this executive order, the EPA established the Office of Civil Rights to ensure compliance with the mandate. Additionally, they implemented an administrative review process to identify possible violations and to determine whether to discontinue an agency's EPA funding (Morse, 2008).

"Principles of Environmental Justice" Continued

- 10. Environmental Justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.
- 11. Environmental Justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and selfdetermination.
- 12. Environmental Justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.
- 13. Environmental Justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.
- 14. Environmental Justice opposes the destructive operations of multinational corporations.
- 15. Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.
- 16. Environmental Justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
- 17. Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

Case Studies

Cancer Alley

Environmental justice issues are not only localized to certain regions, instead there are a variety of landscapes across the United States that are affected by environmental justice issues, including urban, suburban, and rural places. "Cancer Alley" is one of the most well-known cases of environmental injustice. The area is an 85-mile stretch of land located in Southeastern Louisiana, along the Mississippi River, between the cities of Baton Rouge and New Orleans.



Figure 1: Cancer Alley Map

Source: Seventh Generation

There are roughly 45,000 residents and in contrast to other areas of the state, Cancer Alley is predominantly populated by communities that are Black, poor, and illiterate (Campisano, 2023). This region is dotted with over 200 industrial facilities including oil refineries, plastics plants, chemical plants, and various other factories that emit significant amounts of hazardous air pollutants (Bruggers, 2023). Due to these emissions, around 50 toxic chemicals, including benzene, formaldehyde, and ethylene oxide, permeate the air there. These emissions have led to an extraordinarily high amount of health problems such as dizziness, headaches and a number of different cancers such as lung and liver cancer. The cancer risk among the population is also almost 50 times the national average (Shamlian, 2019).

State and corporate officials have consistently challenged, and argued against data that reveal that industrial facilities cause health problems among the communities of Cancer Alley (Baurick, 2019). One town along Cancer Alley is named St. Gabriel which is a suburb of Baton Rouge. In the late 1980s, a pharmacist from St. Gabriel started keeping track of residents' pregnancies. Her numbers revealed that one in three local pregnancies ended in a miscarriage. When this data was presented to industry representatives they claimed they were being scapegoated. Like many states, Louisiana has made efforts to track all reported cancer cases. The "tumor registry" does not indicate a clear cancer cluster in the river region of Cancer Alley. State officials have used these statistics as evidence that the industrial plants pose no health risks. However, the tumor registry also does not eliminate the possibility of these clusters. The state's data is collected based on census tracts which are unevenly sized areas with varying emission levels. To protect residents' privacy, certain data for less populated regions, like St. Gabriel, is not published and the exact locations of cases are not disclosed. The EPA has used modeling to estimate the danger posed by industry. In the vicinity of the Denka neoprene plant in St. John Parish, (a town in Cancer Alley) where chloroprene is released, the EPA estimated the levels of cancer causing chemicals. They found that the levels are among the highest in the United States. The EPA also identified similar concerning levels at the St. Charles Parish (a town in Cancer Alley) near the Union Carbide plant which emits ethylene oxide. In response, a member of the chemical association claimed that a 2018 EPA report "dramatically overstated" the danger of ethylene oxide in the area. Denka officials also regularly challenge the "acceptable threshold" for chloroprene set by the EPA, even though the "acceptable threshold" is not legally binding (Baurick, 2019).

Critics argue that air quality and health regulators in Louisiana, such as the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Health (LDH), do a poor job of protecting the population of Cancer Alley (Laughland, 2022). The U.S. EPA has set a range of "acceptable" risk levels for toxic emissions. However, it is up to each state to set their own standards and Louisiana's standards are amongst the lowest in the nation. For instance, the standards for benzene in Louisiana are twice that of Texas and 30 times that of Massachusetts. The EPA has attempted to use civil rights laws to compel local regulators in Louisiana to effectively protect the citizens of Cancer Alley from pollutants. On October 12, 2022, the EPA's Office of Environmental Justice and External Civil Rights (OEJECR) issued a Letter of Concern to the LDEQ and the LDH. This was in response to complaints filed by concerned citizens and environmental activist groups, under Title VI of The Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, or national origin. The letter made strong recommendations to improve procedures for permitting and agree to follow standards of enforcement and regulation recommended by the EPA (Laughland, 2022). Unfortunately, In August of 2023, the EPA abruptly closed the investigation but no clear explanation has been provided for this closure (Puko et al., 2023).

Environmental justice activists have however had success in the courts. The LDEQ issued permits to the Formosa Plastics Group for the construction of a chemical plant in St. James parish. This plant, on a 2,400 acre site with 14 different production facilities, would emit ethylene oxide, benzene and other carcinogenic chemicals in a place already experiencing very high rates of cancer. It would also be situated close to Welcome, a town in which 90% of the population identifies as Black. In February 2020, Rise St. James, Louisiana Bucket Brigade, The Sierra Club, Center For Biological Diversity, Healthy Gulf, Earthworks and No Waste Louisiana petitioned in the 19th Judicial District Court Parish of East Baton Rouge for judicial review of LDEQ's decision to grant permits for the Formosa plant. The court accepted the <u>petition to review</u> and on September 8th, 2022 it ruled in favor of the plaintiffs by vacating all permits for the plant (Petitioners Brief, 2022). In the conclusion to the court's <u>Written Reasons For Judgement</u>, Judge Trudy White wrote: "The Court finds that the errors identified in LDEQ's decision prejudice substantial rights, including the constitutional rights of the Petitioners under Article IX Section 1 of the Louisiana constitution" (White, 2022).

So what is the situation today with environmental justice in Cancer Alley? Victories such as the Formosa Plastics court decision give reason for hope. There is also reason to believe, despite the decision to close the civil rights investigation, that the EPA will continue to pressure LDEQ and LDH to represent the interests of the people and not just the interests of chemical companies. Despite the alarming statistics of the dangers caused by these chemical facilities, companies continue to expand their industrial production in areas along Cancer Alley (Addish, 2021). However, there is a growing awareness nationally and internationally of the environmental injustice that exists in Cancer Alley and there is a robust community of environmental activists engaged in resistance to the status quo (O'Connor 2023).

Love Canal

The Love Canal disaster is a classic case study of environmental injustice in the U.S. (Gill, 2020). It primarily impacted the health of women and working class individuals. The Love Canal site is situated in Niagara Falls, New York and is an area where excavation took place for a never-built canal that was meant to provide affordable hydroelectric power in the early 1900s. The project was abandoned due to the rise of alternating current. It was then partially filled with water and repurposed for recreational use.



Homes sit empty in the Love Canal Area after residents were evacuated. (Source: <u>EPA</u>)

Between 1942 and 1953, the Hooker Electrochemical Company (now Occidental Chemical Corporation, or OXY) with government sanction, began to utilize the abandoned Love Canal as a chemical waste dump and disposed of more than 21,000 tons of hazardous chemicals. Leakage from the drums resulted in the contamination of both the soil and groundwater (EPA, n.d.). Hooker filled the waste landfill with clay and subsequently sold the land to the Niagara Falls School Board. The company attempted to distance itself from potential future liability by including a cautionary notice in the property deed (Kleiman, 2017). Possibly due to a lack of awareness regarding the potential hazards linked to Hooker's chemical disposals, the Board of Education built an elementary school on the site. By 1955, the school was finished, and further development occurred. Around 800 privately owned single-family residences and 240 affordable apartments were constructed around the canal. The population was made up of working-class individuals with an average yearly income ranging from \$10,000 to \$25,000 (CHEJ, n.d.). Most residents were unaware of the toxic history of their neighborhood. Concerns regarding odors and residues were first reported in the area during the 1960s. These reports intensified in the 1970s due to the rising water levels, which brought contaminated groundwater to the surface (EPA, n.d.) Residents began reporting a myriad of health issues, including epilepsy, asthma, migraines, and nephrosis (Kleiman, 2017). The toxic waste uniquely impacted women living in Love Canal, resulting in significantly higher rates of miscarriages, birth defects, and reproductive health issues. Specifically, the rate of miscarriages increased by 300%. Children were born with three ears, hearing impairments, cleft palates, three sets of teeth, undeveloped lungs, webbed feet, etc. (Hecht, 2020). The New York Department of Environmental Conservation carried out examinations in 1976, followed by subsequent investigations conducted by the EPA in 1977. After testing the drinking water and the backyard soil of homes immediately adjacent to the canal, they found the presence of 248 distinct chemicals and 82 chemical compounds (Gill, 2020).

A woman named Lois Gibbs became a central figure in bringing attention to the environmental and health crisis at Love Canal. With no prior experience in community activism, she united with fellow residents, predominantly women and mothers to raise awareness about the issue and form the Love Canal Homeowners Association (The Goldman Environmental Prize, n.d.). These activists had a series of disheartening encounters with indifferent New York State (NYS) officials, who were slow in their response but quick to disregard the women as a group of hysterical housewives (Kleiman, 2017). The women's determination and advocacy efforts however, gained national attention and in 1978, President Jimmy Carter declared a federal health emergency in the Love Canal area. This declaration facilitated the evacuation and relocation of over 800 families from the contaminated site (Kleiman, 2017). The incident also led to the passing of significant environmental legislation, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1980, which established the Superfund Program. Superfund aids in cleaning up hazardous sites and it grants the EPA authority to assess, identify responsible parties, and address sites with no clear liable party. Nearly 1,200 of the identified National Priorities List (NPL) sites have been cleaned up since Superfund's launch, but about 1,350 still await remediation as of 2018 (Gill, 2020).

After the Love Canal incident, Lois Gibbs discovered that Love Canal was not an isolated event and she founded the Citizens Clearinghouse for Hazardous Waste, later known as the Center for Health, Environment, and Justice (CHEJ). This organization collaborates with over 300 local groups in rural or low-income areas, aiming to shape policies that improve residents' health affected by toxic hazards. Love Canal was the first location to undergo cleanup efforts sanctioned by the Superfund legislation. The cleanup involved relocating most waste to one part of the canal due to its large volume and the reluctance to incinerate. The site's infrastructure, including a drainage system and monitoring wells, underwent EPA reviews from 2003 to 2013, leading to its removal from the National Priorities List (NPL) in 2004. The demolition of the school and houses near the canal was part of the remediation effort. Houses bought during the 1980 government buyout were handed over to the Love Canal Area Revitalization Agency (LCARA), responsible for maintaining the neighborhood (Gill, 2020).

The 21,000 tons of chemicals remained buried at the site but by 1988, New York state declared a section of the area safe to live in. This prompted the renovation of approximately 260 homes, streets, and infrastructure under the new name of Black Creek Village. Beginning in 1990, homes were offered for sale at prices 20% below market rates, with financing from LCARA. Most houses were purchased and inhabited portraying a semblance of normalcy in the working-class community. Though many residents were aware of Love Canal's toxic history, they trusted government assurances regarding the safety of soil and air samples. Over time, the community blended in with other neighborhoods, and newer residents were unaware of the area's toxic past.

Occasional health issues emerged, but few linked them to toxic contamination. In 2011, a sewer repair unearthed contaminants near Black Creek Village, sparking controversy. Investigations concluded that it was an isolated incident missed during the initial cleanup, yet cleanup activities caused further concerns. High-pressure hoses spread toxic materials onto residential properties. Subsequently, a lawsuit was filed by over 550 residents in 2013, citing health and economic harm from exposure to Love Canal wastes. The area, now resembling a grassy park, is fenced off, with signs stating "private property" rather than "danger." Litigation remains ongoing, and despite health concerns, some residents continue to live in their homes (Gill, 2020).

Hunters Point

Another compelling instance of environmental injustice is in The Hunters Point Naval shipyard on the southeastern shore of San Francisco. The origin of the Shipyard dates back to 1867, when the first dry dock opened on the peninsula. In 1941, the U.S. Navy bought the shipyard and it was used as a warship repair facility during World War II. By 1945, more than 18,000 workers, a third of them Black, worked at the Hunters Point Shipyard. Housing and navy barracks were also built near the facility for the workers (Civil Grand Jury, 2022). By the end of the war, white residents started to move to the suburbs for quality affordable housing and better employment opportunities. Black residents and their families however were unable to move to safer, less polluted parts of the city due to racist housing policies (Civil Grand Jury, 2022). From 1946 to 1969, the Naval Radiological Safety Laboratory (NRSL) used Hunters Point shipyard as a site for decontaminating military equipment and ships exposed to atomic bomb testing (Dutch et al., 2018). They developed a technique of decontaminating ships by sandblasting them in dry dock and many of the radioactive vessels ended up passing through the Shipyard (Civil Grand Jury, 2022). In 1952, the city built its biggest wastewater treatment plant in Bayview-Hunters Point. At the Hunters Point Shipyard, utilization and disposal of chemicals, radioluminescent paint, and various industrial toxins led to chemical and radiological pollution. Decades of industrial and military operations resulted in extensive contamination of the land, air, and water in Hunters Point. Hazardous substances like asbestos, heavy metals, PCBs, and radioactive elements were left behind, polluting the soil and groundwater (Chen n.d.).

Activists in Bayview-Hunters Point aimed to address the extensive history of pollution. In 1975, local residents protested against the expansion of the Southeast Treatment Plant, expressing concerns that noxious smells would exacerbate the poor living conditions in the area. Throughout the 1980s, environmental regulations on the disposal and handling of hazardous waste represented attempts by the federal government to address the enduring harmful effects of industrial activities (Chen, n.d.).

In 1989 the area was declared a Superfund site by the EPA, meaning it posed a risk to human health and the environment and was eligible for federal funding to clean it up. For decades, state and local agencies have made failed attempts to monitor and clean up the severe pollution of Hunters Point. In 2002, the Navy paid hundreds of millions of dollars to the private engineering firm Tetra Tech to clean up the nuclear waste. After declaring the clean-up a success in 2016, it was discovered that employees of Tetra-tech purposely falsified results to hide the real toxicity of soil samples from the shipyard. After an EPA examination was performed, it was found that almost half of the data was faked (Aguilar, 2018). The investigation of these events is ongoing and continues to this day (Van Derbeken, 2023).

Today, the majority of the population of Hunters Point are racial minorities and in 2014, 31% of the population was Black and 34% were Asian (Chen, n.d.). The health effects of the radioactive pollution are catastrophic for nearby communities. A survey from the city's health department found that 86% of babies born in the Bayview developed severe asthma before starting kindergarten (Shao, 2021). On average, residents of the Hunters Point Bayview neighborhood have a life expectancy 14 years shorter than the residents of wealthier neighborhoods in San Francisco (Rafiki, n.d.). In 2019, a study was conducted in which residents of the area volunteered to have their urine examined for toxic contaminants. After performing tests on more than 100 residents, many were found to have high levels of toxic chemicals in their bodies, such as lead, mercury, and arsenic (Sumchai, 2020).



Activists in the Bayview Hunters Point community protest in 2022 to push for further cleanup and awareness of the ongoing pollution in their neighborhood. (Source: <u>48hills</u>)

Unfortunately, the environmental history of injustice continues. The effects of climate change have and will inevitably exacerbate the environmental hazards of Hunters Point. Additionally, they will negatively impact transportation infrastructure and utilities. A physical alteration that has occurred is the change in sea levels. Over the past one hundred years, the sea level along the California coast has risen by a total of almost eight inches. This is important to consider because it shows how fast the impacts of climate change are happening. One inch may not seem like a lot, but to put this impact into perspective, every inch of sea level rise covers around 50 to 100 inches (i.e., about 4 to 8 feet) of shoreline (Green Action, n.d.). A report from the San Francisco Civil Ground Jury found that the City, the Navy, and the regulators overseeing the cleanup are failing to take into account how the impact of rising sea levels brought about by climate change may impact the groundwater levels and cause buried toxic substances to resurface and impact human health (Civil Grand Jury, 2022).

The history of Hunters Point highlights a pattern of environmental harm and ongoing challenges faced by the community. Decades of industrial and military operations have resulted in significant pollution, impacting the health of residents, especially those from minority backgrounds. Despite efforts to address these issues, the lingering effects continue, compounded by the added risks of climate change. Concerns regarding rising sea levels and their potential to worsen existing contamination underscore the importance of a comprehensive approach to safeguard the well-being of the community in the face of environmental hazards.

Contemporary Initiatives and Future Directions

On January 27, 2021, the Biden-Harris administration established the <u>Justice40 Initiative</u>. The initiative directs resources and investments to communities that have been disproportionately impacted by climate change. The executive order is named "Justice 40" because it requires at least 40% of the benefits of certain federal investments to be directly allocated to disadvantaged communities. This 40% rule applies to federal programs that make investments in seven categories: "climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and in the development of critical clean water and wastewater infrastructure" (The White House, n.d.).

There are also many examples of recent state policies in the United States that focus on environmental justice. One example is the Massachusetts bill S.9 implemented in 2021 (River Network, n.d.). This new law states that an environmental impact report is mandatory for projects that affect air quality if the project site is located within a 5 mile radius of an environmental justice community (defined as a neighborhood that meets one or more of the specific criteria outlined in the bill) (National Conference of State Legislatures, 2023).

The additional environmental justice requirements of the law include:

- Establishing definitions for environmental benefits, environmental burdens, environmental justice populations, environmental justice principles, and neighborhoods.
- Requiring state environmental impact reports to be completed for any project located within one mile of an environmental justice community. (For projects with air impacts, reports are required if within five miles of an environmental justice community.)
- Requiring all state environmental impact reports to examine both environmental and public health impacts and include opportunities for "meaningful public involvement".
- Establishing an environmental justice council to advise and provide recommendations to the secretary of energy and environmental affairs on relevant policies and standards to achieve the environmental justice principles.

(Source: <u>NEEP Fact Sheet</u>, 2021 <u>https://neep.org/massachusetts-s9-fact-sheet</u>).

Prior to the passage of this new law, environmental justice policy in Massachusetts was managed through executive orders, which creates change and discontinuity whenever there is a change in the governor's office. With environmental justice, and associated definitions and processes, established in law there is opportunity for greater stability and consistency (Wassner, 2021). The Massachusetts definition of what constitutes an environmental justice community is based on race, income, and English language-proficiency criteria applied across census blocks to generate a mapping tool (Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), 2022).

The law also defines an "Environmental justice population" to be "a neighborhood that meets one or more of the following criteria: (i) the annual median household income is not more than 65 percent of the statewide annual median household income; (ii) minorities comprise 40 percent or more of the population; (iii) 25 percent or more of households lack English language proficiency; or (iv) minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income..." (Mass. EOEEA, 2022).

As of 2021, ten states had established environmental justice legislation in some form, with an additional 13 states having pending legislation at that time (Figure 2). A directory of state level actions and policies related to environmental justice is available online from the Vermont Law School, Environmental Justice Clinic.

Figure 2. U.S. States and the Status of Environmental Justice Legislation

None Pending Enacted MT ND ID SD WY СΤ IA NE NJ NV DE IN UT CO KS MO KY NC TΝ **OK** AR SC AL. LA

State Environmental Justice Legislation

Source: <u>Bloomberg Law</u>

There are various organizations that have created strategies for addressing specific environmental justice issues. One organization is Pacoima Beautiful (PB) in California, which became a 50l(c)(3) community-based environmental justice non-profit in February 2000. Their work uses the support of a policy board which consists of residents and professional advisors. In the fiscal years 2005 and 2006 PB had a staff of 12-employees and a budget of \$690,000. The non-profit has three programs and serves the Los Angeles community of roughly 98,000 people residing in an area of approximately 3 square miles. These programs include:

- Community Inspectors Program: assists residents in finding the sources of environmental health risks and implementing methods to mitigate risks.
- Youth Environmentalists Program: helps youth so that they have the chance to engage in activities that enhance the environment in Pacoima
- Safer Homes for a Healthy Community Program: enables residents to develop healthy homes for their families as a way to stop environmentally related health issues like lead poisoning or asthma.

Differences between Environmental Justice (EJ) and Not In My Backyard (NIMBY) movements

EJ focuses on providing equal access and a clean environment to everyone, regardless of race, income or ethnicity. NIMBY, short for "Not in my backvard" describes the situation in which residents of an area object to a new development project (such as affordable housing or a hazardous waste facility) in their neighborhood, due to concerns about its potential impact like chemical pollution, or property values (Homeless Hub, 2021). While both movements involve community concerns over environmental impacts, EJ is rooted in social justice and addresses broader environmental inequalities whereas NIMBY is typically a localized reaction to a specific development (ChatGpt). It's important to note that the two movements are not mutually exclusive, and there can be overlap between them. For example, a community may oppose a development project in their area because they believe it will have a negative impact on the environment and the health of residents, which would be an EJ concern. However, they may also be concerned about the impact on property values, which would be a NIMBY concern 3. (Source: BingChat AI)

Some scholars and environmental justice activists also argue that Nimbyism can cause environmental injustice. Nimbyism , they say, forces the siting of harmful facilities away from affluent communities into less affluent and minority neighborhoods that cannot afford the legal resources to fight them (see sidebar for further discussion).

Conclusion

The environmental justice movement emerged from decades of grassroots resistance, gaining recognition after the pivotal Warren County demonstrations in 1982. It shed light on racial disparities in hazardous waste siting, setting the stage for a national movement. Milestones like the 1991 National People of Color Environmental Leadership Summit solidified principles guiding the movement. Case studies such as Cancer Alley, Love Canal, and Hunters Point shed light on the enduring struggles faced by communities dealing with environmental hazards. These instances show how historical decisions, corporate actions, and regulatory failures have contributed to health disparities and environmental risks, disproportionately impacting vulnerable populations. While progress has been made, challenges persist. Despite legal actions, community activism, and government initiatives, issues such as falsified cleanup efforts, inadequate regulatory oversight, and the continued expansion of industrial facilities in environmentally burdened areas remain prevalent. Contemporary initiatives like the Justice40 Initiative under the Biden-Harris administration and state-level policies, such as the Massachusetts bill S.9, signify a growing recognition of the need to address environmental justice issues systematically. Numerous environmental justice organizations continue to play a crucial role in empowering communities, and implementing programs that help to mitigate environmental risks. It is evident that comprehensive efforts from policymakers, communities, regulatory bodies, and activists are essential to achieving environmental equity and ensuring that all individuals have the right to a safe and healthy environment, regardless of their race, gender, socioeconomic status, or geographic location.

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