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Climate Change and Incarcerated Populations: Confronting Environmental and Climate Injustices Behind Bars

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CLIMATE CHANGE AND INCARCERATED POPULATIONS: CONFRONTING ENVIRONMENTAL AND CLIMATE INJUSTICES BEHIND BARS

Emily C. Gribble^{*} & David N. Pellow^{**}

Introduction	341
I. Environmental Justice, Climate Justice, and Carceral Institutions	342
II. Flooding and Fossil Fuels	346
III. Increased Morbidity and Mortality Related to	
Extreme Temperatures	352
A. Texas's Wallace Pack Unit Prison	352
B. Maricopa County Jail	354
C. Perryville Prison	355
D. Louisiana State Penitentiary at Angola	356
IV. Incarcerated Workforces	358
A. California's Inmate Firefighters	359
B. Vienna Correctional Center	362
C. BP Oil Spill	
D. Hurricane Cleanup in Florida	
V. Prison Litigation and Legal Obstacles	366
Conclusion	

INTRODUCTION

The United States incarcerates more people than any other country in the world.¹ In fact, the population of the United States accounts for less than

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^{1.} See Peter Wagner & Wanda Bertram, "What Percent of the U.S. Is Incarcerated?" (And Other Ways to Measure Mass Incarceration), PRISON POL'Y INITIATIVE (Jan. 16,

5% of the global population but holds 20% of the world's prisoners.² As of 2020, more than 2.3 million people were incarcerated in the United States and of that number, more than 555,000 people have not been convicted of any crime.³ While serving time in U.S. carceral facilities comes with a host of inherent risks and challenges, new research reveals that the threat of anthropogenic climate change presents an additional set of hazards.

Recent reports from legal advocates, journalists, and scholars underscore previously unexamined relationships between climate change and the U.S. carceral system. This Essay explores a number of these intersections. The next Part considers the body of research on environmental justice, climate justice, and their relationship to carceral institutions, followed by a consideration of the ways in which climate impacts harm incarcerated persons directly. The Essay specifically examines how climate changeinfluenced weather events produce flooding and extreme temperatures in jails and prisons, placing the health and wellbeing of prisoners at great risk. The health-impairing effects of fossil fuel extraction are considered, followed by a focus on the brutal conditions incarcerated firefighters and natural disaster workers face while confronting year-round wildfire season as well as in the aftermath of climate-linked industrial accidents and weather events. This Essay centers the experiences, voices, and resistance efforts by incarcerated persons and their allies across these cases with careful consideration of how legal remedies are both deployed and foreclosed. Finally, this Essay also explores the limitations and challenges that prisoners face with respect to seeking litigation and offers recommendations for how prisoners can achieve improvements in their conditions of confinement with an eye toward building support for environmental and climate justice. Climate change's deleterious impacts on incarcerated populations reveal productive points of intersection between movements for environmental justice, climate justice, and prisoner rights.

I. ENVIRONMENTAL JUSTICE, CLIMATE JUSTICE, AND CARCERAL INSTITUTIONS

Since the early 1970s, scholars have demonstrated that communities of color, Indigenous peoples, immigrants, and low wealth or income populations are disproportionately impacted by a spectrum of

^{2020),} https://www.prisonpolicy.org/blog/2020/01/16/percent-incarcerated/ [https://perma.cc/Z54B-NVUE].

^{2.} See id.

^{3.} See id.; see also Wendy Sawyer & Peter Wagner, Mass Incarceration: The Whole Pie 2020, PRISON POL'Y INITIATIVE (Mar. 24, 2020), https://www.prisonpolicy.org/reports/pie2020.html [https://perma.cc/JB3P-RVXD].

environmental risks and threats.⁴ These hazards include air pollution associated with power plants and highways, garbage and hazardous waste dumps, oil pipelines, and other locally unwanted land uses that are more likely to be concentrated in these communities.⁵ The recognition of these uneven risks gave rise to the multidisciplinary field of environmental justice studies and the grassroots environmental justice movement.⁶ The exceedingly common phenomenon of disproportionate risk under which people of color live in the United States and over the world is referred to as environmental racism, while the goal of the myriad grassroots movements that have arisen to document and combat this scourge has been termed environmental justice — a vision of a society in which ecological sustainability and social justice prevail.⁷ Advocates have enjoyed traction in the public sphere by recasting environmental threats like civil rights, human rights, and racial justice concerns, revealing how activists have extended, deepened, and created intersections among the frameworks associated with earlier movements. This movement has successfully prevented polluting industrial facilities from being built and also shut down existing ones, while activists have pushed elected officials to integrate environmental justice concerns into policymaking at the highest levels of the federal government.⁸ However, the environmental justice movement has yet to achieve lasting and significant *legal* victories in the United States largely because the courts have been resistant to arguments and claims concerning disparate impact — a similar dynamic can be seen in pay equity and death penalty suits, among others. And yet, as argued below, there are emerging pathways for continuing this effort via prisoner-led efforts.

Climate injustice is the term we use to describe the uneven and unjust impacts of human-caused climate change on many of the world's

^{4.} See, e.g., ROBERT D. BULLARD, DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY xvi (3d ed. 2018) (describing the 1970s and disproportionate impact on communities of color).

^{5.} See id. at xv (describing the plants, hazardous waste dumps, and other forms of pollution).

^{6.} See id.; see also JULIE SZE, ENVIRONMENTAL JUSTICE IN A MOMENT OF DANGER (2020); Elizabeth Hoover, Environmental Reproductive Justice: Intersections in an American Indian Community Impacted by Environmental Contamination, 4 ENV'T SOCIO. 8, 9 (2018); Dorceta E. Taylor, The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses, 43 AM. BEHAV. SCIENTIST 508, 509–11 (2000); Kyle Powys Whyte, The Dakota Access Pipeline, Environmental Injustice, and U.S. Colonialism, 19 RED INK 154, 156–57 (2017).

^{7.} See Paul Mohai, David Pellow & J. Timmons Roberts, *Environmental Justice*, 34 ANN. REV. ENV'T & RES. 405, 408–10 (2009).

^{8.} See, e.g., Exec. Order No. 12,898, 59 Fed. Reg. 7,629 (Feb. 16, 1994), reprinted as amended in 42 U.S.C. § 4321 (2012).

vulnerable populations. Specifically, low-income, BIPOC,⁹ and global South communities are hit hardest by the effects of climate change, and yet, they contribute the least to creating the problem since these communities produce far lower levels of carbon emissions.¹⁰ In recent years, we have witnessed the emergence of the climate justice movement, which might best be described as a hybrid or convergence of the mainstream environmental and environmental justice movements that are bringing a particularly intense focus to the global climate crisis.¹¹ Many communities from which climate justice movement leaders hail are inundated with a host of environmental and climate threats. One example is coal-fired power plants — one of the leading contributors to global anthropogenic climate change.¹² While climate change may be an abstraction for some, many activists make the case that it is anything but abstract by publicly articulating their experiences of living with and suffering from climate disruption — what climate change scholar Michael Mendez calls climate embodiment.¹³ They are also increasingly narrating discourses of a postcapitalist future with a vision of society marked by more transformative and radical politics by comparison with the traditional or mainstream environmentalism of the previous generation.¹⁴ As with the field of environmental justice studies, scholars of climate justice have documented the widespread and starkly disproportionate impact of climate disruption on marginalized communities — BIPOC, low wealth, and global South, to name a few — and have chronicled the evolution of the climate justice movement across multiple geographic and political scales, from local neighborhood mobilizations to the global coordination of movement actors at United Nations conferences.15

^{9.} Black, Indigenous, and People of Color.

^{10.} See generally MICHAEL MENDEZ, CLIMATE CHANGE FROM THE STREETS: HOW CONFLICT AND COLLABORATION STRENGTHEN THE ENVIRONMENTAL JUSTICE MOVEMENT (2020); J. TIMMONS ROBERTS & BRADLEY C. PARKS, A CLIMATE OF INJUSTICE: GLOBAL INEQUALITY, NORTH-SOUTH POLITICS, AND CLIMATE POLICY (2006). See also Malini Ranganathan & Eve Bratman, From Urban Resilience to Abolitionist Climate Justice in Washington, D.C., 53 ANTIPODE 115, 122 (2019).

^{11.} See generally KUM-KUM BHAVNANI ET AL., CLIMATE FUTURES: RE-IMAGINING GLOBAL CLIMATE JUSTICE (2019).

^{12.} See Sources of Greenhouse Gas Emissions, EPA (July 27, 2021), https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions [https://perma.cc/3SEY-GRDF].

^{13.} See MENDEZ, supra note 10.

^{14.} See generally NAOMI KLEIN, THIS CHANGES EVERYTHING: CAPITALISM VS. THE CLIMATE (2014). See also Laura Pulido, Geographies of Race and Ethnicity II: Environmental Racism, Racial Capitalism and State-Sanctioned Violence, 41 PROGRESS IN HUM. GEOGRAPHY 524, 530 (2017).

^{15.} See generally DAVID CIPLET ET AL., POWER IN A WARMING WORLD: THE NEW GLOBAL POLITICS OF CLIMATE CHANGE AND THE REMAKING OF ENVIRONMENTAL INEQUALITY

In the last several years, a small number of scholars have begun to study the relationship of environmental and climate risks on carceral institutions in the United States. This research has found, for example, that prisons, jails, juvenile detention facilities, and immigrant detention centers are often sites where water contamination, hazardous waste exposure, and food insecurity are commonplace and that these carceral institutions are themselves sources of environmental risk.¹⁶ This body of scholarship has also begun to uncover trends that suggest that the effects of climate change are being disproportionately visited upon prisoners and other incarcerated persons via extreme heat and cold, flooding, wildfire exposure, and the fact that mass incarceration is significantly associated with greenhouse gas emissions in the United States.¹⁷ As with the literature on environmental justice and climate justice, the scholarship on prison ecology is unfolding alongside — and, in some cases, through close collaboration with — the development of grassroots movements.¹⁸ For example, activist groups like Mothers of East L.A., Critical Resistance, the Silicon Valley Toxics Coalition, and the Campaign to Fight Toxic Prisons first documented the relationship between prisons, jails, and environmental conditions - in some cases, as early as the 1990s - and scholars are now catching up to this realization.¹⁹

There are several significant reasons for a focus on environmental and climate justice in prisons. First, the enduring environmental justice reframing of "the environment" as those spaces where we "live, work, play, learn, and pray" is particularly true in the prison system since, unlike 'free

[https://perma.cc/DQ9F-4ALF]; see also Braz & Gilmore, supra note 16, at 98-100.

^{13 (2015).} See also ROBERTS & PARKS, supra note 10; Ranganathan & Bratman, supra note 10, at 121; David Schlosberg & Lisette B. Collins, From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice, 5 WIRES CLIMATE CHANGE 359, 359–60 (2014).

^{16.} See Rose Braz & Craig Gilmore, Joining Forces: Prisons and Environmental Justice in Recent California Organizing, 96 RADICAL HIST. REV. 95, 95–98 (2006); see also DAVID N. PELLOW, WHAT IS CRITICAL ENVIRONMENTAL JUSTICE (2017); Tara Opsal & Stephanie A. Malin, Prisons as LULUs: Understanding the Parallels between Prison Proliferation and Environmental Injustices, 90 SOCIO. INQUIRY 579, 586–90 (2019); Robert Todd Perdue, Linking Environmental and Criminal Injustice: The Mining to Prison Pipeline in Central Appalachia, 11 ENV'T JUST. 177, 180–81 (2018).

^{17.} See Julius Alexander McGee, Patrick Trent Greiner & Carl Appleton, Locked into Emissions: How Mass Incarceration Contributes to Climate Change, 8 Soc. CURRENTS 326, 333–34 (2021).

^{18.} See David N. Pellow, Political Prisoners and Environmental Justice, 29 CAPITALISM NATURE SOCIALISM 1, 1 (2018).

^{19.} See Louis Sahagun, The Mothers of East L.A. Transform Themselves and Their Neighborhood, L.A. TIMES (Aug. 13, 1989, 12:00 AM), https://www.latimes.com/archives/la-xpm-1989-08-13-me-816-story.html

persons,' prisoners do all of those things in a single place where they have little choice to do otherwise. As such, we might revise and expand that definition of the environment so that it reads, where we "live, work, play, learn, pray... and do time."²⁰ The question of space, race, and environment is much starker given the immobilizing effects of prison insofar as inmates' mobility is almost entirely determined by prison authorities.²¹ This is particularly relevant considering the longstanding debate in environmental justice (EJ) studies about the relative freedom of choice that people of color have to move in and out of contaminated neighborhoods. Scholars like Professor Paul Mohai and Professor Robin Saha (two leading EJ researchers) have presented strong evidence that the "minority move-in" hypothesis (the claim that environmental racism is largely the result of people of color moving into already polluted neighborhoods in order to access cheap housing) is misguided since the vast majority of cases of environmental racism occur when polluting facilities follow residents of color, not the other way around.²² In the case of the prison system, this is essentially a moot point since prisoners have virtually no say in where they serve time and are, therefore, entirely at the mercy of the courts and prison authorities. Finally, it should be noted that some of the most inspiring leaders in today's environmental and climate justice movements are incarcerated persons who are articulating a much more transformative framing of the problems we are confronting and more radical solutions, including the integration of an abolitionist orientation into these grassroots efforts.23

II. FLOODING AND FOSSIL FUELS

Climate scientists have reached a consensus that, as the Earth warms as a result of human activity, the planet's atmosphere is increasingly holding greater amounts of moisture, which contributes to more frequent and

^{20.} David Pellow & Jasmine Vazin, *The Intersection of Race, Immigration Status, and Environmental Justice*, 11 SUSTAINABILITY 1, 4 (2019) (emphasis added).

^{21.} See FED. BUREAU OF PRISONS, U.S. DEP'T OF JUST., CPD 5100.08, CHANGE NOTICE, INMATE SECURITY DESIGNATION AND CUSTODY 1 (2019) ("The Bureau of Prisons shall designate the place of the prisoner's imprisonment").

^{22.} See Paul Mohai & Robin Saha, Which Came First, People or Pollution? Assessing the Disparate Siting and Post-siting Demographic Change Hypotheses of Environmental Injustice, 10 ENV'T RSCH. LETTERS 1, 15 (2015).

^{23.} See generally Pellow, supra note 18. Some currently and formerly incarcerated EJ leaders include Marius Mason, Leonard Peltier, Mumia Abu-Jamal, Keith "Malik" Washington, Bryant Arroyo, and Timothy Young. See generally id.

intense rainstorms, as well as massive flooding.²⁴ This new reality is challenging enough for people who have the freedom to come and go from their residences as they please, but it is particularly concerning for imprisoned persons.

When Hurricane Harvey hit Texas in August of 2017, imprisoned persons at the Federal Correctional Institution in Beaumont were placed on lockdown and were not evacuated despite the heavy rainstorm.²⁵ The storm had dropped 35 inches of rain and caused massive flooding, creating a toxic stew of contaminants from nearby petrochemical industries, including a large sulfur dioxide leak from an Exxon refinery.²⁶ Some 1,300 pounds of sulfur dioxide were released by the plant due to damage from Harvey, leading inmates and the surrounding public exposed to the inhalation of the toxic fumes.²⁷ The federal correctional facility was placed on lockdown with no evacuation plan in place while the prison flooded with water.²⁸ Prisoners faced the risk of drowning, exposure to toxic wastewater replete with hydrocarbons, and extremely dangerous temperatures.²⁹ When the thermostat neared 100 degrees, prison officials cut off the water system because it was visibly contaminated, and many prisoners experienced dehydration as a result.³⁰ One inmate sent a family member an email that stated: "We are living in deplorable conditions in our cells with two bottles of water ga [sic] day no toilet our shit is gaggin us and we have no 347 entilation [sic] but we are alive barely."³¹ Prisoners reported that those with heat-related illnesses were left untreated, although the Federal Bureau of Prisons officials claimed that prisoners have "24-

^{24.} See generally U.S. GLOB. CHANGE RSCH. PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II: IMPACTS, RISKS, AND ADAPTIONS IN THE UNITED STATES (2018), https://nca2018.globalchange.gov/ [https://perma.cc/G5UR-PPGE].

^{25.} See Gabrielle Banks, Texas Prisons Take Hit from Harvey, Complaints of Water, Sewage Problems Surface, CHRON. (Sept. 4, 2017, 8:08 PM), https://www.chron.com/news/houston-texas/article/Texas-prisons-take-hit-from-Harveycomplaints-of-12172438.php [https://perma.cc/7748-N6VL].

^{26.} See Steven Mufson, Exxon Mobile Refineries Are Damaged in Hurricane Harvey, Releasing Hazardous Pollutants, WASH. POST (Aug. 29, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/08/29/exxonmobilrefineries-damaged-in-hurricane-harvey-releasing-hazardous-pollutants/ [https://perma.cc/D4BZ-AWBL].

^{27.} See id.

^{28.} See Candice Bernd, 'No Toilet, No Ventilation': Prisoners Describe Horrific Conditions in Harvey's Flood Zone, ALTERNET (Sept. 11, 2017), https://www.alternet.org/2017/09/hurricane-harvey-underscores-need-environmental-justice-prisoners/ [https://perma.cc/V5D2-EMJQ].

^{29.} See id.

^{30.} See id.

^{31.} *Id*.

hour access to medical coverage in Beaumont."³² This was a climate disruption-driven extreme weather event in a region that is ground zero for climate justice struggles.

During that same extreme weather event, incarcerated persons at Texas's Connally Unit — just under 300 miles west of Beaumont — were facing similar concerns.³³ Sherrard Williams is serving a life sentence at that facility and recounted his experience when Harvey hit. He described "the experience of the power being shut off," which was followed a short while later by a water cutoff.³⁴ This development made the situation even more challenging because the toilets no longer functioned, which meant that prisoners like Williams were wary of eating or drinking anything "because it was going to make me use the restroom."³⁵ After the storm, Williams reflected on the anxieties of facing such an event behind bars versus in the free world: "I don't want to be locked up I'd rather look Harvey in the eye."³⁶

In the fall of 2017, Hurricane Maria hit Puerto Rico extremely hard, flooding many parts of the island and placing people's lives and livelihoods at risk.³⁷ There are few places more terrifying to be during a climate-change-driven extreme weather event than a flooding prison. Puerto Rico's 29 territorial and federal prisons are clustered around eight complexes across the island, most along the coast and near high-risk flood zones, thus putting imprisoned persons in harm's way and creating another layer of environmental and climate injustice that intersects with carceral systems.³⁸ As in other parts of the United States, there continue to be concerns that imprisoned persons are not always evacuated when flooding impacts these sites.³⁹ More broadly, Puerto Rico is a site of climate injustice because nearly half of its population is under the poverty line and a high proportion of residents live in areas vulnerable to natural hazards.⁴⁰ Furthermore,

^{32.} Id.

^{33.} See Daniel A. Gross, *Weathering a Hurricane in Prison*, NEW YORKER (Sept. 8, 2017), https://www.newyorker.com/sections/news/weathering-a-hurricane-in-prison [https://perma.cc/ET7T-2H3U].

^{34.} Id.

^{35.} Id.

^{36.} Id.

^{37.} See Yolanda Martinez & Anna Flagg, *Puerto Rico Puts Its Prisons near Flood Zones*, MARSHALL PROJECT (Sept. 21, 2017, 5:31 PM), https://www. themarshallproject.org/2017/09/21/puerto-rico-puts-its-prisons-in-flood-zones [https://perma.cc/7HXW-KTNY].

^{38.} *See id*.

^{39.} See id.

^{40.} Phil McKenna, *What's Happening in Puerto Rico Is Environmental Injustice*, SLATE (Sept. 27, 2017, 3:55 PM), https://slate.com/technology/2017/09/puerto-rico-is-

Puerto Rico "has more flood-prone areas than ever before because [it has] altered natural drainage of storm water, particularly in [its] cities."⁴¹ Residents on the island have organized mutual aid support to provide basic necessities in the absence of sustained efforts by the government of Puerto Rico and in the context of continued neglect by the U.S. federal government.⁴²

State Correctional Institution (SCI) Fayette is a prison in Pennsylvania that was built in 2003 and is an example of environmental and climate injustice for multiple reasons. First, the prison itself was built on a former coal strip mine site — strip mining is a process that lays waste to the landscape.⁴³ Second, there is also a sewage treatment plant on site, which treats the sewage from both the prison and the nearby town of LaBelle, which means the imprisoned population there is forced to live next to a sewage waste site.⁴⁴ Finally, adjacent to the prison is a massive refuse site, holding approximately 40 million tons of coal ash.⁴⁵ This is a global-scale concern because the coal ash is sourced from coal-fired power plants — the leading contributor to global climate change.⁴⁶ This is a micro-level concern as well because the coal ash dust has deeply impacted the health and the bodily wellbeing of prisoners, corrections officers, and nearby townspeople.⁴⁷ Richard Moseley served time at SCI Fayette for several years and told us that when he arrived at the prison he was "in great health. I was an athlete and I'm a non-smoker."⁴⁸ However, within a week of his

experiencing-a-crisis-created-by-environmental-injustice.html [https://perma.cc/R82L-A5ZN].

^{41.} See LISAMARIE CARRUBA ET AL., WORKING GROUP 3 REPORT: CLIMATE CHANGE AND PUERTO RICO'S SOCIETY AND ECONOMY, *in* PUERTO RICO COASTAL ADAPTATION PROJECT 280 (Kasey R. Jacobs & Ernesto L. Diaz eds., 2013).

^{42.} See generally CATALINA M. DE ONÍS, ENERGY ISLANDS: METAPHORS OF POWER, EXTRACTIVISM, AND JUSTICE IN PUERTO RICO (2021).

^{43.} See Andrew P. Schissler, *Coal Mining, Design and Methods of, in* 1 ENCYCLOPEDIA OF ENERGY 488–89 (Cutler Cleveland ed., 2004).

^{44.} See Cindi Lash, Fayette Residents Hope Prison Holds Promise of Better Future, PITT. POST-GAZETTE (July 31, 2003), https://old.postgazette.com/localnews/20030731prisonr5.asp [https://perma.cc/2G82-9VYS].

^{45.} See David Reutter, Report Highlights Health Concerns Related to Coal Ash Dump at Pennsylvania Prison, PRISON LEGAL NEWS (Apr. 9, 2015), https://www.prisonlegalnews.org/news/2015/apr/9/report-highlights-health-concernsrelated-coal-ash-dump-pennsylvania-prison/ [https://perma.cc/BV84-PATK].

^{46.} See generally ENV'T AM. RSCH. & POL'Y CTR., AMERICA'S BIGGEST POLLUTERS: CARBON DIOXIDE EMISSIONS FROM POWER PLANTS IN 2007 (2009), https://environmentamerica.org/sites/environment/files/reports/EA_web_biggestpolluters.pd f [https://perma.cc/D423-SSVG].

^{47.} See generally ABOLITIONIST L. CTR., NO ESCAPE: EXPOSURE TO TOXIC COAL WASTE AT STATE CORRECTIONAL INSTITUTION FAYETTE (2014), https://abolitionistlawcenter.org/wp-content/uploads/2014/09/no-escape-3-3mb.pdf [https://perma.cc/C28X-WTXV].

^{48.} See Interview with Richard Moseley (July 17, 2017) (on file with author).

arrival, he experienced significant health impairment, as "my nose started bleeding, I had breathing problems, and I got really sick and had other respiratory problems."⁴⁹ As he recalled:

I had no idea about coal ash, but I got so sick that I kept a letter on me that I would have officials mail to my family in case I died.... My health has improved since I left SCI Fayette. I'm almost totally back to my original health.⁵⁰

Therefore, we see the micro and the macro scales of climate change intersecting, as Mr. Moseley's body was temporarily ravaged by the same substance that is the leading contributor to global climate change.⁵¹ Historically, this area was the traditional land and hunting grounds of Indigenous nations, including the Shawnee and the Iroquois Federation.⁵² The Indian title to the land was extinguished by the Treaty of Fort Stanwix in 1768, which paved the way for continued European expansion and invasion of Native territory.⁵³ Hence, this site is a place where settler colonialism and the afterlives of Native conquest have been followed by continued state violence against marginalized populations, as well as the land, air, and water and flora and fauna in what we might call *multispecies environmental and climate injustice*.⁵⁴

The Karnes County Civil Detention Center is an immigrant prison in Texas located in what has been described as the "drilling epicenter" of the Eagle Ford Shale, a 30-county region where 20 saltwater disposal wells pump fracked wastewater back into the ground.⁵⁵ The region was also rocked by several well blowouts, local evacuations, and where the majority of the residents interviewed for the study reported major environmental health problems.⁵⁶ Karnes County is the single largest oil-producing county in Texas, and immigrant prisoners report a foul taste and smell in the water at the prison, which is due to an oil spill, and additionally the tap

52. See generally WILLIAM J. CAMPBELL, SPECULATORS IN EMPIRE: IROQUOIA AND THE 1768 TREATY OF FORT STANWIX (Univ. of Okla. Press, 2015).

^{49.} See id.

^{50.} See id.

^{51.} See id.; see also ENV'T AM. RSCH. & POL'Y CTR., supra note 46.

^{53.} See generally id.

^{54.} See generally Danielle Celermajer et al., *Multispecies Justice: Theories, Challenges,* and a Research Agenda for Environmental Politics, 30 ENV'T POL. 119, 119–40 (2021).

^{55.} See Candice Bernd, US Is Locking Immigrants in Toxic Detention Centers, EARTH ISLAND J. (July 31, 2017), https://www.earthisland.org/journal/index.php/articles/entry/US_locking_immigrants_toxic_detention_centers/ [https://perma.cc/MJ4K-3SSU].

^{56.} See Earthworks, Hazards in the Air: Relating Reported Illnesses to Air Pollutants Detected Near Oil and Gas Operations in and around Karnes County, Texas 5, 8, 11, 16 (2017).

water is heavily chlorinated.⁵⁷ The Karnes prison is run by a for-profit corporation — the GEO Group — and has been the site of a prisoner-led hunger strike, launched to resist the conditions of their confinement and to draw attention to the caging of immigrant families.⁵⁸ Karnes County is in the midst of an oil and gas boom facilitated by innovations in hydraulic fracturing.⁵⁹ Fracking involves injecting massive volumes of water and toxic chemicals into underground shale formations to access previously unreachable deposits of natural gas or petroleum and is associated with a range of environmental and public health harms.⁶⁰ There are more than 2,000 wells siphoning fossil fuels from the ground in the area,⁶¹ using a cocktail of chemicals that are associated with health problems like brain damage, cancer, and respiratory disorders.⁶² The Karnes County Residential Center is within 100 feet of many gas flares and pumpjack oil wells, which emit toxic fumes.⁶³ Priscilla Villa is an activist and organizer with the NGO Earthworks, which seeks to address and reduce the hazards from coal, oil, and gas extraction.⁶⁴ She noted that, unlike free residents on the other side of the prison walls, "[t]he prisoners have no choice but to inhale the toxic fumes coming from these sites."65 Scientists have documented the fact that environmental toxicants from fracking are deeply harmful to human health, and even more so for young children and expectant mothers, producing neurological development disorders.⁶⁶

^{57.} See id. at 9; see also Bernd, supra note 55.

^{58.} Southwest Workers' Union in Solidarity with the Mothers at Karnes, END FAM. DET. (Apr. 7, 2015), https://endfamilydetention.com/southwest-workers-union-in-solidarity-with-the-mothers-at-karnes/ [https://perma.cc/733D-H4KC].

^{59.} See EARTHWORKS, supra note 56, at 9.

^{60.} See Theo Colborn et al., *Natural Gas Operations from a Public Health Perspective*, 17 HUM. & ECOLOGICAL RISK ASSESSMENT 1039, 1039–40 (2011).

^{61.} See id.

^{62.} See OCCUPATIONAL SAFETY & HEALTH ADMIN., U.S. DEP'T OF LAB., HYDROGEN SULFIDE (2005), https://www.osha.gov/OshDoc/data_Hurricane_Facts/ hydrogen_sulfide_fact.pdf [https://perma.cc/BAA7-XGY4]. See generally Lisa M. Mckenzie et al., Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources, 424 SCI. TOTAL ENV'T 79 (2012).

^{63.} See Jeremy Deaton & Owen Agnew, Immigrant Detention Center Stifled by Pollution, NEXUS MEDIA NEWS (Sept. 7, 2018), https://nexusmedianews.com/texasimmigrant-detention-center-marred-by-pollution-video-bc936076a97/ [https://perma.cc/7TAL-PXBD].

^{64.} See Priscilla Villa, TRUTH OUT, https://truthout.org/authors/priscilla-villa/ [HTTPS://PERMA.CC/94CQ-DLU4] (last visited Oct. 23, 2021); see also EARTHWORKS MISSION, https://earthworks.org/about/our-mission/ [https://perma.cc/4NQB-GR4C] (last visited Oct. 23, 2021).

^{65.} See Deaton & Agnew, supra note 63.

^{66.} See id.; see also Colborn et al., supra note 60, at 1039.

The Southwest Workers' Union is a Texas-based community organization that organizes grassroots social change movements at the intersections of immigration, race, gender, citizenship, labor, and environmental justice.⁶⁷ The organization issued a statement of solidarity for the hunger strikers, which read in part: "Southwest Workers' Union (SWU) stands in solidarity with the 78 mujeres, and mothers at Karnes County Residential Center in Texas SWU views the denial of basic human necessities such as safe housing and fresh water and air as acts of violence against womyn and children."68 The SWU statement points to the ways in which the Karnes facility reveals the intersections of nativism, patriarchy, racism, and environmental injustice because it is located on land that is at the epicenter of hydraulic fracturing, which has been documented as an environmental and public health hazard and contributor to climate change.⁶⁹ The SWU serve as allies in support of the prison EJ movement - which is, of course, inseparable from the immigrant justice movement in this case — and denounce the violence of racial capitalism as well.

The cases presented here reflect the myriad entanglements of fossil fuel extraction with the violence of incarceration, which includes the harmful impacts of flooding, coal waste, and hydraulic fracturing on the health of imprisoned human communities and on the health of the climate. These cases also underscore the ubiquity of prisoner resistance to these forms of injustice.

III. INCREASED MORBIDITY AND MORTALITY RELATED TO EXTREME TEMPERATURES

A. Texas's Wallace Pack Unit Prison

Climate scientists agree that there is overwhelming evidence that climate change is contributing to planetary warming of the atmosphere on a global scale, as well as to extreme weather events across a variety of locales.⁷⁰ The state of Texas is one such location, and the consequences have been

^{67.} See About Us, SW. WORKERS UNION, https://www.swunion.org/about-us [https://perma.cc/2NXW-UESG] (last visited Nov. 16, 2021).

^{68.} Southwest Workers' Union in Solidarity with the Mothers at Karnes, supra note 58.

^{69.} See Joseph Stromberg, Radioactive Wastewater from Fracking Is Found in a Pennsylvania Stream, SMITHSONIAN MAG. (Oct. 2, 2013), https://www.smithsonianmag.com/science-nature/radioactive-wastewater-from-fracking-is-found-in-a-pennsylvania-stream-351641/ [https://perma.cc/4JGN-QMSQ]; see also Stephen Leahy, Fracking Boom Tied to Methane Spike in Earth's Atmosphere, NAT'L GEOGRAPHIC (Aug. 15, 2019), https://www.nationalgeographic.com/environment/article/fracking-boom-tied-to-methane-spike-in-earths-atmosphere [https://perma.cc/WG76-YWMJ].

^{70.} See generally NAOMI ORESKES, WHY TRUST SCIENCE? (2021).

deadly. Extreme heat has killed at least 23 prisoners in Texas since 1998.⁷¹ Almost 75% of Texas prisons do not have air conditioning throughout the housing areas.⁷² The extreme heat in Texas prisons is believed to be exacerbated by what scientists term anthropogenic climate change, or the broad human impacts on the Earth's climate.

Imprisoned persons at Texas's Wallace Pack Unit prison in Navasota joined a class action lawsuit several years ago to challenge this problem.⁷³ The Pack Unit is primarily made up of prisoners who are disabled, elderly, or have medical conditions, so when the lawsuit was initially filed, the plaintiffs — seven prisoners — alleged that the excessive heat violated their constitutional rights, the Americans with Disabilities Act, and the Rehabilitation Act.⁷⁴ The attorneys representing the prisoners were Jeff Edwards and Scott Medlock with Edwards Law, along with the Texas Civil Rights Project.⁷⁵ In June 2016, the district court granted initial class certification in the Pack Unit case, which was subsequently affirmed by the Fifth Circuit.⁷⁶ In July 2017, U.S. District Court Judge Keith P. Ellison granted an emergency injunction to lower the temperatures at the Pack Unit.⁷⁷ Ellison was surprised that the Texas Department of Criminal Justice (TDCJ) had no policy for taking action during a heat wave and ordered the prison to create a policy to keep the housing at a heat index of 88 degrees Fahrenheit or less, and provide inmates with uncontaminated drinking water.⁷⁸ At the time, the prison's drinking water contained around two to four times the maximum amount of arsenic permitted by the U.S. Environmental Protection Agency.⁷⁹ Nonetheless, roughly 1,000 Texas prisoners from various facilities located in surrounding flood zones were transferred to Wallace Pack in 2017, despite that class-action lawsuit and

^{71.} See Cole v. Collier, No. 4:14-CV-1698, 2017 WL 2178526, at *2 (S.D. Tex. May 16, 2017); see also Gross, supra note 33.

^{72.} See Jolie McCullough, Texas Officials Say It Would Cost \$1 Billion to Cool Prisons — But They've Grossly Overestimated AC Costs Before, TEX. TRIB. (Mar. 21, 2019, 2:00 PM), https://www.texastribune.org/2019/03/21/texas-prisons-air-conditioning-1-billionestimate/ [https://perma.cc/D2CT-HUJ5].

^{73.} See Cole v. Livingston, No. 4:14-CV-1698, 2016 U.S. Dist. LEXIS 77435, at *1 (S.D. Tex. Jan. 22, 2016).

^{74.} See id.

^{75.} See id.

^{76.} See Yates v. Collier, 868 F.3d 354, 358 (5th Cir. 2017); see also Matthew Clarke & Christopher Zoukis, Litigation Heats up over Extreme Temperatures in Prisons, Jails, PRISON LEGAL NEWS (June 29, 2018), https://www.prisonlegalnews.org /news/2018/jun/29/litigation-heats-over-extreme-temperatures-prisons-jails/ [https://perma.cc/8PX5-VKDC].

^{77.} See Clarke & Zoukis, supra note 76.

^{78.} See id.

^{79.} See id.

the judge's ruling that the prison was dangerously hot for vulnerable inmates with medical conditions.⁸⁰ During court hearings, prisoners testified that they often experienced heat-related sicknesses like weakness, inability to breathe well, dizziness, and nausea.⁸¹ Despite this, TDCJ continued to claim that they had sufficiently mitigated the impacts of the heat, yet Judge Ellison rejected this claim arguing that the prison officials were "completely indifferent" to the prisoners' plight.⁸² As part of the settlement, TDCJ announced in February 2018 that they would be installing air conditioning and "maintain[ing] indoor heat indices at or below 88 degrees Fahrenheit between April 15 and October 15 each year" throughout the housing unit.⁸³

B. Maricopa County Jail

In 1993, America's "toughest Sheriff," Joe Arpaio, opened up an outdoor jail in the state of Arizona's Maricopa County.⁸⁴ For years, Arpaio made news headlines for rounding up undocumented Latinx persons in the county and subjecting them to extraordinarily harsh conditions in the Maricopa County Jail's "tent city" where on some days, they suffered from 130-degree Fahrenheit outdoor temperatures.⁸⁵ The tent city jail was, for many observers and human rights advocates, a brutal reflection of the U.S. war on immigrants and on people of color, and the fact that the tents were army surplus materials from the Korean War seemed to reinforce this view.⁸⁶ Compounding the situation, there were reports that prisoners lacked sufficient access to water, earning the Sheriff the moniker the "King of Cruel" from human rights advocates and accolades from elected officials and media pundits who embraced nativist policies.⁸⁷ In 2009, as roughly 200 Latino men were being marched in shackles and chains toward the tent city jail, many of them chanted "Hitler! Hitler!" in a protest directed at Arpaio, who himself had earlier referred to the jail as a "concentration

^{80.} See Bernd, supra note 28.

^{81.} See Collier, 868 F.3d at 364; see also Clarke & Zoukis, supra note 76.

^{82.} See Clarke & Zoukis, supra note 76.

^{83.} See id.

^{84.} Valeria Fernández, Arizona's 'Concentration Camp': Why Was Tent City Kept Open for 24 Years, GUARDIAN (Aug. 21, 2017, 2:15 PM), https://www.theguardian.com/cities/2017/aug/21/arizona-phoenix-concentration-camp-tentcity-jail-joe-arpaio-immigration [https://perma.cc/V32Q-4EYQ].

^{85.} See id.

^{86.} See id.

^{87.} See Sadhbh Walshe, Opinion, Joe Arpaio, Maricopa County's King of Cruel, GUARDIAN (June 27, 2012, 5:04 PM), https://www.theguardian.com/commentisfree/2012/jun/27/joe-arpaio-maricopa-county-king-cruel [https://perma.cc/AS67-YNTG].

camp."⁸⁸ There were outcries from many other quarters, including Amnesty International and the U.S. Justice Department, who accused Arpaio of racial profiling and denying prisoners basic human rights.⁸⁹

Francisco Chairez spent time in Arpaio's tent city for a conviction related to a vehicular accident he caused. In an article he wrote for the *Washington Post*, he recalled:

During the sweltering summer, the temperature could reach 115 or 120 degrees. I was in the tents when we hit 120. It was impossible to stay cool in the oppressive heat. Everyone would strip down to their underwear. There was no cold water, only water from vending machines; and eventually, the machines would run out. People would faint; some had heatstroke. That summer, ambulances came about three times. One man died in his bed. But the winter was even worse. During the winter, there were no heaters. Most jackets and heavily insulated pants weren't allowed; they don't want you to be comfortable. When the temperatures dropped, we were forced to come up with makeshift ways to keep ourselves warm. The showers were kept scalding hot during both summer and winter. We hated to shower, but we would fill our empty water bottles up with the nearly boiling water and put the bottles between our blankets when it was freezing outside. We also would save the plastic bags we found when we cleaned up the jail yard and wrap our feet with them, tucking hot water bottles inside to keep our feet warm while we slept.⁹⁰

Therefore, the combination of climate change-driven extreme weather events and indifference on the part of prison and jail authorities frequently produces hazardous conditions for incarcerated persons.

C. Perryville Prison

On May 19, 2009, at the Perryville Prison in Goodyear, Arizona, Marcia Powell collapsed and later died after being left in an unshaded outdoor chain-linked cage for four hours under the blazing summer sun as temperatures reached up to 107 degrees.⁹¹ Powell had first- and second-degree burns and blisters all over her and a body temperature of 108

^{88.} See Fernández, supra note 84.

^{89.} See id.

^{90.} See Francisco Chairez, *The Year I Spent in Joe Arpaio's Tent Jail Was Hell. He Should Never Walk Free.*, WASH. POST (Aug. 26, 2017), https://www.washingtonpost.com/news/posteverything/wp/2017/08/26/the-year-i-spent-in-joe-arpaios-tent-jail-was-hell-he-should-never-walk-free/ [https://perma.cc/T4L9-EUWD].

^{91.} See Gary Hunter, Arizona Prisoner, Abandoned in Outdoor Cage, Bakes to Death, PRISON LEGAL NEWS (Feb. 15, 2010), https://www.prisonlegalnews.org/news/ 2010/feb/15/arizona-prisoner-abandoned-in-outdoor-cage-bakes-to-death/ [https://perma.cc/48P2-KPNY].

degrees.⁹² She was awaiting transfer to another cell but was reportedly mocked and ignored by guards when she repeatedly asked for something to drink, was denied access to a bathroom, and, upon her death, her body was covered in excrement as a result of her soiling herself.⁹³ Powell was living with a mental illness that officials were treating with more than one psychotropic drug, which increased her sensitivity to sunlight, heat, and lack of water — all the more reason that the prison staff should have been more attentive to her pleas for help.⁹⁴ Donna Hamm works for the advocacy group Middle Ground Prison Reform.⁹⁵ She was outraged that, aside from some disciplinary measures taken against them, no prison staff was prosecuted for this incident: "It's just beyond comprehension It means they've gotten away with the most colossal example of brutality I have seen against a female prisoner in the history of the Arizona Department of Corrections."⁹⁶

Many observers have concluded that the state's usage of unshaded outdoor cages is inhumane.⁹⁷ The state has a policy limiting outside confinement to a maximum of two hours, which was clearly violated in the Powell case.⁹⁸ As a result of this incident, outdoor cages are still in use but have been altered to provide shade, water stations, and benches.⁹⁹ This case reflects a number of layers of injustice, including: the violence of caging a person outdoors in the direct sun on a hot day; subjecting a prisoner to extreme heat and dehydration during a climate change-driven weather event; and the fact that Powell's "crime" was her participation in sex work — an informal economy that governments around the world have criminalized with disproportionate and discriminatory impacts on women of color, low-income persons, and LGBTQ individuals.¹⁰⁰

D. Louisiana State Penitentiary at Angola

In 2013, three inmates on death row at Louisiana State Penitentiary in Angola, Louisiana sued the prison under the Eighth Amendment for

^{92.} See id.

^{93.} See id.; see also Stephen Lemons, Marcia Powell's Death Unaverged: County Attorney Passes on Prosecuting Prison Staff, PHX. NEW TIMES (Sept. 1, 2010, 8:09 AM), https://www.phoenixnewtimes.com/news/marcia-powells-death-unaverged-county-attorney-passes-on-prosecuting-prison-staff-6499269 [https://perma.cc/6VMA-CP35].

^{94.} See Lemons, supra note 93.

^{95.} See id.

^{96.} Id.

^{97.} See Hunter, supra note 91.

^{98.} See id. Powell was left in an unprotected, unshaded cage outdoors for four hours. Id. 99. Id.

^{100.} See Moses Moon, Symposium Introduction: Sex Workers' Rights, Advocacy, and Organizing, 52 COLUM. H.R. L. REV. 1062 (2021).

discrimination on the basis of disability.¹⁰¹ The plaintiffs, Elzie Ball, Nathaniel Code, and James Magee, claimed that the prison officials were "subjecting them to excessive heat, acting with deliberate indifference to their health and safety, and discriminating against them on the basis of their disabilities."102 The plaintiffs sought injunctive relief, including a court order requiring defendants to reduce and maintain the heat index on death row at or below 88 degrees Fahrenheit.¹⁰³ The district court ordered the independent collection of temperature, humidity, and heat-index data for the three-week period immediately before trial.¹⁰⁴ The Louisiana State Penitentiary at Angola had a heat index inside death row as high as 195 degrees in 2011 and 172 degrees in 2012.¹⁰⁵ Data collected throughout the 21 days leading up to the trial showed a heat index above 104 degrees Fahrenheit.¹⁰⁶ These temperatures are known as the Extreme Danger Zone and, according to the court documents, the data collected "unequivocally established that inmates housed in each of the death row tiers are consistently, and for long periods of time, subjected to high temperatures and heat indices in the [National Weather Service]'s 'caution,' 'extreme caution,' and 'danger' zones."¹⁰⁷ Aged 35 to 60, the plaintiffs all suffered from hypertension and other chronic illnesses like diabetes, hepatitis, depression, high cholesterol, or obesity, and were all taking medications that increased their risk of heat-related illness.¹⁰⁸ Sweating, headaches, swelling of the joints, nausea, dizziness, disorientation, and difficulty breathing were just a few of the heat-related conditions that the plaintiffs endured regularly.¹⁰⁹ At the bench trial, the court rejected the claims of discrimination but found that the plaintiffs had been subjected to cruel and unusual punishment.¹¹⁰ In order to make a claim that conditions of confinement violate the Constitution, two elements must be established.¹¹¹ First, a plaintiff must show that the conditions, "alone or in

^{101.} See Ball v. LeBlanc, 988 F. Supp. 2d 639, 642 (M.D. La. 2013).

^{102.} See id.

^{103.} See id. at 643.

^{104.} See id. at 643-44.

^{105.} Press Release, The Promise of Just. Initiative, Lawsuit Filed Against Louisiana Department of Public Safety and Corrections Over Civil Rights and Constitutional Abuses; Summer Heat in Louisiana Creates Unsafe and Unlivable Conditions (Aug. 1, 2013), https://www.birdmarella.com/wp-content/uploads/2013/06/Angola-Heat-Press-Release.pdf [https://perma.cc/4LBE-JK44].

^{106.} See Ball, 988 F. Supp. 2d at 653.

^{107.} Id. at 659.

^{108.} See Daniel W. E. Holt, Heat in US Prisons & Jails: Corrections & the Challenge of Climate Change 1, 44 (2015).

^{109.} See id.

^{110.} See id. at 43.

^{111.} See id. at 36.

combination,"¹¹² create a "substantial risk of serious harm,"¹¹³ even if no harm has yet occurred.¹¹⁴ Second, a plaintiff must show that officials were "subjectively aware of the risk" and acted with "deliberate indifference."¹¹⁵ In *Ball v. Leblanc*, a case concerning the Louisiana State Penitentiary in Angola, the court ruled that the conditions on death row constituted substantial risk of serious harm and found that the defendants had acted with deliberate indifference.¹¹⁶ The court concluded that the risk imposed by the extreme heat "could be inferred from its obviousness as well as from circumstantial evidence presented at trial."¹¹⁷ The court granted the injunctive relief to the death row inmates and directed prison officials to create a plan "to reduce and maintain the heat index in the Angola death row tiers at or below 88 degrees Fahrenheit."¹¹⁸ Thus, even under dire conditions such as this, some incarcerated persons have been able to challenge prison authorities and successfully improve the basic conditions of their confinement.

While some elected officials continue to deny the fact of climate change, there is no question that this phenomenon is real and represents an ongoing threat to the health and wellbeing of far too many incarcerated persons facing extreme heat in U.S. prisons. In each of the cases presented here, the problem of climate-driven extreme weather events was brought to light as a result of the actions taken by prisoners to draw attention to this deadly reality.

IV. INCARCERATED WORKFORCES

Natural and technological disasters related to climate change are becoming more frequent and intense around the globe.¹¹⁹ Wildfires, oil spills, floods, and other extreme weather events and technological failures associated with the fossil fuel industry reveal the multilayered socioecological violence of capitalism and its attendant extractive economies. Incarcerated persons are frequently called on to do the most

^{112.} See Rhodes v. Chapman, 452 U.S. 337, 347 (1981).

^{113.} See Farmer v. Brennan, 511 U.S. 825, 834 (1994).

^{114.} See Helling v. McKinney, 509 U.S. 25, 33 (1993).

^{115.} See Farmer, 511 U.S. at 829.

^{116. 988} F. Supp. 2d 639, 642 (M.D. La. 2013).

^{117.} See HOLT, supra note 108, at 45.

^{118.} See Ball, 988 F. Supp. at 689.

^{119.} See Nathanial Gronewold, *More Frequent, Severe Climate-Fueled Disasters Exacerbate Humanitarian Crises*, SCI. AM. (Nov. 18, 2020), https://www.scientificamerican.com/article/more-frequent-severe-climate-fueled-disasters-exacerbate-humanitarian-crises/ [https://perma.cc/AU2E-X7TD].

difficult work when these calamities strike.¹²⁰ Prisoners are used as labor in disaster response and recovery activities in many U.S. states, such as California, Florida, Illinois, and Louisiana.¹²¹ In one study, 64% of the 47 states with publicly available emergency management plans identified incarcerated labor as a key resource in these efforts.¹²² This includes a range of tasks, from cleaning up debris to serving meals during mass displacement events, to earthquake and hazardous material spills and much more.¹²³ There is also a confusing and contradictory set of framings that state emergency management agencies use in their planning documents to describe inmate workers during such events, including defining them as labor sources, as potential security threats to the public, and as vulnerable populations.¹²⁴ This range of framings can cause confusion for the public and place the health and wellbeing of incarcerated workers at risk since it can contribute to the withholding of key resources that imprisoned laborers need to protect themselves while on the job. The most salient observation is that incarcerated persons constitute a marginalized population, and this raises serious questions about their ability to provide full consent and to enjoy basic health and safety protections on the job, particularly when the work is risky.¹²⁵

A. California's Inmate Firefighters

Imprisoned people are being pushed into the increasingly dangerous practice of fire fighting in an age of rapid and violent climate change. Some 4,000 persons are actively involved in this program in the state of California — including at least 250 women — which means that around one-third of the firefighters in California are incarcerated.¹²⁶ In other states

^{120.} See, e.g., J. Carlee Smith, *Inmates: Our Defenders in Disaster*, NAT. HAZARDS CTR. (Jan. 3, 2017), https://hazards.colorado.edu/article/inmates-our-defenders-in-disaster [https://perma.cc/C2WS-YG83].

^{121.} See id.

^{122.} Jordan Carlee Smith, Inmate Populations in a Disaster: A Labor Force, a Vulnerable Population, and a Hazard 27 (2016) (M.A. thesis, Louisiana State University), https://digitalcommons.lsu.edu/cgi/viewcontent.cgi?article=5492&context=gradschool_thes es [https://perma.cc/27W2-S2ST].

^{123.} See id. at 24–26; see also Heather Ann Thompson, *The Prison Industrial Complex:* A Growth Industry in a Shrinking Economy, 21 NEW LAB. F. 38, 43 (2012).

^{124.} See Smith, supra note 122. See generally Njideka C. Motanya & Pamela Valera, Climate Change and Its Impact on the Incarcerated Population: A Descriptive Review, 31 Soc. Work PUB. HEALTH 348 (2016).

^{125.} See Smith, supra note 122.

^{126.} See, e.g., Jaime Lowe, The Incarcerated Women Who Fight California's Wildfires, N.Y. TIMES MAG. (Aug. 31 2017), https://www.nytimes.com/2017/08/31/magazine/theincarcerated-women-who-fight-californias-wildfires.html [https://perma.cc/6JND-GBPY]; Julia Lurie, 30 Percent of California's Forest Firefighters Are Prisoners, MOTHER JONES

on the West Coast, many firefighters are drawn from juvenile detention facilities.¹²⁷

Imprisoned firefighters are trained in what are called conservation camps — an evolution of the "road camps" staffed by incarcerated people, which were first formally authorized by the California state legislature in 1915 to build roads and railroads, respond to environmental challenges, and participate in some types of agriculture.¹²⁸ In 1946, in response to firefighter labor shortages during World War II, the Rainbow Conservation Camp was established as the first permanent fire camp.¹²⁹ It was modeled after New Deal Civilian Conservation Corps camps.¹³⁰ Ever since then, California has used imprisoned labor to address the increasingly lethal threat associated with climate disruption.

Incarcerated persons working on fire lines are required to do the most dangerous and exhausting work associated with firefighting, working shifts of 72 continuous hours.¹³¹ The use of respirators during firefighting is encouraged but not always practical, given the extreme heat conditions firefighters face on the job.¹³² This is also problematic because of the toxic fumes they inhale, which can cause lifelong respiratory ailments.¹³³ In

uoregon.edu/xmlui/bitstream/handle/1794/25282/PolickKirkpatrick_oregon_0171N_12650. pdf?sequence=1&isAllowed=y [https://perma.cc/TSA7-HCRK].

133. See John Veit, How Anthropogenic Climate Change Exacerbates Vulnerability in Prison Communities; A Critical Environmental Justice Analysis (Dec. 2018) (M.A. thesis,

⁽Aug. 14, 2015), https://www.motherjones.com/environment/2015/08/40-percentcalifornias-fires-are-fought-prison-inmates/ [https://perma.cc/U3A5-KC8K]; Annika Neklason, *California Is Running Out of Inmates to Fight Its Fires*, ATLANTIC (Dec. 7, 2017), https://www.theatlantic.com/politics/archive/2017/12/how-much-longer-willinmates-fight-californias-wildfires/547628/ [https://perma.cc/MBR2-QFUG].

^{127.} See Cat Enders, Escape Casts Spotlight on Washington Use of Juvenile Inmates to Fight Wildfires, GUARDIAN (Aug. 31, 2015, 7:00 AM), https://www.theguardian.com/world/2015/aug/31/washington-state-juvenile-inmates-fight-wildfires-escape [https://perma.cc/M653-GEYK].

^{128.} See Philip Russell Goodman, Hero or Inmate, Camp or Prison, Rehabilitation or Labor Extraction: A Multi-level Study of California's Prison Fire Camps 35 (2010) (Ph.D. dissertation, University of California, Irvine) (ProQuest); see also Kaelyn Frances Polick-Kirkpatrick, Prisons in the Wildlands: A Critical Look Into the Historical Development and Implications of California Conservation Camps 21 (2019) (M.A. thesis, University of Oregon), https://scholarsbank.

^{129.} See Goodman, supra note 128, at 92; see also Polick-Kirkpatrick, supra note 128, at 1, 21.

^{130.} See Polick-Kirkpatrick, supra note 128, at 1, 21.

^{131.} See Philip Goodman, Race in California's Prison Fire Camps for Men: Prison Politics, Space, and the Racialization of Everyday Life, 120 AM. J. SOCIO. 352, 384 (2014); see also Neklason, supra note 126.

^{132.} See Mara Kardas-Nelson, Overstretched Wildland Firefighters Risk Lung, Heart Maladies, INVESTIGATEWEST (Sept. 28, 2020), https://www.invw.org/2020/09/28/overstretched-wildland-firefighters-risk-lung-heart-maladies/ [https://perma.cc/PV6C-F84S].

recent years, at least three prisoners have died while fighting fires in California and six died during a single fire in Arizona.¹³⁴

Despite the dangers inherent in firefighting, the incentives for prisoners to participate in these programs are appealing. For example, prisoners may receive reduced sentencing for firefighting.¹³⁵ They also tend to receive more pay than they would on a traditional work assignment.¹³⁶ Many typical prisoner laborers are paid between eight cents and just over a dollar per hour, while imprisoned firefighters are paid up to \$2.56 per day while in camp, \$1 per hour while working, and receive credit towards parole.¹³⁷ Non-prisoner firefighter salaries start at roughly \$40,000 per year in some states,¹³⁸ but most former prisoners are almost always ineligible for those jobs because their criminal records prevent them from securing an emergency medical technician certification.¹³⁹

In 2020, however, California Assembly Bill No. 2147 helped to remove some of the barriers and created the possibility of career pathways for formerly incarcerated firefighters.¹⁴⁰ Under this new law, individuals who were formerly incarcerated and have successfully participated in the California Conservation Camp Program will be given court-ordered "early termination of probation, parole, or supervised release," and shall "not be required to disclose the conviction on an application for licensure by any state or local agency."¹⁴¹ Although this bill opens the pathway for employment for formerly incarcerated persons, it is still very limited in

HumboldtStateUniversity),https://digitalcommons.humboldt.edu/cgi/viewcontent.cgi?article=1266&context=etd[https://perma.cc/Y2BM-4A4B].

^{134.} See Lowe, supra note 126; see also Prisoner Workers Like California's Inmate Firefighters Are 'Uniquely Vulnerable,' ACLU Lawyer Says, WBUR (Aug. 15, 2018), https://www.wbur.org/hereandnow/2018/08/14/california-inmate-firefighters-wildfire [https://perma.cc/J59C-PV96].

^{135.} See, e.g., Dale Chappell, Arizona Pays Prisoners Pennies on the Dollar to Fight Fires, All in the Name of Saving Money, PRISON LEGAL NEWS (Feb. 1, 2021), https://www.prisonlegalnews.org/news/2021/feb/1/arizona-pays-prisoners-pennies-dollarfight-fires-all-name-saving-money/ [https://perma.cc/VC4D-UXK6]; Clara Hill, Women Get Prison Sentence Reduced After Their Life-Risking Work as Inmate Firefighters During 2020 Wildfires, INDEPENDENT (July 24, 2021, 8:25 PM), https://www.independent.co.uk/climatechange/oregon-wildfires-prison-inmates-sentences-b1889929.html [https://perma.cc/K78S-HJ5D].

^{136.} See Lowe, supra note 126.

^{137.} See id.

^{138.} See id.

^{139.} See Matt Reynolds, Former Inmates Are Battling Legal Barriers to Work as Firefighters, AM. BAR ASS'N J. (June 1, 2021, 1:50 AM), https://www.abajournal.com/magazine/article/former-inmates-are-battling-legal-barriers-to-full-time-work-as-firefighters [https://perma.cc/YZT5-NY4K].

^{140.} See 2020 Assemb., 2019–20 Reg. Sess., § 2(c)(1) (Cal. 2020).

^{141.} See CAL. PENAL CODE §§ 1203.4b(b)(3), (b)(5)(A) (West 2021).

scope. First, individuals must petition the courts to expunge their records, but expungement does not erase the record of incarceration.¹⁴² A study from UC Berkeley found that 20% of employers would "definitely not" hire someone with a criminal record and 42% of employers would "probably not" hire someone with a criminal record.¹⁴³ This is a problem for formerly incarcerated individuals whose years of work experience at Fire Camp could leave them open to hiring discrimination.

B. Vienna Correctional Center

Opened in 1965, the Vienna Correctional Center (VCC) is located in the southern Illinois town of Vienna and is a prime example of how the U.S. prison system is characterized by generally unhealthy conditions and a spectrum of environmental risks within these built environments.¹⁴⁴ VCC is a minimum-security prison that houses mostly low-level offenders.¹⁴⁵ The racial or ethnic composition of the inmate population in 2011 was 67% African American, 21% white, and 11% Latinx.¹⁴⁶ In other words, nearly eight out of ten prisoners were people of color. Since 1901, the John Howard Association (JHA) of Illinois has served as the state's only independent citizen oversight organization focused on prisons.¹⁴⁷ Its staff have made regular visits to VCC and have uncovered and reported on practices and conditions that reflect broad trends in carceral facilities across the United States.¹⁴⁸

When JHA personnel visited VCC in the fall of 2011, they heard that staff and inmates had been involved in the preparation of more than 400,000 sandbags for a flood during the previous spring, an intervention

146. See id. at 1.

^{142.} See id. §§ 1203.4b(b)-(d).

^{143.} See Harry J. Holzer, Steven Raphael & Michael A. Stoll, *How Willing Are Employers to Hire Ex-offenders?*, 23 FOCUS 40, 41 (2004).

^{144.} See JOHN MAKI & MAYA SZILAK, JOHN HOWARD ASS'N OF ILL., MONITORING VISIT TO VIENNA CORRECTIONAL CENTER 2 (2011), https://static1.squarespace.com /static/5beab48285ede1f7e8102102/t/5d162ff3b9f37d0001eee30b/1561735155159/Vienna_ Report+2011.pdf [https://perma.cc/PD6C-F5W6].

^{145.} See *id.* (explaining that low-level offenses often include drug-related crimes committed by someone with no prior offenses, no history of violent activity, no known involvement in high-level criminal activity, and someone who is not viewed as a risk to public safety).

^{147.} See Our History, JOHN HOWARD ASS'N, https://www.thejha.org/history [https://perma.cc/69SK-Q7QV] (last visited Jan. 7, 2022).

^{148.} See generally id. See also MAKI & SZILAK, supra note 144. The John Howard Association of Illinois takes its name from the eighteenth-century English humanitarian, John Howard, who is widely regarded as the founder of the prison reform movement and after whom many prison reform organizations around the world today are named. See generally JOHN HOWARD, THE STATE OF THE PRISONS IN ENGLAND AND WALES (1777).

believed to have saved "countless homes and buildings from serious damage."¹⁴⁹ In the spring of 2011, the Mississippi River experienced massive flooding resulting in untold economic and social harms across a significant portion of the state.¹⁵⁰ In particular, the Army Corps of Engineers blew up a levy to control the overall flooding, but many parts of the town of Cairo, Illinois were devastated.¹⁵¹ The levy destruction also flooded and completely washed away the small town of Pinhook, Illinois, which was a community founded by African American former sharecroppers in 1940.¹⁵² Journalists Lisa Song and Patrick Michels confirmed the story that inmates from VCC were involved in the effort to save the town of Cairo.¹⁵³

This story underscores several intersecting phenomena. Researchers have documented an increasing use of incarcerated persons for addressing climate-change driven extreme weather events like the massive flooding that occurred in Illinois in 2011 and wildfires occurring around the United States.¹⁵⁴ This practice reveals how interlinked environmental and racial injustices are inside and outside the prison system, as climate change produces extreme weather events like the flood, which intersects with injustices that result in incarcerated people (who are majority people of color both in VCC and the United States more generally) being conscripted to fill sandbags to weather that storm. Those decisions then intersected with the institutionally racist state decision to flood an all-African American town, which was originally founded by sharecroppers — a system of farming that was the direct descendant of chattel slavery.¹⁵⁵ Thus, as shown in this case, there are powerful and unsettling linkages between multiple forms of social and ecological domination imprisonment and forced labor, sharecropping and chattel enslavement,

^{149.} MAKI & SZILAK, supra note 144, at 3.

^{150.} See Alan Taylor, *Mississippi Flooding*, ATLANTIC (May 11, 2011), https://www.theatlantic.com/photo/2011/05/mississippi-flooding/100064/ [https://perma.cc/5RHN-RWE4].

^{151.} See id.

^{152.} See Lisa Song & Patrick Michels, *There Was a Plan to Save This City from Flooding*, PROPUBLICA (Sept. 6, 2018, 5:00 AM), https://www.propublica.org/article/cairo-there-was-a-plan-to-save-this-city-from-flooding [https://perma.cc/RD2J-K9FA].

^{153.} See id.

^{154.} See Jessica Lipscomb, Unpaid Florida Prisoners Being Used to Clean Up After Hurricane Irma, MIA. NEW TIMES (Sept. 28, 2017, 8:00 AM), https://miaminewtimes.com/news/unpaid-florida-prison-inmates-being-used-on-hurricaneirma-cleanup-labor-crews-9701867 [https://perma.cc/6EE3-AMMN]; see also Prisoner Workers Like California's Inmate Firefighters Are 'Uniquely Vulnerable,' ACLU Lawyer Says, supra note 134.

^{155.} See Ralph Shlomowitz, *The Origins of Southern Sharecropping*, 53 AGRIC. HIST. Soc'Y 557, 557 n.2 (1979); see also Song & Michels, supra note 152.

anthropogenic climate disruption, and the physical destruction of an African American residential community. The reverberations and implications of this case are troubling and nearly beyond the capacity of language to fully grasp.

C. BP Oil Spill

The Deepwater Horizon was an offshore drilling platform owned by the company Transocean, which leased the facility to BP. In April of 2010, the facility suffered a catastrophic accident, resulting in the deaths of 11 workers, an oil spill that leaked continuously into the Gulf of Mexico for three months, and the near total devastation of the region's seafood industry.¹⁵⁶ While hiring minimum wage or salaried workers from various nearby communities was an option, BP contracted with Louisiana parish jails to supply incarcerated persons to cleanup the oil lapping up on the shores of the Gulf instead.¹⁵⁷ Many local residents were angered at the fact that prisoners were being conscripted to do this work while they were displaced and unemployed as a result of the oil spill. BP tried to minimize this public relations crisis by changing out the "Inmate Labor" t-shirts the prisoners wore for attire with a BP logo, but few locals were fooled, largely because of the undeniable and stark racial dynamics before their eyes.¹⁵⁸ As one source noted: "70% of Louisiana's prisoners and almost all of the prisoner workers on the cleanup crews are [B]lack while 90% of the local coastal residents are white."159

The prisoners were forced to work 12 hour days, likely inhaling dangerous toxins, for between zero and 40 cents an hour, with the possibility of "good time" credit toward their sentences.¹⁶⁰ The health risks

^{156.} See Deepwater Horizon — BP Gulf of Mexico Oil Spill, EPA (Dec. 4, 2020), https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-

spill#:~:text=On%20April%2020%2C%202010%2C%20the,of%20marine%20oil%20

drilling % 20operations [https://perma.cc/96SB-EY36]; see also Zachary T. Sampson, USF Researchers Sampled More than 2,000 Fish in the Gulf of Mexico. They Found Oil Pollution in Every One., TAMPA BAY TIMES (Apr. 17, 2020), https://www.tampabay.com/news/environment/2020/04/15/usf-researchers-sampled-morethan-2000-fish-in-the-gulf-of-mexico-they-found-oil-pollution-in-every-one/ [https://perma.cc/J5GU-L6CU].

^{157.} See Abe Louise Young, BP Hires Prison Labor to Clean Up Spill While Coastal Residents Struggle, NATION (July 21, 2010), https://www.thenation.com/article/archive/bp-hires-prison-labor-clean-spill-while-coastal-residents-struggle/ [https://perma.cc/8A63-MPJU].

^{158.} See Matthew Clarke, Prisoner Labor Used to Clean Up BP Oil Spill, PRISON LEGAL NEWS (Mar. 15, 2011), https://www.prisonlegalnews.org/news/2011/mar/15/prisoner-labor-used-to-clean-up-bp-oil-spill/ [https://perma.cc/WRM2-Y2RD].

^{159.} See id.

^{160.} See id.

associated with crude oil exposure are serious enough to give anyone participating in an oil cleanup significant cause for concern.¹⁶¹ These risks include hematopoietic, hepatic, renal, and pulmonary abnormalities.¹⁶² In one study of more than 100 persons who engaged in oil cleanup labor, more than 70% of them had levels of creatinine in the upper limit of the normal range, while 23% had creatinine levels higher than the upper limit of the normal level, which means they were at risk of developing kidney malfunction and failure.¹⁶³ This case is important for a number of reasons, including the fact that the disaster these prisoners were cleaning up was caused by a leading fossil fuel corporation — a business that is tied directly to activities known to cause climate change. The fact that mostly African American incarcerated persons were tasked with cleaning up an oil spill when that same population is overburdened with the broader impacts of climate change reveals the multiple layers of inequity this population endures.

D. Hurricane Cleanup in Florida

After Hurricane Irma tore through parts of Florida, leaving massive volumes of debris and waste in its wake, Florida's Department of Corrections conscripted hundreds of prisoners to do the cleanup across several counties.¹⁶⁴ They were paid nothing for their labor, in a continuation of practices state officials have pursued since the first penitentiary was built in Florida in 1868, whose construction and maintenance costs were offset at that time by the use of unpaid, coerced, African American labor as well.¹⁶⁵ Paul Wright is the Director of the Human Rights Defense Center, an organization that advocates on behalf of incarcerated persons, particularly with respect to environmental and climate justice cases.¹⁶⁶ Regarding the Hurricane Irma cleanup, he stated: "It's not that much different from a slave plantation The only difference is now the slave owners wear uniforms and their employer is the state."¹⁶⁷ The Florida Department of Corrections boasts on its website that its prisoners work an estimated 6.6 million hours and save the taxpayers \$59 million per

^{161.} See generally Mark A. D'Andrea, & G. Kesava Reddy, Health Risks Associated with Crude Oil Spill Exposure, 127 AM. J. MED. 886.e9 (2014); Mina Ha & Hae-Kwan Cheong, Oil Spill Clean-up: A Trade-Off Between Human Health and Ecological Restoration?, 2 LANCET PUB. HEALTH e534 (2017).

^{162.} See D'Andrea & Reddy, supra note 161.

^{163.} See id.

^{164.} See Lipscomb, supra note 154; see also Clarke, supra note 158.

^{165.} See Lipscomb, supra note 154.

^{166.} See id.

^{167.} Id.

year.¹⁶⁸ Therefore, the hurricane cleanup is just one example of this effort to combine punishment, enslavement, and institutional racism under the guise of fiscally responsible government management.¹⁶⁹

A large portion of prison jobs have disproportionately high exposures to environmental toxics, which can lead to serious health effects and injuries. Exposing inmates to dangerous working conditions or toxic substances can be a violation of the Eighth Amendment since it could be argued that the risk of injury violates contemporary standards of decency. With such a large number of prisoners being exposed to environmental and occupational hazards, one would hope that inmates are at least given basic labor protections. However, this is generally not the case. Various courts have upheld the view that inmates are not considered employees and therefore are not granted any protections.¹⁷⁰ Inmates are forced to risk their health and safety for little to no pay, and they are often coerced into dangerous work under the threat of disciplinary action.

V. PRISON LITIGATION AND LEGAL OBSTACLES

In 2018, civil and criminal defense attorneys with the Campaign to Fight Toxic Prisons and the Abolitionist Law Center filed a federal environmental lawsuit against the Bureau of Prisons to stop the development of a new maximum-security prison in Letcher County in Eastern Kentucky.¹⁷¹ The proposed project was estimated to cost around \$444 million, was located in an extremely rural area that had undergone mountaintop removal for coal mining, and was surrounded by five active coal mines, all of which shared the North Fork River Watershed.¹⁷² In addition to being an active coal mining area, the proposed site was also located next to the Lilley Cornett Woods, one of Kentucky's largest old-

^{168.} See Christopher Zoukis, Prison Labor: Positive Programming or Modern-Day Slavery?, PRISON LEGAL NEWS (June 5, 2018), https://www.prisonlegalnews.org/ news/2018/jun/5/prison-labor-positive-programming-or-modern-day-slavery/ [https://perma.cc/VL2U-TG3G].

^{169.} See generally Lipscomb, supra note 154.

^{170.} See Natalie Hurst, Prisoners Are Not for Sale: Incarcerated Workers Deserve Employee Status, UNIV. CIN. L. REV. (Nov. 24, 2020), https://uclawreview.org/2020/11/24/prisoners-are-not-for-sale-incarcerated-workers-deserve-employee-status/ [https://perma.cc/7JTB-L94E].

^{171.} See Complaint for Declaratory & Injunctive Relief at 1, Barroca v. Bureau of Prisons, No. 1:18-cv-02740 (D.D.C. 2018); see also Press Release, Abolitionist L. Ctr., Media Release: Prisoners and Activists Stop New Prison on Coal Mine Site in Kentucky (June 20, 2019), https://abolitionistlawcenter.org/tag/usp-letcher/ [https://perma.cc/7F7D-AZUR].

^{172.} See Jennifer Hijazi, Inmates Contest Plan for Prison Above Kentucky Mine, COURTHOUSE NEWS SERV. (Nov. 28, 2018), https://www.courthousenews.com/kentucky-federal-prison-plans-draw-inmate-suit/ [https://perma.cc/PY9C-3GR5].

growth forests.¹⁷³ The Record of Decision (ROD) disregarded both the environmental and human rights concerns, and the Bureau of Prisons declared they would be moving forward with the development of the prison.¹⁷⁴

Twenty-one prisoners joined together with local community organizations to challenge the ROD.¹⁷⁵ Attorneys argued that the ROD contained many substantive and procedural violations.¹⁷⁶ First, the plaintiffs claimed that there was no need for a new prison building since the number of incarcerated individuals has been decreasing since the Obama era. The Department of Justice, the parent agency of the Bureau of Prisons, stated under oath in Congress that this facility was not necessary.¹⁷⁷ In addition, the plaintiffs argued that the Environmental Impact Statement's Alternatives Analysis, Cumulative Impact Analysis, and Environmental Justice Review were insufficient because they failed to consider prisoners as a population that faces extreme environmental injustice by being incarcerated in unsafe facilities like the one proposed in Letcher County.¹⁷⁸ Finally, they argued that the clear-cutting, road building and widening, construction of a new sewer plant, wetlands destruction, 24-hour lighting, increased carbon emissions, and risks of pollution exposure due to the location violated the National Environmental Policy Act.¹⁷⁹ substantive issues raised were the need for this project, pollution, wetlands destruction, and climate change.¹⁸⁰ The procedural issues raised were the adequacy of the notice and the prisoners' right to be heard.¹⁸¹ The claims were brought under the Administrative Procedure Act182 and reviewed under an "arbitrary and capricious" standard as well as the Endangered Species Act,¹⁸³ which reviewed the biological opinion and assessment of

^{173.} See id.; see also Lilley Cornett Woods Appalachian Ecological Research Station, E. Ky. UNIV., https://naturalareas.eku.edu/lilley-cornett-woods-appalachian-ecological-research-station [https://perma.cc/BX7S-RTPA] (last visited Nov. 5, 2021).

^{174.} See Complaint for Declaratory & Injunctive Relief, *supra* note 171, at 3; *see also* Press Release, Abolitionist L. Ctr., *supra* note 171.

^{175.} See Complaint for Declaratory & Injunctive Relief, supra note 171, at 3.

^{176.} See id.

^{177.} See id. at 41; see also U.S. DEP'T OF JUST., U.S. DEPARTMENT OF JUSTICE FY 2018 PERFORMANCE BUDGET CONGRESSIONAL SUBMISSION FEDERAL PRISON SYSTEM BUILDING & FACILITIES 28, https://www.justice.gov/file/968981/download [https://perma.cc/V3F7-88BP] (last visited Jan. 7, 2022).

^{178.} See id. at 5-6.

^{179.} See id. at 2, 6.

^{180.} See generally id.

^{181.} See generally id.

^{182.} See id. at 6.

^{183.} See 16 U.S.C. §§ 1531–1544.

the Indiana Bat, the gray bat, and the Northern Long-Eared Bat.¹⁸⁴ In the end, the case was dismissed because the Bureau of Prisons removed the ROD, thereby retracting their intent to build the prison in that location.¹⁸⁵

Although the Letcher County case was successful, there were many obstacles to overcome prior to filing the lawsuit. Like many lawsuits involving incarcerated individuals, the statutes outlined in the Prison Litigation Reform Act (PLRA) create countless barriers.¹⁸⁶ The PLRA was signed into law in 1996 during an era that is well known for racist and discriminatory laws.¹⁸⁷ It also caps attorney fees, creates high barriers to settlement, and limits the court's ability to act as a watchdog over prison conditions.¹⁸⁸ Provisions like the Exhaustion Requirement create a harmful double standard that mandates prisoners must first try and resolve any complaint directly with prison officials and exhaust all administrative appeals prior to being able to file a federal lawsuit.¹⁸⁹ The PLRA limits the scope of prospective relief available because courts may only grant an injunction related to prison conditions if it "is narrowly drawn, extends no further than necessary ... and is the least intrusive means necessary to correct the violation of [a] Federal right."¹⁹⁰ Furthermore, the PLRA requires courts to dismiss any action related to conditions of confinement if the complaint is deemed frivolous or malicious.¹⁹¹ This is problematic because under the PLRA's Three Strikes Rule, if a prisoner receives three frivolous lawsuit strikes, they could be barred from participating in litigation proceedings or be required to pay all legal fees upfront with little exception.¹⁹²

In 2020, only 7.6% of all civil rights cases involving incarcerated plaintiffs had an attorney involved, meaning the vast majority of inmate

^{184.} See FED. BUREAU OF PRISONS, REVISED FINAL ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED UNITED STATES PENITENTIARY AND FEDERAL PRISON CAMP 4–35 (2016), https://www.prisonlegalnews.org/media/publications/Complete

^{%20}Revised%20FEIS%20USP%20and%20FPC%20Letcher%20Co%20KY%20with%20ap pendices.pdf.

^{185.} See Stipulation of Dismissal at 1, Barroca v. Bureau of Prisons, No. 1:18-cv-2740-JEB (D.D.C. Sept. 4, 2019).

^{186.} See 42 U.S.C. § 1997e.

^{187.} See Peter Wagner, *Tallying the Extent of the Clinton-Era Crime Bills*, PRISON POL'Y INITIATIVE (May 25, 2016), https://static.prisonpolicy.org/blog/2016/05/25/ seven_clinton_crime_bills/ [https://perma.cc/Y2NB-2Z6Z].

^{188.} See generally 42 U.S.C. § 1997e.

^{189.} See Margo Schlanger, Trends in Prisoner Litigation, as the PLRA Enters Adulthood, 5 U.C. IRVINE L. REV. 153, 155 (2015); see also 42 U.S.C. § 1997e(a).

^{190.} See Schlanger, supra note 189, at 154 n.9 (quoting 18 U.S.C. § 3626 (a)(1)(A)).

^{191.} See id. at 155 n.20 (citing 28 U.S.C. § 1915(g)).

^{192.} See id.

civil rights cases were filed pro se — on their own behalf.¹⁹³ Filing pro se increases inmates' chances of having their case dismissed for minor technicalities like using the wrong color pen or attaching the wrong documents.¹⁹⁴ Civil rights attorneys are cautious about taking cases involving an incarcerated plaintiff because the PLRA caps recoverable attorney fees far below market value.¹⁹⁵ Moreover, the PLRA deters many attorneys from partaking in prison litigation by limiting recoverable fees to total no more than 150% of damages awarded to the plaintiff.¹⁹⁶ Damages awarded to incarcerated plaintiffs are typically low because of the remedial restrictions under the PLRA. In order to seek monetary damages, the plaintiff must show that they suffered serious physical injury that excludes mental and emotional injuries, creating an exceedingly challenging barrier.¹⁹⁷ The Exhaustion Requirement, Three Strikes Provision, Physical Injury Requirement, and high filing fees all serve to limit prisoners' access to the court and stand in the way of justice. Repealing this law would help prisoners achieve improvements in their conditions of confinement and offer constitutional accountability. While prisoners and their allies have been quite successful at enacting meaningful change in the Letcher County case and many others documented here, there are a myriad of legal, administrative, and bureaucratic obstacles to achieving meaningful reform.

CONCLUSION

This Essay builds on recent reports concerning the impacts of anthropogenic climate change on incarcerated populations. The Essay presents several cases reflecting the perils associated with climate changelinked events and policies in the United States, including: climate changeinfluenced flooding and the impacts of fossil fuel extraction on the incarcerated; the rise of health-impairing and life-threatening temperature extremes in jails and prisons; and the harsh conditions imprisoned persons contend with while fighting wildfires and cleaning up waste or debris in natural and technological disaster zones. This Essay focused on the experiences and perspectives of incarcerated persons on the front lines of

^{193.} See Andrea Fenster & Margo Schlanger, Slamming the Courthouse Door: 25 Years of Evidence for Repealing the Prison Litigation Reform Act, PRISON POL'Y INITIATIVE (Apr. 26, 2021), https://www.prisonpolicy.org/reports/PLRA_25.html [https://perma.cc/U8FE-828G]; see also Schlanger, supra note 189, at 166.

^{194.} See Fenster & Schlanger, supra note 193.

^{195.} See id.

^{196.} See id.; see also 42 U.S.C. § 1997e.

^{197.} See Know Your Rights: The Prison Litigation Reform Act (PLRA), ACLU, https://www.aclu.org/sites/default/files/images/asset_upload_file79_25805.pdf [https://perma.cc/GD5U-BXDA] (last visited Oct. 26, 2021).

climate change, with attention to the myriad ways that legal remedies have been available, pursued, or denied to them.

The evolution of grassroots movements for prisoner rights, environmental justice, and climate justice offers lessons and opportunities for thinking through how incarcerated persons and their allies might best achieve these intersecting goals. The evidence is clear that imprisoned people are a vulnerable population that policy makers should consider in their analyses and rule-making with respect to ensuring the protection of groups most impacted by environmental and climate threats. Relatedly, and as demonstrated here, among the most vocal and successful advocates for prisoner rights as well as environmental and climate justice are incarcerated persons themselves. Incarcerated persons have used class action lawsuits, internet communications, hunger strikes, and a range of other methods to call public attention to their plight, to resist and improve their conditions of confinement, and to reveal previously unrecognized spaces of environmental and climate justice movement activity and leadership.