

**WEAPONIZING THE VIRUS:  
MAPPING THE INTERSECTION BETWEEN CRIMINAL JUSTICE AND  
ENVIRONMENTAL JUSTICE IN THE U.S. DURING THE COVID-19 PANDEMIC**

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## Table of Contents

<i>Acknowledgements</i>	3
<i>Preface</i>	4
<b><u>Introduction</u></b>	<b>6</b>
<b><u>Chapter 1: Environmental Justice and the American Criminal Justice System</u></b>	<b>12</b>
<i>What is Environmental Justice?</i>	12
<i>Defining the Environment</i>	15
<i>Policing and Environmental Justice</i>	19
<i>Prisons and Environmental Justice</i>	23
<i>Conclusion</i>	28
<b><u>Chapter 2: Policing and Black Lives Matter in the Pandemic</u></b>	<b>30</b>
<i>The Black Lives Matter Protests and Police Brutality</i>	30
<i>Obstructing Health and Safety Resources</i>	35
<i>Health and Environmental Consequences of Chemical Gas Use in Portland, OR</i>	39
<i>Conclusion</i>	47
<b><u>Chapter 3: COVID-19, Incarceration, and Environmental Injustice</u></b>	<b>49</b>
<i>Rates of Coronavirus Infection in Carceral Facilities</i>	49
<i>Environmental Conditions Exacerbating Poor Health Outcomes in Carceral Facilities</i>	53
<i>Conclusion</i>	63
<b><u>Conclusion</u></b>	<b>64</b>
<b>Bibliography</b>	<b>67</b>

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## *Preface*

As a Portland resident, I have seen first-hand the communal and ecological impacts of nightly police violence and chemical agent deployment. I have seen how the trauma of police brutality harms both the physical and mental health of protesters, I have felt the burning in my eyes and the urge to cough as I walked through spaces still lingering with teargas from the previous night's activities, and I have seen a diminishing sense of trust between city residents and local policy makers. Even more, I have seen the burdens on these communities grow as they became compounded by other environmental factors.

In September of 2020, the entire state of Oregon experienced an environmental tragedy in which about 1,000,000 acres of forest were lost due to fires statewide.<sup>1</sup> During this time, roughly 100,000 people were forced to evacuate their homes in the middle of a pandemic, entire communities burned to the ground, and many more were advised to prepare to leave at a moment's notice.<sup>2</sup> As smoke from the wildfires poured into the city, Portland experienced several consecutive days of "hazardous" air quality (defined by the United States Environmental Protection Agency as an "extremely rare" air quality index between 300 and 500), and a few times, the air quality even surpassed this scale altogether, recording an index in the 700s.<sup>3</sup> Friends of mine living closer to the sites of the nightly protests remarked that they could not

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<sup>1</sup> KATU Staff, "More than 1M Acres Have Burned in Oregon, Nearly Double the 10-Year Average, ODF Says," *KATU*, September 18, 2020, <https://katu.com/news/local/more-than-1m-acres-have-burned-in-oregon-nearly-double-the-10-year-average-odf-says>.

<sup>2</sup> Brad Schmidt and Mark Friesen, "Oregon Initially Said 500,000 People Had Been Evacuated Because of Wildfires. The Numbers Didn't Add up -- and the State Backtracked," *OregonLive*, September 11, 2020, <https://www.oregonlive.com/news/2020/09/oregon-said-500000-people-have-been-evacuated-because-of-wildfires-the-numbers-dont-add-up.html>.

<sup>3</sup> Joseph Winters, "Oregon's Air Quality is So Far Beyond 'Hazardous' that No One Knows What It Means for Health," *Grist*, September 11, 2020, <https://grist.org/climate/oregons-air-quality-is-so-far-beyond-hazardous-that-no-one-knows-what-it-means-for-health/>.

discern if the symptoms they experienced (including scratchy throats, difficulty breathing, coughing, and headaches) were caused by the thick smoke, the months of consistent exposure to tear gas, or a potential coronavirus infection. While discussion of the environmental justice implications of the Oregon wildfires is beyond the scope of this project, it is still important to note that the ongoing police brutality during the coronavirus pandemic provided a context that intensified the sense of confusion, isolation, and distress felt by those in my community as our state burned. Through a consideration of the impacts of Oregon's wildfires, we can clearly see the ways in which environments, public health, and policing intersect and interact with each other.

Still, the dual contamination of teargas and smoke in my hometown is just one of many examples that illustrate the relationship between criminal and environmental justice during the time of the coronavirus. In fact, over the last few months, several stories have been released regarding prison evacuations in the face of environmental disasters, forced sterilizations of immigrants in ICE detention centers, and mass outbreaks of the virus in carceral spaces. Nevertheless, these stories have become overshadowed by news outlets saturated with discourse on whether or not the country should fully reopen its economy and reduce social distancing requirements. It is not surprising that stories from incarcerated persons, who have absolutely no autonomy over their environmental conditions, are largely ignored in the national conversation because this is a population that has been consistently treated as sacrificial when it comes to issues of environmental degradation and other threats to their health and physical safety throughout American history. Given the destructive power of the ongoing health crisis and the disproportionate effect it has on incarcerated folk, it is essential to begin evaluating and holding the criminal justice system accountable for its complicity in such environmental injustices.

## Introduction

There is no question that the coronavirus pandemic has dramatically impacted the lives of nearly every person living in America. Fifteen months after the first case was reported in the United States in January of 2020, more than 31.5 million had tested positive for the virus and over 560 thousand had died.<sup>4</sup> In addition to those who have experienced the negative health consequences of COVID-19 first-hand and those who have tragically lost loved ones to the disease, millions have suffered from varying degrees of economic hardship due to changing employment conditions. Even those lucky enough to have remained in good health and to have evaded precarious financial situations during the pandemic have still witnessed a mass transformation in the way they work, go to school, and socialize with others due to new social distancing guidelines. Nevertheless, the Centers for Disease Control indicates that there are certain risk factors, including those related to health care access, racial and ethnic background, education level, housing, wealth, and occupational status, that increase an individual's susceptibility to infection and likelihood of developing more severe symptoms from the coronavirus.<sup>5</sup> Thus, it is evident that the pandemic has greatly exacerbated existing social inequalities in America.

At the same time that our country was confronting this public health crisis, the brutal murder of George Floyd by Minneapolis police officers in May of 2020 brought the pervasiveness of systemic racism in this country to the national spotlight. Now more than ever before, Americans who had previously been able to claim blissful ignorance and had never been

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<sup>4</sup> "Coronavirus Disease 2019 (COVID-19) in the U.S.," Centers for Disease Control and Prevention, last modified April 25, 2021, <https://covid.cdc.gov/covid-data-tracker>.

<sup>5</sup> "Health Equity Considerations and Racial and Ethnic Minority Groups," Centers for Disease Control and Prevention, last modified July 24, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html>.

personally exposed to police violence were relying on social media to stay informed and connected to the world. As a result of vastly circulated, informational posts and cellphone footage of the incident, they were finally forced to contend with the racial injustices propagated by policing in this country.

As new waves of Black Lives Matter and abolitionist protesters took to the streets to demand justice for George Floyd and other victims of police brutality, officers responded to these demonstrations with brute force in conjunction with a weaponization of the environment. Police intercepted personal protective equipment meant to guard protesters against the virus and repeatedly used tear gas (a respiratory irritant) to disperse crowds, thereby intensifying the risk of infection with COVID-19 for these populations. In my own hometown of Portland, Oregon, the nightly use of tear gas for more than three consecutive months has raised new concerns about the unknown environmental and health implications of long-term exposure to these chemical agents.

The rise of the Black Lives Matter movement at this moment not only highlighted the blatant disregard for the well-being of Black lives and Black communities demonstrated by police violence in America, but it also drew attention to other manifestations of systemic racism that adversely affect minority populations. One such example that has particularly distressed social justice advocates is the fact that individuals detained in jails, prisons, and ICE facilities, who disproportionately come from heavily policed communities of color, are suffering from extremely high rates of infection and death from the coronavirus. These rates can be attributed to prolonged exposure to toxic environments that compromise the health of these individuals and an inability to social distance within these carceral spaces. In both the case of Black Lives Matter protesters and that of incarcerated individuals, it is clear that these groups have been treated as

sacrificial populations in the face of environmental degradation and the COVID-19 pandemic. Moreover, in both instances, the environmental injustices facing these populations originate in the United States' criminal justice system.

Although the ongoing public health crisis, incarceration and police brutality, and environmental justice may present as distinct issues on the surface, they are all exceedingly interconnected and amplify one another; for instance, an incarcerated individual with a pre-existing respiratory condition caused by long-term exposure to toxic prison environments is also made more susceptible to the virus due to an inability to social distance, and the poor quality of healthcare available further increases the risk of mortality. Through an analysis of scholarly research, journalists' reports, and environmental justice principles, this thesis seeks to answer the following questions: *What is the existing relationship between criminal and environmental justice? And how does the coronavirus pandemic impact or exacerbate these issues of environmental justice posed by America's criminal justice system?*

The objectives of this thesis are as follows:

- Define the relationship between the United States criminal justice system and issues of environmental justice and determine the role of the coronavirus crisis in exacerbating environmental injustices stemming from policing and incarceration
- Describe, analyze, and interpret the environmental justice implications of the police tactics used to repress Black Lives Matter activists within the context of the pandemic
- Evaluate and interpret the dire circumstances of the current health crisis in carceral spaces, including prisons, jails, and immigrant detention centers, through an environmental justice lens

The purpose of this investigation is to call attention to the environmental injustices created by the United States criminal justice system, especially those injustices which relate to the current context of the coronavirus health crisis. This thesis seeks to amplify the often-suppressed voices of policed and incarcerated communities and to emphasize their natural human right to a safe, clean, healthful, and sustainable environment. Because my research centers on issues impacting certain vulnerable populations, including undocumented and incarcerated folks, it is essential that I present the circumstances of their situation accurately and with an awareness of the overlapping systems of power and oppression that have worked to maintain the status quo. In order to minimize the risk of harm caused by this investigation, I base my research on sources that have demonstrated a respect for and a sensitivity to these impacted populations, and I refer to the words directly expressed from members of affected communities whenever possible.

While a few scholars in this field have touched upon the manifestation of environmental injustices within the criminal justice system, such as David Pellow in his discussion of “prison ecologies,” the relationship between environmental justice and the American criminal justice system remains a relatively unexplored topic. Moreover, there has been little consideration of how the current health crisis contributes to environmental injustices within this system. This thesis aims to fill this vacancy in the field of environmental justice and analyze the intersection between environmental justice, criminal justice, and the coronavirus pandemic. Because this project centers on a novel subject of investigation, it aims to orient the reader to the relationship in question by presenting a broad overview and original research analysis of the ways in which the pandemic contributes to environmental justice violations of policing and prisons; however, the field of environmental justice would greatly benefit from an independent and in-depth investigation of each of the sub-topics addressed in this thesis.

In the first chapter of this thesis, I contextualize my investigation by defining what is meant by the term “environment” and what constitutes an “environmental injustice.” Moreover, I discuss the intersection between environmental justice and the criminal justice system by providing an overview of the existing literature relating to this relationship, focusing on environmental justice infringements that occur as a result of both policing and incarceration. This chapter also outlines the connection between the following two chapters, which both address threats to environmental justice that are presented by distinct aspects of the criminal justice system and that have been exacerbated by the pandemic.

In the second chapter, I center my analysis specifically on the environmental justice issues posed by the police response to the Black Lives Matter protests that have sparked across the country following the deaths of George Floyd and Breonna Taylor. I argue that the use of physical violence, interception of necessary supplies, interference with protesters’ personal protective equipment, and the frequent deployment of chemical crowd-disbursal agents undermine the fundamental principles of environmental justice, especially when the impacts of these police tactics are compounded by the current coronavirus crisis. Here, I look to my hometown of Portland, Oregon as a case study in this chapter as I address the unknown ecological and health effects produced by nearly three consecutive months of tear gas exposure.

The third chapter shifts focus to the state of the pandemic in prisons, jails, and immigrant detention centers across the United States. It contends that the state’s failure to prevent massive outbreaks of COVID-19 in these facilities while denying detained individuals the freedom to escape the toxic environments violates the detainees’ right to a safe and healthful environment and is thus indicative of an environmental injustice.

In the final section of this thesis, I summarize the main conclusions from my research, reflect on the lessons learned from the distinct circumstances of the coronavirus pandemic as they relate to policing and prisons in the United States, and pose a few questions for further inquiry. To close, I direct my discussion towards the future and suggest a list of action steps that should be taken in order to work towards a more environmentally just future—one that is not undermined by our criminal justice system.

## Chapter 1: Environmental Justice and the American Criminal Justice System

The issues of policing, incarceration, and the coronavirus pandemic addressed in this thesis are evaluated through an environmental justice framework. Before I can address the impact of the ongoing health crisis on the environmental justice outcomes within the United States' criminal justice system, I must first outline the environmental justice framework as well as the environmental spaces in which environmental injustices can occur. After laying out the foundations of this conceptual framework, this chapter considers the works of environmental justice scholars that identify and discuss the existing relationships between policing and environmental violence and that of prisons and environmental violence. The relationships characterized in this chapter serve as a base for my analysis in the second and third chapters of this thesis.

### *What is Environmental Justice?*

At its core, environmental justice calls for the equitable distribution of the benefits and burdens of environmental activities among all people, and it holds that any violation of this tenet consequently results in environmental *injustice*. As defined by the United States Environmental Protection Agency,

Environmental justice is 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 goal will be achieved when everyone enjoys... the same degree of protection from environmental and health hazards [and] equal access to the decision-making processes to have a healthy environment in which to live, learn, and work.<sup>6</sup>

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<sup>6</sup> "Environmental Justice," Collections and Lists, United States Environmental Protection Agency, last modified November 3, 2014, <https://www.epa.gov/environmentaljustice>.

In other words, environmental justice implies that no one faces a disproportionate risk of environmental harms, and every person has a significant voice in determining their environmental outcomes. Independent of one's identity and positionality in society, everyone is deserving of a safe, clean, healthful, and sustainable environment.

Contributing to the development of an environmental justice framework, the delegates at the First National People of Color Environmental Leadership Summit drafted the "Principles of Environmental Justice" in 1991 which established 17 guiding doctrines of the environmental justice movement. The principles outlined in this document that are most relevant to this investigation indicate that environmental justice requires respect for the sacredness of Mother Earth, nondiscriminatory public policy, rights to environmental self-determination, the termination of toxic production, and reparations and quality healthcare for victims of environmental injustice.<sup>7</sup> Since their creation, these principles have been canonized into the environmental justice movement and represent its desired outcomes.

Another extension of the environmental justice framework contributed by David Pellow is the assertion that all people are indispensable. To affirm the indispensability of all people is to hold that everyone's life is valuable and that everyone shares the basic human right to live in a healthful environment. In the words of Pellow, "... indispensability honors key [environmental justice] and ecological principles by seeing all communities... as interconnected, interdependent, but also sovereign and requiring the solidarity of others."<sup>8</sup> Further, Pellow asserts that indispensability takes on the view that "all members of society and socio ecological systems

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<sup>7</sup> People of Color Environmental Leadership Summit, "The Principles of Environmental Justice (EJ)," (Washington, D.C., 1991).

<sup>8</sup> David Pellow, *What Is Critical Environmental Justice?* (Newark: Polity Press, 2017), 26.

have something to contribute to... our collective futures.”<sup>9</sup> If we recognize that all lives are significant and play an important role in society, we must care for and defend the well-being of these lives. This perspective necessarily implies that no one is less worthy or exempt from deserving environmental justice protections.

Nevertheless, scholars of environmental justice acknowledge that environmental violence does not affect individuals at random. Policies that result in environmental degradation disproportionately target minority communities, particularly in relation to race, ethnicity, and socio-economic status, as these populations are often disregarded as expendable. Not only are these communities frequently excluded from the environmental decision-making process, but they are also treated as “sacrifice zones” in the face of environmental degradation. As a result, the field of environmental justice tends to place a particular emphasis on the ways in which these factors of one’s identity influence the way one is situated in environmental contexts. As Joni Adamson, Mei Mei Evans, and Rachel Stein explain: “Environmental justice initiatives specifically attempt to redress the disproportionate incidence of environmental contamination in communities of the poor and/or communities of color...”<sup>10</sup> Because of the emphasis placed on indispensability and interconnectedness, environmental justice condemns the idea of sacrifice zones and recognizes the need to devote special attention into addressing the environmental violence inflicted on these communities.

Finally, in defining the framework of environmental justice it is important to note that environmental justice does not simply propose making small adjustments to mitigate much larger abuses caused by harmful policies. Instead, it demands truly transformative solutions that seek to

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<sup>9</sup> Pellow, *Critical Environmental Justice*, 26.

<sup>10</sup> Joni Adamson, Mei Mei Evans, and Rachel Stein, *The Environmental Justice Reader: Politics, Poetics and Pedagogy* (Tucson: University of Arizona Press, 2002), 5.

end environmental violence altogether and promote an active presence of justice. According to scholar Robert Bullard, environmental justice requires that we ask, “‘How little harm is possible?’ rather than ‘How much harm is allowable?’”<sup>11</sup> Thus, environmental justice cannot be achieved without a *full* commitment to establishing an equitable distribution of the benefits and burdens of environmental activities, adhering to the First National People of Color Environmental Leadership Summit’s 17 principles, and ensuring that no population is treated as expendable or sacrificial. In this sense, the movement promotes a proactive approach to addressing environmental justice concerns such that it seeks to establish the presence of *positive peace*, a form of peace that implies a dynamic process of eliminating structural violence and creating sustainable, long-lasting social justice for all persons in society.<sup>12</sup>

### *Defining the Environment*

In order to better understand the concept of environmental justice as well as what constitutes an environmental injustice, it is important to also clarify what is meant by the term “environment.”

The first, and perhaps the most obvious, interpretation of the environment is that which concerns the “natural world” and the ecosystems inhabited by it. The dictionary definition offered by Meriam-Webster that most strongly correlates to this particular notion of “environment” is “the complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon an organism or an ecological community and ultimately

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<sup>11</sup> Robert Bullard, ed., *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*, (San Francisco: Sierra Club, 2005), 4.

<sup>12</sup> Linus Pauling et al., “Peace Research: Aims and Perspectives,” *Bulletin of Peace Proposals* 1, no. 3 (1970): 197–211.

determine its form and survival.”<sup>13</sup> Included in this definition would also be such factors as the quality of air we breathe, the level of biodiversity in a region, and our access to and quality of food and water supplies. Thus, from this standpoint, any activity that disproportionately degrades these life-supplying natural resources for an individual or group without meaningful involvement of all affected persons are consequently considered environmental injustices.

In addition to this “natural” understanding of the environment, this term is also extended to refer to our “built environments,” or those which “are constructed by and for human activity.”<sup>14</sup> These built environments can take the form of the buildings in which we live and conduct business, infrastructure we use for travel like roads and highways, and even the organization of space in a city’s design. Just as healthy natural environments are an essential factor of preserving environmental justice, built environments also play a significant role in determining justice outcomes. In fact, our built environments often exacerbate and reproduce patterns of inequality in society. They control whether or not our bodies are protected from the elements, they determine the frequency in which our bodies are exposed to toxins, they shape our access to various resources, they can either limit or expand our capacity to travel and dictate where we are able to go, and they influence who we come into contact with on a regular basis. Environmental injustices occur within built environments when they are constructed in such a way that fosters and maintains inequalities and/or inflicts harm against certain communities.

The quality of both natural and built environments invariably impact the health and well-being of those situated within them. When these external environments are characterized by

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<sup>13</sup> “Environment,” Merriam-Webster, accessed October 20, 2020, <https://www.merriam-webster.com/dictionary/environment>.

<sup>14</sup> William A. Gleason, “Built Environment,” in *Keywords for Environmental Studies*, ed. William A. Gleason, Joni Adamson, and David N. Pellow (NYU Press, 2016), 35–36, <http://www.jstor.org/stable/j.ctt15zc5kw.15>.

exploitation, dilapidation, and insufficient access to resources, the poor living conditions typically manifest within the human body via exacerbated health issues and physical discomfort. Policies that lead to such conditions result in what Rob Nixon describes as a “slow violence” in which suffering is imposed on communities indirectly and incrementally (through harmful manipulations of their natural and built environments) over an extended period of time.<sup>15</sup> Thom Davies et al. contribute to this conception of “slow violence” by explaining that it is a form of structural violence that operates latently by “withholding [the] means to live” from certain populations and can have detrimental effects that are not fully revealed at its onset.<sup>16</sup> In other words, this type of violence permits suffering through willful negligence and demonstrates a disregard for the well-being of those affected.

Not only is the body a site where external conditions are reflected through one’s physical health and well-being, but the body is also an environment in and of itself. This third type of environment is often the least understood or acknowledged when discussing environmental issues, yet it is essential within an environmental justice framework. While we tend to think of environments as that which is outside of and acts upon the body, the body is also the most immediate location in which the self resides. In his analysis of critical environmental justice, and more specifically a feminist approach to interpreting environmental issues, Pellow states that it is important that we are “... thinking about environmental justice conflicts at the microscale, at the bodily level.... [When] we redefine our bodies as “lands” and “homes” and “environments,” we can then more effectively personalize and politicize environmental justice for people whose

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<sup>15</sup> Rob Nixon, “Slow Violence, Gender, and the Environmentalism of the Poor,” in *Environment at the Margins: Literary and Environmental Studies in Africa*, ed. Byron Caminero-Santangelo and Garth Myers, 1st ed. (Ohio University Press, 2011), 257, <http://www.jstor.org/stable/j.ctt1j7x72r.15>.

<sup>16</sup> Thom Davies, Arshad Isakjee, and Surindar Dhese, “Violent Inaction: The Necropolitical Experience,” *Antipode* 49, no. 5 (April 2017): 1270.

personal well-being is often at risk from a range of threats.”<sup>17</sup> From this perspective, when we make sense of our bodies as unique spaces or environments which affect our life experiences, we understand that environmental injustices manifest in more ways than just the slow violence described by Nixon. In this sense, even direct harm committed against a body, or the threat thereof, is considered a form of environmental injustice. As an environment that a person carries with them their entire lives, the well-being of the body, like the well-being of the external environment, is critical for maintaining the well-being of the self. Thus, anything which undermines the security of the body (such as sexual assault, unhealthy food provisions, and police brutality) constitute environmental injustices as much as issues traditionally associated with the environment like air pollution and deforestation.

We must also understand that when instances of environmental injustice occur on a personal, bodily level, it affects more than just a single, targeted individual. In his conversation about direct forms of violence, Pellow later adds,

... such microscale environmental injustices are inescapably linked to and supportive of macroscale environmental injustices focused on entire populations of people. The effects of such violence targeting one person or one body ripples across populations and communities, through an ecology of repression and brutality that requires a transformative response.”<sup>18</sup>

Here, Pellow suggests that when injustices occur within the microenvironment of a body, the impacts are diffuse, affecting the bodies of entire populations of people as such violence becomes normalized and looms over communities as a constant threat. Therefore, it would be wrong to assume that harm inflicted on a single person could be dismissed as irrelevant or insignificant to the bodily environments of others. Because of this awareness that the protection

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<sup>17</sup> Pellow, *Critical Environmental Justice*, 74.

<sup>18</sup> Pellow, *Critical Environmental Justice*, 79.

of one's rights is interconnected with that of others, there is a strong sense of community mobilization within the environmental justice movement that is necessary in order to combat the persisting injustices.

In short, when we define the term "environment" from an environmental justice standpoint, we refer to all natural, built, and bodily conditions that impact a person's well-being. It thus includes any and all of the spaces in which we live, work, and play.<sup>19</sup> Whether it presents as "slow violence" (as is the case of contaminated air and water supplies that gradually take a toll on the health of those consuming such resources) or more direct forms of bodily harm (as is the case when a person is beaten and/or killed by state forces), any instance of environmental injustice consequently undermines the security of every person's human right to a safe and healthful environment.

### *Policing and Environmental Justice*

One of the major perpetrators of environmental injustices within the American criminal justice system is the policing process. While the link between police and environmental (in)security is not widely discussed in environmental justice literature, scholars including David Pellow, Lindsey Dillon and Julie Sze help to outline a framework from which to understand this relationship. From this framework, we see that policing is a racialized process that tends to affect the same communities that carry a larger burden of environmental degradation, intensifying the vulnerability of these populations.

Despite the alleged duty of the police force to "Protect and Serve" the communities they patrol, policing in America has a record of targeting of Black and brown bodies, violating the

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<sup>19</sup> Robert Bullard, "Environmental Justice for All," *The New Crisis* 110, no. 1 (2003): 24.

environmental justice principle which demands unbiased, discrimination-free public policy. For example, according to the NAACP's Criminal Justice Factsheet, "A Black person is five times more likely to be stopped [by police] without just cause than a white person," and "65% of Black adults [and approximately 35% of Latino and Asian adults] have felt targeted because of their race."<sup>20</sup> The Bureau of Justice Statistics also reveals that as of 2015, "When police initiated [contact with residents], Blacks (5.2%) and Hispanics (5.1%) were more likely to experience the threat or use of physical force than whites (2.4%)..."<sup>21</sup> In addition, Black people account for 22% of the roughly 1,000 individuals shot and killed by police officers in the United States each year while only composing 13.4% of the total population, whereas the numbers for white people are 41% and just over 60% respectively.<sup>22</sup> Even more, Black victims of lethal police force were less likely to be armed than white victims.<sup>23</sup> All of these statistics clearly identify a trend in which police actually undermine the safety of racial and ethnic minorities. As a result, we must critically ask *who* is serviced by the police, and *from what/whom* are they being protected. The disproportionate policing of and use of force against communities of color implies an attitude that these populations are inherently criminal and undeserving of the protection police purportedly offer. It creates an unsafe environment in which there is a perpetual threat of violence, and the community as a whole suffers.

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<sup>20</sup> "Criminal Justice Fact Sheet," NAACP, accessed November 7, 2020, <https://www.naacp.org/criminal-justice-fact-sheet/>.

<sup>21</sup> Elizabeth Davis, Anthony Whyde, and Lynn Langton, "Contacts Between Police and the Public, 2015," (Bureau of Justice Statistics, 2018), 1.

<sup>22</sup> NAACP, "Criminal Justice Fact Sheet."

<sup>23</sup> Sarah DeGue, Katherine A. Fowler, and Cynthia Calkins, "Deaths Due to Use of Lethal Force by Law Enforcement: Findings from the National Violent Death Reporting System, 17 U.S. States, 2009-2012," *American Journal of Preventive Medicine* 51, no. 5 Suppl 3 (November 2016): S173–87.

Pellow relates the criminalization of Black and brown communities to environmental justice by arguing that both go hand-in-hand with state-sponsored violence and collective punishment. He contends that the racialized state does not require a crime to be committed in order to punish entire communities by contaminating their environments and policing their bodies; instead, the only necessary “offense” is “being black in a white-dominated society.”<sup>24</sup> In his own words, Pellow explains that “...particular bodies and communities can suffer the brutality of environmental racism as criminalization from birth through death: from living in toxic homes and residential communities that are also occupied by police forces, to attending schools that are inundated with toxics and occupied by police...”<sup>25</sup> To put it simply, environmental degradation and policing in communities of color are part of the same process in which these groups are treated as both threatening and less-than-human. The persistent monitoring and victimization of these populations by police is then justified by the belief that individuals within these communities are not valuable members of society. Consequently, the nature of policing in America opposes the environmental justice principle of indispensability, and instead operates under the false conviction that these communities are expendable and able to be sacrificed.

Through an analysis of the mantra “I can’t breathe,” which was adopted by the Black Lives Matter Movement after Eric Garner was murdered by police using an illegal chokehold, Dillon and Sze expand upon the relationship between toxic environments and police brutality from an environmental justice standpoint. Specifically, the scholars point to the high rates of

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<sup>24</sup> Pellow, *Critical Environmental Justice*, 55.

<sup>25</sup> David Pellow, “The Disturbing Link Between Environmental Racism and Criminalization,” *Environmental Health News*, December 9, 2019, <https://www.ehn.org/environmental-racism-and-the-criminal-justice-system-2641465977.html>.

asthma in communities of color that are caused by racial disparities in the quality of air we breathe. Because Garner's asthma was ruled a contributing factor in his death (in addition to his hypertension, diabetes, and obesity, which also stem from one's environmental situation), Dillon and Sze argue that "...Garner's body was already vulnerable to police violence, in part, because of these pre-existing health and environmental conditions."<sup>26</sup> They then draw a parallel between the physical chokehold in which the police officer denied Garner his breath and the pollution that slowly chokes entire communities of color and weakens the integrity of their health.<sup>27</sup> In this sense, the direct violence of police officers and the slow violence of toxic environments are really just two sides of the same coin, and "I can't breathe" becomes a metaphor for both of these manifestations of environmental injustice.

Even more, Pellow further connects policing and environmental injustice by defining the process of incarceration that is carried out by police as a form of extractivism. He asserts that through this process, "...family members, friends, neighbors, co-workers, and colleagues are literally siphoned off from their homes and social networks every day; they are critical "resources" for maintaining the function of our communities."<sup>28</sup> That is to say, the individuals who are policed and incarcerated play integral roles in their communities: they work and provide wages for their families, they help raise and educate children, and they provide emotional support for one another. When they are taken away from their homes, however, the remaining community and family members must then take on the economic and emotional burden caused by their absence, which is an especially difficult undertaking when resources are already spread

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<sup>26</sup> Lindsey Dillon and Julie Sze, "Police Power and Particulate Matters: Environmental Justice and the Spatialities of In/Securities in U.S. Cities," *English Language Notes* 54, no. 2 (September 2016): 18, <https://doi.org/10.1215/00138282-54.2.13>.

<sup>27</sup> Dillon and Sze, "Police Power," 19.

<sup>28</sup> Pellow, *Critical Environmental Justice*, 79.

thin. Pellow also likens the process to “mining,” suggesting that policed individuals are forcefully removed from neighborhoods and placed into jails and prisons in order to fuel and sustain the prison industrial complex.<sup>29</sup> Because arrests essentially strip the human resources away from the environments in which they are rooted and forcefully re-locate these individuals for the benefit of the carceral system, it is evident that their communities face a disproportionate amount of the burdens of such activities without receiving the same benefits. Moreover, this extractive process neither respects the principle of equal participation in the decision-making process nor that of environmental self-determination, which are essential components of environmental justice.

On the whole, we see that policing in the United States is a system that breeds environmental injustice. Similar to the way in which communities of color are treated as sacrificial sites for pollution and toxic living conditions, they are also disproportionately made targets of police surveillance, violence, and extraction. Both policing and ecological degradation work in conjunction to make Black and brown bodies vulnerable. This framework and understanding of the relationship between policing and environmental justice forms the basis of my analysis in the second chapter of this thesis.

### *Prisons and Environmental Justice*

Once a person has been policed, the criminal justice system often inflicts further suffering on the body by confining that individual in carceral spaces (prisons, jails, and detention centers) that are characterized by toxic environments. As a result, the same people who experience the environmental injustices that arise from excessive policing in their communities as well as

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<sup>29</sup> Pellow, *Critical Environmental Justice*, 81.

environmental degradation caused by factors beyond the criminal justice system (which both occur disproportionately in poor communities of color) are frequently subjected to further environmental harms within the prison industrial complex.

Incarcerated folk are consistently exposed to some of the worst environmental hazards in America. Scholars who have investigated the environmental conditions of prisons across the United States frequently note that these facilities are built in close proximity to toxic wastelands including coal ash dumps, hydraulic fracking sites, and nuclear plants.<sup>30</sup> Additionally, prisoners in facilities all across the United States face daily threats to their health and safety as they are forced to consume contaminated food and water supplies; given inadequate evacuation plans during environmental crises like floods, fires, and hurricanes; sexually exploited and/or physically abused by prison guards; denied access to quality health care; and subjected to many other hazardous environmental conditions that are too numerous to list here.<sup>31</sup> Those in charge of operating correctional facilities refuse prisoners even the minimum environmental quality standards necessary to sustain human life and instead treat inmates as if they are an extension of the wastelands they are thrown into. At the very minimum, these conditions reflect gross negligence and disregard for human life, and at worst, they represent intentional and malicious

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<sup>30</sup> Brenna Helppie-Schmieder, “Toxic Confinement: Can the Eighth Amendment Protect Prisoners from Human-Made Environmental Health Hazards?” *Northwestern University Law Review* 110, no. 3 (2016): 647–78; Dustin S. McDaniel et al., “No Escape: Exposure to Toxic Coal Waste at State Correctional Institution Fayette,” (Abolitionist Law Center | Human Rights Coalition, 2014); Maggie Leon-Corwin et al., “Polluting Our Prisons? An Examination of Oklahoma Prison Locations and Toxic Releases, 2011–2017,” *Punishment & Society* 22, no. 4 (October 2020): 413–38, <https://doi.org/10.1177/1462474519899949>; Candice Bernd, Zoe Loftus-Farren, and Maureen Nandini Mitra, “America’s Toxic Prisons: The Environmental Injustices of Mass Incarceration,” *Earth Island Journal* 32, no. 2 (2017): 17–26; Panagioti Tsolkas, “The Ecology of a Prison Nation,” *Earth First!* 35, no. 2 (2015): 5–8.

<sup>31</sup> Elizabeth A. Bradshaw, “Tombstone Towns and Toxic Prisons: Prison Ecology and the Necessity of an Anti-Prison Environmental Movement,” *Critical Criminology* 26, (2018): 1–16; Tsolkas, “Ecology of a Prison Nation”; Yue Shen et al., *Environmental Injustice Behind Bars: Toxic Imprisonment in America*, (Santa Barbara: The Global Environmental Justice Project, 2018), <https://doi.org/10.13140/RG.2.2.11281.28003>; Bernd, Loftus-Farren, and Mitra, “America’s Toxic Prisons”; McDaniel et al., “No Escape”; David Pellow, “Struggles for Environmental Justice in US Prisons and Jails,” *Antipode* 0 (September 2019): 1–18, <https://doi.org/10.1111/anti.12569>; Pellow, *Critical Environmental Justice*.

acts of violence towards prison populations. Moreover, as Pellow explains, "... unlike nonprisoners, prisoners do not have the freedom to leave this built environment and come and go as they please, so exposure to chemical toxins and pollutants, extreme weather events, social violence, and control are that much more pervasive."<sup>32</sup> Despite the particularly vulnerable position of these individuals, though, the injustices they face are largely ignored in American society. In contrast to Pellow's doctrine of indispensability, incarcerated individuals are instead stigmatized for having "transgressed" against society, and many people consequently associate them with a level of expendability and/or believe that those in prison *deserve* inhumane living conditions as punishment for their crimes. Thus, policy makers allow these health and environmental justice violations to persist without any accountability, and the general population remains indifferent to inmate suffering.

While some may take the firm stance that these harsh conditions are justified as part of the punitive ramifications of a crime, it is important to note that the health impacts of toxic prison environments tend to persist way beyond the duration of a person's sentence; even after they have "served their time," their punishment continues. We can look to the chronic exposure of toxic coal waste at State Correctional Institution (SCI) Fayette in Labelle, Pennsylvania as an example. According to a study released by the Abolitionist Law Center and the Human Rights Coalition in 2014,

... more and more prisoners have reported declining health, revealing a pattern of symptomatic clusters consistent with exposure to toxic coal waste: respiratory, throat and sinus conditions; skin irritation and rashes; gastrointestinal tract problems; pre-cancerous growths and cancer; thyroid disorders; other symptoms such as eye irritation, blurred vision, headaches, dizziness, hair loss, weight loss, fatigue, and loss of mental focus and concentration.<sup>33</sup>

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<sup>32</sup> Pellow, *Critical Environmental Justice*, 68.

<sup>33</sup> McDaniel et al., "No Escape," 1.

The report also states that most prisoners did not have these symptoms until after their arrival at SCI Fayette.<sup>34</sup> All of the listed symptoms are indicative of serious health issues that will not suddenly disappear if and when a prisoner is finally released from these polluted environments. In a letter sent to the Abolitionist Law Center, one prisoner inside the facility wrote, “I have 37-months in on a five-to-ten-year sentence and fear that I will not live to see my 13-year-old son.”<sup>35</sup> These emotional words reveal the devastating extent to which these environmental and health hazards affect the entire lives of incarcerated folks and their families. For many, a few years in SCI Fayette (or any other prison in the country) can easily become a death sentence due to the toxic contamination of these sites. In this sense, we see that the environmental injustices of prisons do not exist in a fixed or isolated setting, but rather they transcend the time and place in which a prisoner lives out their sentence.

Despite the fact that these toxic prison environments undoubtedly violate the Environmental Protection Agency’s statement on environmental justice claiming they will work to ensure *everyone* has “the same degree of protection from environmental and health hazards,”<sup>36</sup> the agency excludes prison populations from their efforts. Pellow explains that while the Environmental Protection Agency has taken a number of actions against prisons for producing pollution that has affected nearby communities, it does not do anything to achieve justice for the health and safety hazards impacting those within the facilities.<sup>37</sup> It is incredibly disheartening to see that even the Environmental Protection Agency, which is meant to safeguard the environmental conditions of the most marginalized communities, does not treat incarcerated

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<sup>34</sup> McDaniel et al., “No Escape,” 1.

<sup>35</sup> McDaniel et al., “No Escape,” 5.

<sup>36</sup> United States Environmental Protection Agency, “Environmental Justice.”

<sup>37</sup> Pellow, *Critical Environmental Justice*, 65.

populations as deserving of environmental protection. The Environmental Protection Agency's failure to consider the environmental injustices incurred against prisoners demonstrates the true extent to which incarcerated folk are disregarded as sub-human and dispensable populations in American society.

Another dynamic that merits consideration is the population of those affected by the environmental harms of the prison industrial complex. Due to the rise of mass incarceration over the last 50 years, there are approximately 2.2 million people incarcerated in prisons and jails across the United States.<sup>38</sup> Here, in the "land of the free," we have the highest incarceration rate in the world. Even though the environmental violence produced by the prison industrial complex is largely overlooked by the general population, it is clear that these harms affect a large portion of the population. Nevertheless, they do not impact every demographic equally. While one in nine men in the U.S. are projected to face incarceration at some point in their lives, this statistic increases to one in three for Black men and one in six for Latino men.<sup>39</sup> For white men on the other hand, the likelihood of imprisonment is only one in 17.<sup>40</sup> Thus, incarceration follows the same pattern as policing in that it disproportionately targets communities of color, which is not surprising considering one of these processes precedes the other. Still, we see that the environmental injustices of both policing and prisons amplify one another as they repeatedly inflict harm on the same communities. Pellow emphasizes this sentiment, asserting that "... inequalities are mutually reinforcing in that they tend to act together to produce and maintain systems of individual and collective power, privilege, and subordination."<sup>41</sup> Looking into the

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<sup>38</sup> "Criminal Justice Facts," The Sentencing Project, accessed November 10, 2020, <https://www.sentencingproject.org/criminal-justice-facts/>.

<sup>39</sup> The Sentencing Project, "Criminal Justice Facts."

<sup>40</sup> The Sentencing Project, "Criminal Justice Facts."

toxic conditions of prisons, police violence, and surveillance, it is apparent that there are indeed multiple layers of discrimination working to undermine the rights of the communities of color to live in safe and healthful environments.

From this outline of the environmental injustices that occur within the carceral confinement of the prison industrial complex, it is evident that incarcerated individuals are not only confronted with horribly unsafe, unclean and unhealthy environments, but the suffering of this population is also widely ignored as they are disregarded as unimportant members of society. Moreover, the fact that incarceration disproportionately affects racial and ethnic minorities parallels the environmentally unjust outcomes of policing as well as the disparate impacts of environmental degradation that occur outside the context of the criminal justice system. Pellow summarizes this well: “No less disturbing is that the targeted poisoning and polluting of people behind bars reflects what has long been a practice of doing the same to ‘free’ residential communities—suggesting that environmental racism and criminalization intersect and reinforce one another on both sides of the prison's walls.”<sup>42</sup> In other words, the environmental injustices that occur within prisons are part of a larger web of interconnecting systems of oppression. This understanding of the relationship between environmental justice and prisons will form the basis of my discussion in the third chapter of this thesis.

### *Conclusion*

Policing and incarceration are two functions of the American criminal justice system that work in tandem to inflict environmental injustices through discriminatory public policies that

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<sup>41</sup> Pellow, *Critical Environmental Justice*, 21.

<sup>42</sup> Pellow, “Disturbing Link.”

disproportionately target communities of color, present a constant threat of state violence, and extract individuals from these communities. It then treats those extracted as disposable populations by placing them into prisons located in toxic wastelands and by denying them access to environmental and health protections. These injustices of the criminal justice system manifest in the natural, built, and bodily environments of the affected populations, from contaminating their air and water supplies with toxins, to stripping away their autonomy in choosing the environmental space in which they are located, to making direct physical attacks on the bodies of those deemed “criminal” by the state. All of these factors come together to undermine the health and bodily security of policed and incarcerated individuals and communities.

In the following chapter, I take a closer look at the environmental injustices of the policing function of the criminal justice system that have intensified over the last few months in response to the growing Black Lives Matter movement. Specifically, I consider the way in which the police confrontations with protesters within the context of the coronavirus pandemic have exacerbated the existing dynamics of environmental violence dispensed by law enforcement officers in the United States. I argue that the tactics used by police officers violate the fundamental principles of environmental justice by jeopardizing protesters’ rights to healthful and secure environments.

## Chapter 2: Policing and Black Lives Matter in the Pandemic

The protesters who clashed with police forces across the United States following the murders of George Floyd, Breonna Taylor, and the many other Black victims of police brutality faced significant threats to their health and safety as they demanded an end to state violence and justice for the lives lost. In this chapter, I argue that the police tactics used in response to these protesters, including excessive use of force; tampering with the food, water and personal protective equipment of protesters; and extensive deployment of tear gas constitute environmental injustices that are exacerbated by the coronavirus health crisis. I also analyze the city of Portland, Oregon as a case study to highlight specifically the way in which long term exposure to such chemical agents produce unknown ecological and long-term health implications that undermine the protesters' and city residents' rights to equal environmental protection and autonomy.

### *The Black Lives Matter Protests and Police Brutality*

The aggressive and disproportionate use of force in response to Black Lives Matter's calls to end police violence has been well-documented by journalists, legal observers, and independent organizations. In collaboration with Bellingcat, Forensic Architecture has geolocated, verified, and analyzed more than 1,000 incidents from 43 states of violence or other serious misconduct by police occurring between May 27, 2020 and November 24, 2020.<sup>43</sup> Included in their archive are images and footage from protests that depict officers physically dragging protesters through the streets, kicking individuals who are on the ground and not

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<sup>43</sup> "Police Violence in the United States," Forensic Architecture, accessed November 29, 2020, <https://blmprotests.forensic-architecture.org/>; Forensic Architecture and Bellingcat, "Police Brutality and the BLM Protests," public dataset, last modified November 25, 2020, [https://docs.google.com/spreadsheets/d/1-9KKfaEDhgeJ8dz8HjsFNBniDCQj-5ADWbuMkw2hNBU/edit?ts=5f99a04b&usp=embed\\_facebook](https://docs.google.com/spreadsheets/d/1-9KKfaEDhgeJ8dz8HjsFNBniDCQj-5ADWbuMkw2hNBU/edit?ts=5f99a04b&usp=embed_facebook).

resisting, repeatedly beating them with batons, and firing “less-lethal” rounds into already retreating crowds.<sup>44</sup> In several instances, federal officers who were brought in to assist local police departments have even been caught on camera “disappearing” protesters off the streets by forcing them into unmarked vans and driving off with no explanation.<sup>45</sup> According to the Forensic Architecture dataset, there have been 317 accounts of physical assault, a combined 323 accounts of pepper spray and/or tear gas usage, and 270 accounts of “less-lethal” round deployment (which includes “‘sponge’ bullets, ‘pepper balls’, ‘bean bag’ rounds, rubber bullets, ‘blast ball’ grenades, ‘flash-bang’ projectiles, and other similar munitions [that] are very capable of causing lethal injuries”<sup>46</sup>) carried out by law enforcement officers.<sup>47</sup> Still, these figures only represent incidents for which there is substantial evidence and does not include the probable hundreds of cases of police violence *not* caught on camera during these protests. As a result, the number of such violations is likely much higher. Even more, the evidence suggests that these aggressive tactics of police officers seem to target individuals at the scene indiscriminately. While the majority of the victims of this brutality were unarmed civilians peacefully protesting, the archive also includes documented assaults against journalists, medics, and legal observers, even after these professionals had clearly identified their positions.<sup>48</sup>

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<sup>44</sup> Forensic Architecture, “Police Brutality at the Black Lives Matter Protests (Phase 2),” Vimeo video, November 2020, <https://vimeo.com/473875576>.

<sup>45</sup> Forensic Architecture and Bellingcat, “Police Brutality”; Forensic Architecture, “Police Brutality.”

<sup>46</sup> Forensic Architecture, “Police Violence.”

<sup>47</sup> Forensic Architecture and Bellingcat, “Police Brutality.”

<sup>48</sup> Forensic Architecture and Bellingcat, “Police Brutality”; Michael Safi et al., “‘I’m Getting Shot’: Attacks on Journalists Surge in US Protests,” *The Guardian*, June 5, 2020, <https://www.theguardian.com/media/2020/jun/05/im-getting-shot-attacks-on-journalists-surge-in-us-protests>.

From an environmental justice standpoint, the police at these Black Lives Matter protests have created unsafe environments characterized by significant risk of bodily harm as a response to individuals speaking out against social injustices. These Black Lives Matter supporters were evoking their first amendment rights to peaceably assemble in order to demand an end to police targeting of Black bodies and, consequently, an end to the environmental harms associated with this process. Nevertheless, while the seventh principle of environmental justice established by the First National People of Color Environmental Leadership Summit “demands the right to participate as equal partners at every level of decision making, including needs assessment, planning, implementation, enforcement and evaluation,”<sup>49</sup> those attempting to make their voices heard to affect public policy in regard to the policing of their communities were met with overwhelming violent suppression. As evidenced by the vast documentation of these incidents, police have not only failed to de-escalate tensions at the Black Lives Matter protests but have also been the predominant perpetrators of violence at otherwise peaceful demonstrations. In addition, the First National People of Color Environmental Leadership Summit’s 15th principle claims that “Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms,”<sup>50</sup> yet the images of these heavily armed police forces and federal agents intimidating the crowds, attacking civilians, and kidnapping protesters bear striking resemblance to a military occupation of the same cities they were hired to “protect and serve.” Indeed, the Forensic Architecture team has come to a similar conclusion from analyzing the cases of police brutality emerging during the protests, stating, “Out of [the] data

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<sup>49</sup> People of Color Environmental Leadership Summit, “Principles.”

<sup>50</sup> People of Color Environmental Leadership Summit, “Principles.”

emerges a picture of police departments that behave more like paramilitaries than public servants.”<sup>51</sup>

Yet another principle of environmental justice violated by law enforcement at these Black Lives Matter protests is that which “demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.”<sup>52</sup> While police have shown little restraint in antagonizing, arresting, assaulting those who show up for the Black Lives Matter protests, they have demonstrated an amicable demeanor towards far-right and white supremacist groups participating in counter protests. These blatant double standards are evident from the limited police presence at Proud Boys rallies in which many participants were armed, the photos of police officers posing and shaking hands with far-right militia groups, the advice given to these groups about how to avoid arrests while demonstrating, and the documented cases of police standing by idly as white supremacists attack Black Lives Matter protesters.<sup>53</sup> As a result, we see a clear pattern of discrimination and bias in which the United States police force targets Black Lives Matter supporters as “sacrificial” or “disposable” populations that are undeserving of bodily security while uplifting groups like the Proud Boys who regularly intimidate and commit hate crimes against Black communities. The central distinction between these two groups met with contrasting police conduct is, of course, race. Whereas the Black Lives Matter protesters are largely composed of Black people, people of color, and white folks who advocate for the de-marginalization of racial minorities, the far-right groups are mostly composed of white men who refuse to give up their position as racial oppressors. Just as Black

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<sup>51</sup> Forensic Architecture, “Police Brutality,” 2:28.

<sup>52</sup> People of Color Environmental Leadership Summit, “Principles.”

<sup>53</sup> Forensic Architecture, “Police Brutality”; Forensic Architecture and Bellingcat, “Police Brutality.”

Codes were used to incarcerate former slaves and exploit their labor through convict leasing in the post-Civil War era, the police force maintains preferential treatment towards the groups seeking to reinforce the existing racialized systems that breed environmental injustices, and it simultaneously uses its power to undermine the efforts of those aiming to dismantle such systems. Thus, the police have reinforced their status as a function of white supremacy through their response to the Black Lives Matter protests.

As Brian Castner, the Senior Crisis Advisor on Arms and Military Operations at Amnesty International summarizes the situation, “The analysis is clear: when activists and supporters of the Black Lives Matter movement took to the streets in cities and towns across the USA to peacefully demand an end to systemic racism and police violence, they were overwhelmingly met with a militarized response and more police violence.”<sup>54</sup> On the whole, the indiscriminate and widespread police violence enacted against those at Black Lives Matter protests, especially in contrast to treatment of white supremacist groups, represents an environmental injustice that violates the principles of meaningful involvement in the decision making process, freedom from militarized occupation of land, and freedom from discriminatory public policy. Nevertheless, the overt, physical attacks against these protesters represent just one element of the environmental violence inflicted by police during these demonstrations. Another, more covert tactic used by the police force involves the confiscation and obstruction of personal protective equipment and other necessary supplies meant to protect protesters from the coronavirus pandemic.

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<sup>54</sup> “USA: End Unlawful Police Violence Against Black Lives Matter Protests,” *Amnesty International*, June 23, 2020, <https://www.amnesty.org/en/latest/news/2020/06/usa-end-unlawful-police-violence-against-black-lives-matter-protests/>.

### *Obstructing Health and Safety Resources*

In addition to the explicit acts of direct violence demonstrated by police at these Black Lives Matter protests, there have also been numerous cases in which officers have weaponized the ongoing coronavirus crisis against the protesters by tampering with resources designated to keep protesters healthy and safe, including masks, water, and medical supplies. By undermining the protective measures put in place by protesters and organizers, these officers have demonstrated a willingness, if not an active desire, to take advantage of the crowded environments of the protests and to facilitate the transmission of the virus among those speaking out against police brutality.

One such police tactic that has been repeatedly employed is the forceful removal of protesters' face masks before exposing them to chemical respiratory irritants such as pepper spray and tear gas. For instance, a report from August 22, 2020 in Portland, OR reveals, "Four officers arrest a journalist, and another officer rips the facemask off another journalist recording the arrest before setting off a tear gas canister at their feet."<sup>55</sup> Another account from August 28, 2020 in the same city reads, "Three officers have piled onto a protester who is now fully restrained. They take off the protester's mask and pepper-spray them in the face."<sup>56</sup> Forensic Architecture has recorded at least 10 distinct occasions in which similar incidents have occurred between the end of May 2020 and the beginning of September 2020 in New York City; Columbus, OH; Washington, D.C.; and Philadelphia, PA.<sup>57</sup> Because scientists overwhelmingly concur that, when social distancing is not possible, the use of face masks is one of the most

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<sup>55</sup> Forensic Architecture and Bellingcat, "Police Brutality."

<sup>56</sup> Forensic Architecture and Bellingcat, "Police Brutality."

<sup>57</sup> Forensic Architecture and Bellingcat, "Police Brutality."

effective ways to reduce the spread of COVID-19,<sup>58</sup> the fact that police are intentionally impeding protesters' masks from serving their intended function exposes an attitude that protesters do not deserve protection from the disease. Even more, tear gas and pepper spray are both known to induce coughing, which is also a common mode in which the coronavirus becomes airborne and is transmitted from person to person. As a result, when the now mask-less individuals are targeted with these chemical agents, the assaults essentially transform the densely populated protesting sites into coronavirus "sacrifice zones" in which the whole crowd of demonstrators face greater risk of becoming potential receptors of the virus.

Yet another example of police obstructing the use of personal protective equipment at protests is the interception of mask shipments meant for protesters. Due to an awareness of the pernicious health implications of the coronavirus, the dangers of large gatherings, and the necessary protective function of face coverings, organizers at these Black Lives Matter protests have tried their best to ensure the health and safety of demonstrators by strongly encouraging everyone in attendance to wear a mask. Most organizers have even kept a stock of extra masks available for those who either do not have a mask and/or for those whose masks have been damaged or otherwise compromised throughout the course of the event. Nevertheless, following the death of George Floyd, tens of thousands of dollars' worth of facemasks en route to protests in St. Louis, New York City, Minneapolis, and Washington, D.C. were confiscated by law enforcement before they ever reached their final destinations.<sup>59</sup> According to the analysis of Chelsea Fuller, a spokesperson for the Movement for Black Lives, "... it appears [the government

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<sup>58</sup> "Scientific Brief: Community Use of Cloth Masks to Control the Spread of SARS-CoV-2," Centers for Disease Control and Prevention, last modified November 20, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/more/masking-science-sars-cov2.html>.

<sup>59</sup> Ashley Collman, "Law Enforcement Mysteriously Seized Hundreds of Face Masks That Were Being Mailed to George Floyd Protesters, Rights Group Says," *Business Insider*, June 5, 2020, <https://www.businessinsider.com/george-floyd-protesters-face-masks-seized-movement-for-black-lives-2020-6>.

and police] want to ensure that people who protest are susceptible to the same deadly pandemic that they have failed miserably at stopping.”<sup>60</sup> Indeed, by denying protesters access to these potentially life-saving masks, the police indicate that they do not wish for the protesters to be protected from infection. In this sense, we can see that the police not only harm the bodily environments of the protesters by engaging in direct acts of physical violence, but they are also clearing a path for the virus to inflict a delayed attack against the bodies of protesters as well as the bodies of those in the protesters’ direct communities.

On top of interfering with protesters’ protective masks, police at Black Lives Matter protests have also destroyed water and medical supplies made available to demonstrators. One specific instance that garnered media attention was the sacking of a medical tent in Asheville, North Carolina. Photos from the incident depict Asheville police officers slashing hundreds of water bottles with knives as well as compromising other supplies meant to support the health and safety of protesters including food, bandages, and saline solution by dumping them into the streets.<sup>61</sup> These disturbing images of police officers carelessly wasting huge amounts of fresh drinking water not only demonstrate a complete lack of respect for the protesters’ basic needs and for the amount of Earth’s resources consumed in producing these water bottles, but the images are also symbolic of a larger trend of environmental injustice in this country. For those of us with the privilege to be able to consistently rely on our tap for safe drinking water at a relatively low cost, it is often easy to forget that potable water is a scarce resource amidst the backdrop of a global water crisis.

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<sup>60</sup> Collman, “Law Enforcement.”

<sup>61</sup> John Boyle, “Asheville Protests: Mayor Manheimer Wants Explanation of Police Destruction of Medical Station,” *The Asheville Citizen Times*, June 4, 2020, <https://www.citizen-times.com/story/news/local/2020/06/03/asheville-mayor-wants-police-explain-destruction-medical-station/3134785001/>.

Even though fresh water is an essential resource for sustaining life, all one has to do is look to cases like Flint, Michigan where residents still cannot trust the safety of their water supply after six years from the initial contamination to see that, in the United States, not all people are treated as equally worthy of this basic need. We can also look to Standing Rock where the construction of the Dakota Access Pipeline, despite major protests, has jeopardized the safety of the Standing Rock Sioux Tribe's water supply.<sup>62</sup> As a result, the images from the Black Lives Matter protest in Asheville represent more than just the actions of a few police officers at a single event, but rather a long-standing pattern of the state taking away the basic means of life from communities of color and, more specifically, from Black and Indigenous communities. Because the water bottles at the protests were meant to keep the demonstrators hydrated as well as help flush tear gas and pepper spray out of their skin and bodies, the destruction of this essential resource only served to further undermine the well-being of these individuals at a time when their health is already in a precarious situation due to the pandemic.

Moreover, the ninth principle of environmental justice from the First National People of Color Environmental Leadership Summit explicitly states, "Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care."<sup>63</sup> However, while Black Lives Matter protesters have been clear victims of environmental injustice as a result of police brutality, obstructed mask use, and destruction of water supplies, the police have also gone out of their way to prevent protesters from receiving quality healthcare by also targeting medics and damaging medical supplies, begetting further environmental injustice.

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<sup>62</sup> Victoria M. Massie, "To Understand the Dakota Access Pipeline Protests, You Need to Understand Tribal Sovereignty," *Vox*, October 28, 2016, <https://www.vox.com/2016/9/9/12851168/dakota-access-pipeline-protest>.

<sup>63</sup> People of Color Environmental Leadership Summit, "Principles."

Many have argued that, because the spread of the coronavirus is such a huge concern in large crowds, the protesters should not be gathering at all until the health crisis comes to an end. Arguments such as this one, however, suggest that these Black Lives Matter protesters deserve to get sick for not complying with social distancing guidelines. Nevertheless, the fact that police killed 164 Black people within the first eight months of 2020<sup>64</sup> shows that the pandemic has not curbed police brutality. Further, despite the pandemic, protesters maintain their first amendment rights to organize and speak out against injustice. Thus, arguments which imply that people create their own health risks by protesting ignore the existing health and safety threats imposed daily on Black communities by police. Even more, while organizers of the protests have sought to reduce the health risks at these events by providing and wearing face masks as well as keeping water and medical supplies on hand, the police interference with such protective measures demonstrates an active interest in undermining the integrity of protesters' health and in using the coronavirus as an additional agent of environmental violence against those speaking out.

### *Health and Environmental Consequences of Chemical Gas Use in Portland, OR*

Following the murders of George Floyd and Breonna Taylor, the city of Portland, Oregon garnered national attention for the scale and pervasiveness of its Black Lives Matter protests as well as the police aggression that rose in response to such demonstrations. One particular police tactic employed against the Portland protesters that has raised serious health and environmental concerns is the extensive use of tear gas in the city, most notably chlorobenzylidenemalononitrile (CS). Police in Portland deployed this chemical crowd dispersal agent against protesters several

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<sup>64</sup> Li Cohen, "Police in the U.S. Killed 164 Black People in the First 8 Months of 2020. These Are Their Names," *CBS News*, September 10, 2020, <https://www.cbsnews.com/pictures/black-people-killed-by-police-in-the-u-s-in-2020/>.

times a night for more than 100 consecutive days before Mayor Ted Wheeler banned the force from using CS gas on September 10, 2020 due to legal pressures from various civil rights and environmental organizations.<sup>65</sup> This ban, however, did not include other chemical irritants such as chloroacetophenone (CN) and oleoresin capsicum (OC, commonly referred to as pepper spray), and this ban issued no authority over the tactics used by the federal agents occupying the city.<sup>66</sup> Although the police force and its supporters have defended the use of tear gas against protesters by pointing to the temporary and non-lethal nature of their effects, there has been significant pushback by health and environmental experts against this assessment, indicating that the consequences of such police tactics may be much more damaging given the unprecedented quantity and duration of tear gas deployment as well as the concurrent context of the coronavirus pandemic.

According to the Centers for Disease Control and Prevention, the immediate and short-term health effects of tear gas exposure include burning of the eyes, skin, nose, and mouth; excessive tearing and blurred vision; runny nose; tightness in the chest; shortness of breath; coughing; choking sensation; and/or nausea and vomiting.<sup>67</sup> Considering the ongoing presence of a highly contagious and deadly virus that is spread through contact with respiratory droplets, perhaps the most concerning symptoms of this tear gas exposure are those which relate to the irritation of the respiratory system. Even though the effects of tear gas are expected to subside

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<sup>65</sup> Monica Samayoa, “More than 4 Months of Tear Gas in Portland Raises Concerns for Environment,” *OPB*, October 23, 2020, <https://www.opb.org/article/2020/10/23/tear-gas-environment-impact-portland/>; Alex Zielinski, “After Months of Protests, Portland’s Mayor Bans CS Gas,” *The Stranger*, September 10, 2020, <https://www.thestranger.com/slog/2020/09/10/44450708/after-months-of-protests-portlands-mayor-bans-cs-gas>.

<sup>66</sup> Zielinski, “After Months of Protests.”

<sup>67</sup> “Facts About Riot Control Agents,” Centers for Disease Control and Prevention, last modified May 16, 2019, <https://emergency.cdc.gov/agent/riotcontrol/factsheet.asp>.

approximately 15-30 minutes after a person has ceased contact with the chemical agent,<sup>68</sup> the initial interaction between protesters and tear gas that is operating as intended is sufficiently dangerous enough to create a condition in which hundreds of individuals simultaneously break into coughing fits, increasing these Black Lives Matter supporters' risk of infection with COVID-19. Just as when police rip protective face masks off of protesters, the persistent use of tear gas at these densely populated demonstrations represents a disregard for the security of protesters' bodily environments. Moreover, because several of the health effects of tear gas exposure mimic those of the coronavirus, it can be difficult to discern whether a person is coughing or experiencing shortness of breath due to the virus or due to the lingering teargas residue at the site of the protest. This can place a lot of psychological stress on demonstrators who are unsure of the source of their symptoms or the symptoms of those around them. In this sense, when protesters are repeatedly exposed to these chemical irritants, they are not only treated as sacrificial populations in the face of the current health crises, but the police also actively transform the environmental conditions into a weapon against the Black Lives Matter supporters in an effort to silence their voices.

In addition to the immediate bodily reaction to these chemical crowd control agents, tear gas exposure has the potential to cause health consequences that last beyond the duration of the exposure. For instance, Sven-Eric Jordt, a professor at Duke University's School of Medicine, reports, "There are sufficient data proving that tear gas can increase the susceptibility to pathogens, to viruses."<sup>69</sup> This claim is substantiated by a study conducted by Hout et al., which

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<sup>68</sup> Centers for Disease Control and Prevention, "Facts About Riot Control Agents."

<sup>69</sup> Bill Chappell, "Portland, Ore., Mayor Bans Police Use of Tear Gas at Protests," *NPR*, September 10, 2020, <https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/09/10/911531561/portland-ore-mayor-bans-police-use-of-tear-gas-at-protests>.

found that military recruits who were exposed to CS during their U.S. Army Basic Combat Training were more likely to develop an acute respiratory illness following said exposure.<sup>70</sup> These ailments include, but are not limited to, the common cold, influenza, pharyngitis, bronchitis, and pneumonia.<sup>71</sup> As Dr. William Lambert, a professor of epidemiology at OHSU PSU School of Public Health, explains, “CS and capsaicin are both powerful oxidating agents which burn the mucous membrane so that the eyes, nose, and throat are left with lasting impairment for up to three months to fight viral infections.”<sup>72</sup> Thus, individuals tear gassed at the Black Lives Matter protests not only experience greater risk of contracting COVID-19 during the initial interaction with the respiratory irritant, but they are also made more susceptible to the virus in the weeks and months following this exposure.

Asthma is another health issue that complicates the impacts of tear gas exposure. Anecdotal evidence not only suggests that prolonged interactions with these chemical agents can potentially cause individuals to develop asthma,<sup>73</sup> but it also indicates that significant exposure can result in severe asthmatic reactions that may require hospitalization in individuals who already suffer from the condition.<sup>74</sup> According to Rothenberg et al., “... the most severe complications reported after tear gas deployment involve asthma attacks.”<sup>75</sup> Because Black and

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<sup>70</sup> Joseph J. Hout et al., “O-Chlorobenzylidene Malononitrile (CS Riot Control Agent) Associated Acute Respiratory Illnesses in a U.S. Army Basic Combat Training Cohort,” *Military Medicine* 179, no. 7 (July 2014): 793–98, <https://doi.org/10.7205/MILMED-D-13-00514>.

<sup>71</sup> Hout et al., “O-Chlorobenzylidene Malononitrile.”

<sup>72</sup> Cristin Severance, “Verify: What’s the Difference Between Tear Gas and CS Gas Used by Portland Police?” *KGW*, June 8, 2020, <https://www.kgw.com/article/news/local/protests/what-is-the-difference-between-tear-gas-and-cs-gas-used-by-portland-police/283-b83583e6-c77f-4f83-9571-da35c33ef9a9>.

<sup>73</sup> Centers for Disease Control and Prevention, “Facts About Riot Control Agents.”

<sup>74</sup> Pierre-Nicolas Carron and Bertrand Yersin, “Management of the Effects of Exposure to Tear Gas,” *British Medical Journal* 338, no. 7710 (2009): 1556.

Indigenous populations report higher rates of asthma than other races in America<sup>76</sup> (due to a long history of targeted pollution and contamination of their environments) and because asthma increases the risk of severe health impacts from tear gas exposure, it is evident that the police use of these crowd dispersal agents induce disparate levels of risk upon exposure based on race. Thus, the continuous release of CS gas into the atmosphere results in a greater health concern for these already marginalized populations, inherently violating the fundamental principle of environmental justice which holds that no group should bear a disproportionate burden of the consequences of environmental activities.

Even more, while it is commonly accepted that most of the symptoms of tear gas exposure are only temporary and will cease once a person is no longer in contact with the contaminant, these expectations are based on limited research and the assumption that the interaction with the chemical agent is not significantly prolonged. A major issue with our current understanding of the health impacts of CS gas exposure is that the evidence supporting the conclusion that most of the effects should resolve shortly after a person is no longer in contact with the substance comes from controlled studies of healthy male volunteers, and there is a significant lack of research conducted on the way this substance affects women, children, and individuals with pre-existing medical conditions.<sup>77</sup> Also, because Portland has released an unprecedented volume of CS gas over a sustained period of time, there are no prior comparable

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<sup>75</sup> Craig Rothenberg et al., “Tear Gas: An Epidemiological and Mechanistic Reassessment,” *Annals of the New York Academy of Sciences* 1378, no. 1 (August 2016): 96–107, <https://doi.org/10.1111/nyas.13141>.

<sup>76</sup> “Current Asthma Demographics,” American Lung Association, last modified July 6, 2020, <https://www.lung.org/research/trends-in-lung-disease/asthma-trends-brief/current-demographics>.

<sup>77</sup> Rothenberg et al., “Tear Gas”; “Tear Gas: Frequently Asked Questions,” Oregon Health Authority: Toxic Substances, Oregon.gov, accessed January 6, 2021, <https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/TOXICSUBSTANCES/Pages/Tear-Gas.aspx>.

situations from which we can look to predict how these repeatedly exposed bodies might react to the substance. In this sense, the Black Lives Matter protesters in Portland as well as the city's residents are essentially treated as experimental guinea pigs in the face of such extensive exposure to the chemical agent.

One particular concern that has surfaced as a result of the nightly deployment of tear gas in Portland has been its hormonal impacts on people who menstruate. After inhaling a significant amount of tear gas at the protests, several women and trans men have reported irregularities with their periods that were abnormal for their bodies, including the onset of debilitating cramps, experiencing multiple periods within the same month or a single period lasting for the entire duration of the month, and getting a period when they had previously stopped menstruating due to their intake of testosterone or their particular birth control method.<sup>78</sup> While no conclusive evidence can be extrapolated to definitively conclude that the tear gas is the culprit of these irregularities, the coincidental timing of such health issues and unknown nature of such repeated interactions with CS gas are enough to cause serious suspicion and disquietude among the affected population. The fact that police continued to use this crowd dispersal tactic against the protesters with such great frequency and without complete certainty of the health ramifications of extensive exposure to the agent once again represents their willingness to discard the health and safety of Black Lives Matter supporters as a sacrificial population.

Beyond the immediate human health risks posed by the extensive use of tear gas, the considerable volume of these chemicals released in Portland has also raised major concerns about their ecological impacts. Even after the tear gas released into a crowd has settled and one

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<sup>78</sup> Rebecca Ellis, “‘It’s like They’re Testing It on Us’: Portland Protesters Say Tear Gas Has Caused Irregularities with Their Periods,” *OPB*, July 29, 2020, <https://www.opb.org/article/2020/07/29/tear-gas-period-menstrual-cycle-portland/>.

can no longer see the clouds of white smoke it produces, a large degree of the substance remains fixed in the environment until it is washed away by rainfall or through human intervention. During the summer months of 2020, which were particularly dry, Portland residents frequently reported seeing the residue from dried tear gas stuck to trees, dirt, and other surfaces as they passed through popular protesting sites in the daytime.<sup>79</sup> The concentration of this residue in the environment was strong enough to cause the tear gas' signature irritation of the eyes and respiratory system long after the chemicals had been deployed.<sup>80</sup> Without washing this residue away, it is very likely that these chemicals would drift inside of nearby buildings and attach themselves to clothing, causing more sustained environmental safety concerns for humans.

Nevertheless, the power washing of the streets as well as Portland's heavy autumn and winter rainfall merely shifted the focus of the environmental concerns of this chemical output to the city's aquatic ecology. After passing through the city's storm drains, the toxic chemical residue, as well as fragments from the tear gas munitions, made their way into the Willamette River. One particular issue that poses a grave risk to many fish species is that the pepper balls and munition fragments that end up in the river are roughly the same size as the fishes' food, meaning they are likely to ingest these toxic materials.<sup>81</sup> Even more, Portland's Bureau of Environmental Services, which had been testing stormwater catch basins in the city to determine the extent of the ecological threat posed by this unprecedented use of chemical crowd dispersal agents, reported much higher levels of toxins such as cyanide, chromium, and zinc in the basins

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<sup>79</sup> Monica Samayoa and Lauren Dake, "60-plus Days of Tear Gas Leaves Lingering Questions About Environmental Impacts," *OPB*, July 31, 2020, <https://www.opb.org/article/2020/07/31/tear-gas-environmental-impact-portland/>; Jason Wilson, "Teargas Used on Portland Protesters Risks 'Grave Health Hazards', Says Lawsuit," *The Guardian*, October 20, 2020, <http://www.theguardian.com/us-news/2020/oct/20/teargas-portland-protests-may-pose-grave-health-hazards-lawsuit>.

<sup>80</sup> Samayoa and Dake, "60-plus Days."

<sup>81</sup> Samayoa, "More than 4 Months."

near protesting sites.<sup>82</sup> In addition, aquatic ecologist and lead scientist at DAPPER Stats (a Portland-based ecological consultant company) Juniper Simonis has been conducting their own research on the toxicity of these chemical weapons and their environmental impacts, collecting chemical munitions at protests and testing river water, soil, and vegetation samples from the bank of the Willamette.<sup>83</sup> According to Simonis' analysis of the situation, "These things that are being pumped down into the river right now are full of heavy metals that bioaccumulate. We're talking about zinc, we're talking about lead, we're talking about aluminum, we're talking about chromium.... Really gnarly stuff that isn't just going to move through the ecosystem and move on, it's going to stay here and it's going to impact the river and people for generations."<sup>84</sup>

Because this is the first time a city in the United States has ever experienced such a prolonged exposure to these substances, there are still a lot of unknowns regarding the environmental impacts of tear gas contamination that require further research. This uncertainty leaves room for potentially disastrous outcomes, which has led environmental groups including Northwest Center for Alternatives to Pesticide (NCAP), Willamette Riverkeeper, Cascadia Wildlands, Neighbors for Clean Air (NCA), 350 Portland, and ACLU of Oregon to sue the Department of Homeland Security for "deploying 'an unprecedented amount of dangerous chemical weapons' without assessing their environmental impacts beforehand, as required by the National Environmental Policy Act."<sup>85</sup> The fact that law enforcement officers are willing to continue releasing these toxic chemicals into the atmosphere in order to achieve their desired

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<sup>82</sup> Andrew Selsky, "Environmental Groups Sue Over Portland Tear Gas Use," *AP NEWS*, October 20, 2020, <https://apnews.com/article/lawsuits-oregon-environment-environmental-policy-portland-bf9025735e2687b0f5fa71d8587a45bc>.

<sup>83</sup> Samayoa, "More than 4 Months."

<sup>84</sup> Samayoa, "More than 4 Months."

<sup>85</sup> Selsky, "Environmental Groups Sue."

ends with the protesters, without regard to any potential ecological ramifications, falls in violation of the first principle of environmental justice established at the First National People of Color Environmental Leadership Summit which “affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.”<sup>86</sup> Clearly, the substantial output of toxic chemicals into the environment caused by the nightly deployment of tear gas is not akin to treating Mother Earth as sacred, nor is it representative of an environmentally just framework that recognizes the basic human right to live in a healthful, clean, and sustainable environment.

### *Conclusion*

On the whole, the police brutality, interference with health resources, and excessive deployment of tear gas against Black Lives Matter protesters following the deaths of George Floyd and Breonna Taylor constitute grave environmental injustices by jeopardizing the health and safety of protesters’ bodily and natural environments, especially as these risks are intensified by the coronavirus pandemic. Through tactics that facilitate the spread of COVID-19, such as confiscating protective face masks from individuals in dense crowds and dispersing toxic respiratory irritants into the air that induce coughing and weaken the body’s immune system, law enforcement officers have effectively weaponized the virus against protesters and demonstrated their disregard for these Black Lives Matter supporters as a disposable population in the face of the ongoing health crisis. Even so, we must also recognize that this pattern of violence perpetrated by police officers is not a new phenomenon specific to the recent rise in the Black Lives Matter movement, nor is the coronavirus pandemic the precipitating cause of these

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<sup>86</sup> People of Color Environmental Leadership Summit, “Principles.”

environmental injustices. Rather, issues of violent policing have a long history of plaguing communities of color in America, and the tactics used by law enforcement in response to these Black Lives Matter protesters would likely be similar, if not the same, regardless of the current health situation, and these tactics would still be considered acts of environmental injustice. The role of the coronavirus in this situation, however, is to act as a threat accelerator; that is, the pandemic serves to exacerbate the pre-existing environmental injustices that result from policing in America.

The following chapter of this thesis shifts focus from policing to incarceration, analyzing the way in which the coronavirus pandemic has exacerbated issues of environmental injustice posed by this other facet of the American criminal justice system. Just as over policing disproportionately plagues communities of color, these communities are similarly overrepresented in prisons, jails, and immigrant detention centers where they are subjected to further environmental violence. More explicitly, the next chapter addresses the rapid spread of COVID-19 in carceral facilities and maintains that the state's failure to prevent such outbreaks, in addition to the toxic conditions within these spaces which make incarcerated folk more vulnerable to the virus, violate environmental justice principles of indispensability, bias-free policy, and environmental autonomy.

### Chapter 3: COVID-19, Incarceration, and Environmental Injustice

As coronavirus virus rates continue to surge in the United States with hundreds of thousands of new cases reported daily, one demographic that is frequently overlooked, yet at the same time has suffered disproportionately in the face of this public health crisis, is the nation's incarcerated population. This chapter presents an overview of COVID-19 infection and death rates in prisons, jails, and immigrant detention centers across the United States as well as the existing environmental circumstances within these spaces that contribute to the disproportionately negative health outcomes for incarcerated folks. I then analyze the current health conditions in carceral facilities through an environmental justice lens, arguing that the lack of preventative health measures and precautions, poor quality medical care, and absence of environmental autonomy within these spaces violate the fundamental principles of this framework.

#### *Rates of Coronavirus Infection in Carceral Facilities*

Without a doubt, prisons in America have become COVID-19 hotspots as the virus is rapidly spread between and among incarcerated individuals and prison staff. Working in collaboration with The Associated Press, The Marshall Project has been collecting coronavirus infection data from state and federal prisons across the United States. As of April 23, 2021, The Marshall Project reports that *at least* 395,915 incarcerated individuals had tested positive for COVID-19, and of this population, at least 2,572 had died due to infection with the disease.<sup>87</sup> Although the total U.S. prison population is smaller than the population of most countries, the number of coronavirus cases within these carceral facilities alone is higher than the number of

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<sup>87</sup> "A State-by-State Look at Coronavirus in Prisons," *The Marshall Project*, April 23, 2021, <https://www.themarshallproject.org/2020/05/01/a-state-by-state-look-at-coronavirus-in-prisons>.

total confirmed cases in many of the world's largest nation-states. In comparing the number of confirmed cases in U.S. prisons to the rest of the world during the summer of 2020 (between May 1 and August 1) the Prison Policy Initiative indicates that “[if] these mass incarceration-linked cases were the reported caseload of a country, that country would rank 5th in the world,” falling only behind the United States, Brazil, India, and Russia.<sup>88</sup> Even so, because many prisons only test those who present symptoms of the virus or opt not to test their inmates at all, the actual number of cases and COVID-19 deaths among incarcerated individuals is likely much higher than the figures reported by The Marshall Project.<sup>89</sup> Despite the difficulties in calculating the exact number of cases within the prison population, The Marshall Project estimates that by December 2020, roughly one out of every five people incarcerated in U.S. prisons had suffered from infection of the disease as opposed to only one out of every 20 individuals in the general American public, suggesting that infection rates were four times higher within prison facilities than in the nation as a whole.<sup>90</sup> Incarcerated persons are also dying at a disproportionate rate from the coronavirus than the American population as a whole. According to The Marshall Project, “Nationwide, the mortality rate for COVID-19 among prisoners is 45 percent higher than the overall rate.”<sup>91</sup>

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<sup>88</sup> Gregory Hooks and Wendy Sawyer, “Mass Incarceration, COVID-19, and Community Spread,” *Prison Policy Initiative*, December 2020, <https://www.prisonpolicy.org/reports/covidspread.html>.

<sup>89</sup> Beth Schwartzapel, Katie Park, and Andrew Demillo, “1 in 5 Prisoners in the U.S. Has Had COVID-19,” *The Marshall Project*, December 18, 2020, <https://www.themarshallproject.org/2020/12/18/1-in-5-prisoners-in-the-u-s-has-had-covid-19>; Kristen M. Budd and Bianca E. Bersani, “The Incarceration State in the Age of COVID-19,” in *Social Problems in the Age of COVID-19 Vol 1*, ed. Kristen M. Budd et al., 1st ed., (Bristol University Press, 2020), 15, <https://doi.org/10.2307/j.ctv15d81tx.7>; Brendan Saloner et al., “COVID-19 Cases and Deaths in Federal and State Prisons,” *JAMA* 324, no. 6 (August 2020): 19, <https://doi.org/10.1001/jama.2020.12528>; “Covid-19’s Impact on People in Prison,” Equal Justice Initiative, last updated January 7, 2021, <https://eji.org/news/covid-19s-impact-on-people-in-prison/>.

<sup>90</sup> Schwartzapel, Park, and Demillo, “1 in 5 Prisoners.”

<sup>91</sup> Schwartzapel, Park, and Demillo, “1 in 5 Prisoners.”

Like prisons, immigration detention centers report exceedingly high rates of coronavirus infection as compared to the general American population. A report published by the Journal of the American Medical Association reveals, “On August 31, [the U.S Immigration and Customs Enforcement (ICE)] reported 5379 cumulative COVID-19 cases and 6 related deaths among its detainees.”<sup>92</sup> Because this investigation relied solely upon the data made publicly available by ICE from 92 of the 135 facilities across the United States, it is likely that these numbers are underestimates based on incomplete reporting and under-testing in the detention centers.<sup>93</sup> Still, the report finds that the rate of infection for detainees was 13.4 times that of the national rate at the time of the investigation.<sup>94</sup>

At the same time that these immigration detention centers are demonstrating severe inadequacies in mitigating the spread of COVID-19 among detainees, they are also linked to furthering contamination beyond the walls of these facilities. For instance, a study conducted by Detention Watch Network claims that, after controlling for other variables, the presence of an ICE facility in a county significantly increased that county’s risk for a COVID-19 outbreak as well as increased the likely severity of said outbreak in the spring of 2020.<sup>95</sup> These results follow similar patterns as the community transmission of the virus caused by prisons and jails.<sup>96</sup> Even more, the Detention Watch Network report finds these immigrant detention centers culpable for facilitating transmission of the virus internationally, pointing to instances in which facilities with

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<sup>92</sup> Parsa Erfani et al., “COVID-19 Testing and Cases in Immigration Detention Centers, April-August 2020,” *JAMA* 325, no. 2 (October 2020): 182-4, <https://doi.org/10.1001/jama.2020.21473>.

<sup>93</sup> Erfani et al., “COVID-19 Testing.”

<sup>94</sup> Erfani et al., “COVID-19 Testing.”

<sup>95</sup> Gregory Hooks, Bob Libal, and Setareh Ghandehari, “Hotbeds of Infection: How ICE Detention Contributed to the Spread of COVID-19 in the United States,” (Detention Watch Network, December 2020), 14.

<sup>96</sup> Hooks and Sawyer, “Mass Incarceration.”

active coronavirus cases deported untested individuals, only for those individuals to test positive for the virus shortly after their arrival in countries including India, Haiti, Guatemala, and El Salvador.<sup>97</sup> It is important to emphasize that the coronavirus threat in areas surrounding detention centers is a result of negligent policies stemming from the immigration enforcement institution, not the immigrants themselves. As Dr. Ranit Mishori, a professor at Georgetown University's School of Medicine and a senior medical advisor at Physicians for Human Rights, explains, "The United States has a long history of scapegoating immigrants for the spread of infectious diseases, yet medical evidence suggests that punitive immigration enforcement — such as packing detention facilities or scaring immigrants away from accessing medical care — is the true threat to public health."<sup>98</sup>

In both the case of prisons and immigration detention centers, the disproportionately high rates of coronavirus infection reflect environmental circumstances within these carceral spaces that result in a greater burden of the health crisis falling on those detained in such facilities. Thus, the statistics presented by The Marshall Project and the Journal of the American Medical Association necessarily indicate the presence of environmental injustices. Despite the alarming coronavirus conditions within these carceral spaces and their impact on the surrounding communities, though, prisons and ICE facilities are rarely mentioned in mainstream media regarding the pandemic. One reason for this lack of media attention is that issues affecting immigrant and incarcerated populations are often deemed a low priority. Both detained immigrants and incarcerated folks are commonly viewed as individuals who have "transgressed against society" by failing to comply with its rules and regulations, and these populations are

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<sup>97</sup> Hooks, Libal, and Ghandehari, "Hotbeds of Infection," 7.

<sup>98</sup> John Washington, "ICE Mismanagement Created Coronavirus 'Hotbeds of Infection' in and Around Detention Centers," *The Intercept*, October 9, 2020, <https://theintercept.com/2020/12/09/ice-covid-detention-centers/>.

thus considered less worthy of the basic human dignity and respect granted to free individuals. In essence, these detained populations are treated as disposable, opposing the critical environmental justice principle that upholds the indispensability of all people.<sup>99</sup>

Another important consideration is the fact that the incarceration and immigrant detention affect Black people and people of color more so than it does white populations due to our nation's system of racialized policing. Even outside of prisons, jails, and immigrant detention centers, the Centers for Disease Control and Prevention indicates that "Race and ethnicity are risk markers for other underlying conditions that affect health including socioeconomic status, access to health care, and exposure to the virus related to occupation," resulting in higher rates of coronavirus among Black, Indigenous, and Latinx populations.<sup>100</sup> As a result, it is evident that these carceral institutions, and consequently the increased risk of infection that is associated with them, follow existing patterns of environmental racism. In the following section, I explore more specifically the environmental factors within prisons and detention centers that contribute to these unjust health outcomes for detained individuals.

### *Environmental Conditions Exacerbating Poor Health Outcomes in Carceral Facilities*

Since the onset of the coronavirus pandemic, public health experts have emphasized the importance of taking preventative measures to limit the spread of the virus. These measures include social distancing (which entails maintaining a distance of at least six feet between oneself and others, avoiding large crowds or gatherings, and minimizing the total number of

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<sup>99</sup> Pellow, *Critical Environmental Justice*.

<sup>100</sup> "Hospitalization and Death by Race/Ethnicity," Centers for Disease Control and Prevention, last modified March 12, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.

people with whom one comes in direct contact), wearing face masks when social distancing is not possible, and regularly practicing exemplary sanitary habits. Nevertheless, routine procedures, cramped conditions, and limited access to resources within carceral spaces have made it impossible for confined individuals to exercise these precautions deemed “essential” for reducing risk of coronavirus infection. For example, communal living, bathroom, and food service facilities; frequent transfers of those in custody between institutions; and lack of consideration for hygienic standards (like performing pat-downs without wearing gloves or without changing gloves between inmates), all contribute to the rapid transmission of the virus in these carceral spaces by broadening detained individuals’ circles of contact.<sup>101</sup> Moreover, social distancing is simply not an option for these populations given the physical space limitations within these facilities. According to the Prison Policy Initiative, cells in correctional facilities are only required to provide “a 5X5-foot space for each person, leaving almost no room for maneuvering while maintaining the recommended 6 feet of distance between people... [but] in some facilities, beds can be as close as 3 feet apart.”<sup>102</sup> At the same time that detained populations are forced into close quarters with potential carriers of the virus, they are also denied adequate access to basic hygienic goods, like soap and protective face coverings.<sup>103</sup> In Etowah County Detention Center, where there was a significant coronavirus outbreak last June, several

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<sup>101</sup> Elizabeth A. Bradshaw, “Do Prisoners’ Lives Matter? Examining the Intersection of Punitive Policies, Racial Disparities and COVID-19 as State Organized Race Crime,” *State Crime Journal* 10, no. 1 (2021): 19; Budd and Bersani, “Incarceration State,” 14.

<sup>102</sup> Aleks Kajstura and Jenny Landon, “Since You Asked: Is Social Distancing Possible Behind Bars?” *Prison Policy Initiative*, April 3, 2020, <https://www.prisonpolicy.org/blog/2020/04/03/density/>.

<sup>103</sup> Hooks, Libal, and Ghandehari, “Hotbeds of Infection,” 5; Clarissa Donnelly-DeRoven, “Immigrants Detained by ICE Say They Were Punished for Requesting COVID-19 Tests,” *The Intercept*, December 3, 2020, <https://theintercept.com/2020/12/03/etowah-ice-detention-covid-outbreak/>; Dara Lind, “ICE Detainee Says Migrants Are Going on a Hunger Strike for Soap,” *ProPublica*, March 23, 2020, [https://www.propublica.org/article/ice-detainee-says-migrants-are-going-on-a-hunger-strike-for-soap?token=3-o2TVyAqASwdG65PPRjM0V-pxKrSOzK](https://www.propublica.org/article/ice-detainee-says-migrants-are-going-on-a-hunger-strike-for-soap?token=3-o2TVyAqASwdG65PPRjM0V-pxKrSOzK;); Kate Goldman, “No Masks, Disinfectant or Soap. This is Detention Amid a Pandemic,” *The New York Times*, April 2, 2020, <https://www.nytimes.com/2020/04/02/opinion/coronavirus-ice-immigration-detention.html>.

detained individuals reported receiving “only one disposable mask every three weeks.”<sup>104</sup>

Without a doubt, individuals confined in prisons, jails, and immigrant detention centers are expected to withstand the pandemic under conditions that amplify their risk of illness.

The inability for incarcerated folks and immigrants confined in ICE facilities to follow preventative COVID-19 guidelines stems largely from negligent policy making and a failure of carceral institutions to formulate a comprehensive health plan when the virus began spreading throughout the country. Because the involuntarily detained populations are given no control over the environment in which they are placed nor the resources made available to them, their health and well-being is completely at the mercy of the policy makers who operate these carceral facilities. Rather than taking precautions to ensure that everyone within the custodial settings had sufficient access to personal protective equipment and the ability to physically distance themselves from others, these policy makers have left those in prisons, jails, and ICE detention centers extremely vulnerable to infection. As stated in the second principle of environmental justice established at the First National People of Color Environmental Leadership Summit, “Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.”<sup>105</sup> When we look at the living conditions within carceral facilities, however, it is clear that the public health policies instituted during this pandemic, such as social distancing guidelines and mask mandates, are not universally applied nor accessible to incarcerated nor detained immigrant populations. Instead, these populations are subjected to environmental conditions that intensify the risk of coronavirus infection and render mass outbreaks inevitable. It is evident that the coronavirus management policies of carceral

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<sup>104</sup> Donnelly-DeRoven, “Immigrants Detained by ICE.”

<sup>105</sup> People of Color Environmental Leadership Summit, “Principles.”

institutions do not demonstrate a “mutual respect” for those confined within them and are therefore indicative of environmental injustice.

Another major issue contributing to the rampant spread of COVID-19 in prisons, jails, and immigrant detention centers is insufficient testing of the confined populations. Viral testing for COVID-19 is important for the mitigation of infection rates because it allows for easier identification of individuals who have come into contact with the virus; this information can then be used to quarantine individuals who test positive or who have come into contact with someone who has tested positive (including those who are asymptomatic) and keep them separate from the uninfected population. Nevertheless, a report prepared by the ACLU and Prison Policy Initiative reveals that by the end of June 2020, only five states (Massachusetts, Michigan, Tennessee, West Virginia, and Vermont) had completed “comprehensive testing of the population in state prisons.”<sup>106</sup> Considering the abundance of risk factors for COVID-19 outbreaks in prisons, these low levels of testing are not only incredibly irresponsible, but also highly dangerous. Additionally, several ICE facilities have come under scrutiny for their active attempts to limit coronavirus testing among detainees. For instance, Clarissa Donnelly-DeRoven of *The Intercept* reports that solitary confinement (a form of psychological torture, according to United Nations human rights experts<sup>107</sup>) was used at Etowah County Detention Center as a tactic to intimidate detainees into signing waivers that revoked their requests for coronavirus tests.<sup>108</sup> In December 2020, a federal judge also condemned the Mesa Verde ICE Processing Center after it

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<sup>106</sup> Emily Widra and Dylan Hayre, “Failing Grades: States’ Responses to COVID-19 in Jails and Prisons,” (American Civil Liberties Union and Prison Policy Institute, June 25, 2020) 5.

<sup>107</sup> Nils Melzer, “United States: Prolonged Solitary Confinement Amounts to Psychological Torture, Says UN Expert,” United Nations Human Rights Office of the High Commissioner, accessed February 16, 2021, <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25633>.

<sup>108</sup> Donnelly-DeRoven, “Immigrants Detained by ICE.”

experienced a massive COVID-19 outbreak in the facility. The judge wrote that ICE officials portrayed a “conscious avoidance of widespread testing for fear that positive tests would require them to take measures to protect the safety of detainees that they preferred not to take.”<sup>109</sup> In other words, ICE officials could reasonably assume the high probability of infection among detainees yet deliberately refrained from testing the population, opting instead to utilize the lack of confirmed cases as a justification for maintaining the status quo and protecting profits. The lack of coronavirus testing in prisons, jails, and detention centers suggests a prevalent indifference for the health and safety of those detained within these carceral institutions. This indifference falls in direct conflict with the foundational environmental justice assumption that all persons deserve an environment that is clean, safe, and healthful.

Not only are the people detained in carceral facilities more likely to contract COVID-19 due to their hazardous environmental conditions, but they are also more likely to experience severe illness from the virus once infected. “Severe illness from COVID-19,” according to the Centers for Disease Control and Prevention, “is defined as hospitalization, admission to the ICU, intubation or mechanical ventilation, or death.”<sup>110</sup> One of the major risk factors for developing these complications with COVID-19 is the presence of underlying medical conditions in patients. Not surprisingly, prison and jail populations report high rates of these chronic health issues. A study conducted by epidemiologists Ingrid Binswanger, Patrick Krueger, and John Steiner reports that incarcerated individuals suffer disproportionately from health problems such as

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<sup>109</sup> Lawyers’ Committee for Civil Rights of the San Francisco Bay Area, “Court Slams ICE for Handling of COVID at Mesa Verde,” press release, December 3, 2020, <https://lccrsf.org/newsroom/news-press-releases/court-slams-ice-for-handling-of-covid-at-mesa-verde/>.

<sup>110</sup> “People with Certain Medical Conditions,” Centers for Disease Control and Prevention, last modified February 3, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>.

hypertension, asthma, hepatitis, and cancer,<sup>111</sup> all of which are conditions the Centers for Disease Control and Prevention indicates are linked to increased risk for severe illness from the coronavirus.<sup>112</sup> Binswanger et al. conclude, “Jail and prison inmates had a higher burden of most chronic medical conditions than the general population even with adjustment for important sociodemographic differences and alcohol consumption.”<sup>113</sup> Similar research conducted by Harvard physicians at the Cambridge Health Alliance and Harvard Medical School corroborates these results, finding that “Compared to other Americans of the same age, the 1.2 million state prison inmates are 31 percent more likely to have asthma, 55 percent more likely to have diabetes, and 90 percent more likely to have suffered a heart attack.”<sup>114</sup> Because of the increased prevalence of these conditions among incarcerated populations, these individuals are made even more vulnerable to the potentially lethal impacts of this pandemic.

The high rates of chronic illness within prisons and jails are no coincidence. Indeed, the quality of one’s external environment has a large impact on one’s health, and America’s carceral institutions are notorious for detaining individuals in facilities that are characteristically unclean, unsafe, and neglected. Not only are detained populations frequently exposed to toxic chemicals due to the fact that these carceral centers are often built in close proximity to wastelands such as coal ash dumps, hydraulic fracking sites, and nuclear plants,<sup>115</sup> but most incarcerated folks and

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<sup>111</sup> Ingrid Binswanger, Patrick Krueger, and John Steiner, “Prevalence of Chronic Medical Conditions Among Jail and Prison Inmates in the USA Compared with the General Population,” *Journal of Epidemiology and Community Health* 63, no. 11 (August 2009): 912–19, <https://doi.org/10.1136/jech.2009.090662>.

<sup>112</sup> Centers for Disease Control and Prevention, “People with Certain Medical Conditions.”

<sup>113</sup> Binswanger, Krueger, and Steiner, “Prevalence of Chronic Medical Conditions,” 912.

<sup>114</sup> David Cecere, “Inmates Suffer from Chronic Illness, Poor Access to Health Care,” *Harvard Gazette*, January 15, 2009, <https://news.harvard.edu/gazette/story/2009/01/inmates-suffer-from-chronic-illness-poor-access-to-health-care/>.

<sup>115</sup> Helppie-Schmieder, “Toxic Confinement”; McDaniel et al., “No Escape”; Leon-Corwin et al., “Polluting Our Prisons”; Bernd, Loftus-Farren, and Mitra, “America’s Toxic Prisons”; Tsolkas, “Ecology of a Prison Nation.”

immigrants in ICE custody are also forced to drink contaminated water; eat food that lacks proper nutrition, is expired, and/or has been exposed to pests; and live in dilapidated facilities that are filled with mold and offer little protection from extreme weather conditions.<sup>116</sup> These conditions take a serious toll on an individual's body, often weakening their immune system and leaving them more vulnerable to disease. Infection with COVID-19 can be incredibly dangerous for even the healthiest individuals in our society, but it can be even more deadly for those whose bodies face constant assaults from their environment.

Just as incarceration and punitive immigration policies disproportionately affect communities of color, it is also important to note that these same marginalized populations are disproportionately made the target of similar environmental injustices outside of carceral settings. For instance, it is evident that people of color are more likely to live in proximity to landfills and polluting factories, be subjected to hazardous working conditions, and reside within food deserts. As David Pellow explains, "... the targeted poisoning and polluting of people behind bars reflects what has long been a practice of doing the same to 'free' residential communities—suggesting that environmental racism and criminalization intersect and reinforce one another on both sides of the prison's walls."<sup>117</sup> In other words, prisons, jails, and ICE detention centers mirror and exacerbate the poor environmental conditions outside of these carceral spaces, working in tandem to worsen health outcomes for those detained. Essentially, these institutions have used policing and incarceration as tools to round up populations that were

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<sup>116</sup> Bradshaw, "Tombstone Towns and Toxic Prisons"; Tsolkas, "Ecology of a Prison Nation"; Pellow, *Critical Environmental Justice*; Bernd, Loftus-Farren, and Mitra, "America's Toxic Prisons"; McDaniel et al., "No Escape"; Pellow, "Struggles for Environmental Justice."

<sup>117</sup> Pellow, "Disturbing Link."

already at higher risk for serious complications from infections like the coronavirus and intensified the environmental conditions that rendered them vulnerable in the first place.

In addition to the toxic nature of carceral landscapes, limited access to quality health care within these facilities also contributes to the poor health outcomes experienced by incarcerated and detained immigrant populations during this pandemic. According to David Cecere of the Cambridge Health Alliance, “Nationally, more than 800,000 inmates — 40 percent of the total prison and jail population — reported a chronic medical condition.... More than 20 percent of these sick inmates in state prisons, 68.4 percent of jail inmates, and 13.9 percent in federal prisons had not seen a doctor or nurse since incarceration.”<sup>118</sup> Left untreated, many chronic illnesses can develop into more serious health problems and further damage the body, leaving these incarcerated individuals further vulnerable to the deadly impacts of the coronavirus. This kind of medical negligence can similarly be found in ICE detention centers, where an investigation led by the Committee on Oversight and Reform and Subcommittee on Civil Rights and Civil Liberties of the U.S. House of Representatives reveals that “a widespread failure to provide necessary medical care to detainees with serious and chronic medical conditions” led to several detainee deaths that should have been preventable.<sup>119</sup> The House investigation further condemns these ICE facilities for falsifying medical logs after deaths have occurred and for failing to comply with federal regulations that require the public release of death investigation reports for anyone who dies in ICE custody.<sup>120</sup> Under the ninth principle of environmental justice developed by the First National People of Color Environmental Leadership Summit,

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<sup>118</sup> Cecere, “Inmates Suffer.”

<sup>119</sup> Carolyn Maloney and Jamie Raskin, “The Trump Administration’s Mistreatment of Detained Immigrants: Deaths and Deficient Medical Care by For-Profit Detention Contractors,” Staff report (U.S. House of Representatives, September 2020) 1-2.

<sup>120</sup> Maloney and Raskin, “The Trump Administration’s Mistreatment of Detained Immigrants,” 2-3.

“Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.”<sup>121</sup> Because detained populations already face environmental injustices from their toxic and unsafe housing conditions, the failure to provide these individuals with quality health care deepens this injustice.

Added to the environmental injustices of carceral institutions that are exacerbated by the coronavirus pandemic is the complete restriction of mobility that detained populations experience. Whereas non-detained individuals may have at least *some* freedom to leave or change a built environment when they determine it is unsafe, incarcerated folks and detained immigrants are held in carceral facilities against their will and have no agency over the conditions they face within these spaces. In the context of COVID-19, for example, non-detained populations have a certain degree of autonomy in protecting themselves from the virus that detained populations do not. This includes the ability to remove oneself from a space once it becomes too crowded; buy or make protective face masks; access cleaning supplies, soap, and hand sanitizer to increase one’s personal hygiene and the cleanliness of their built environments; and seek higher quality health care when one is unsatisfied with the services they have received (though the quality of health care available to a non-detained individuals may still be limited to varying degrees depending on such factors as one’s race, occupation, socio-economic status, location, gender, sexuality, etc.). Nevertheless, the fifth principle of environmental justice from the First National People of Color Environmental Leadership Summit states, “Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.”<sup>122</sup> The foundations of this principle imply that all people have a

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<sup>121</sup> People of Color Environmental Leadership Summit, “Principles.”

<sup>122</sup> People of Color Environmental Leadership Summit, “Principles.”

basic right to decide their environmental conditions, which is a right clearly stripped away from incarcerated and detained immigrant populations. As a result, the absence of environmental autonomy contributes to the environmental injustice experienced by detained persons during this pandemic.

Finally, it is also important to note that, from the very beginning of this pandemic, organizations like Human Rights Watch issued warnings that carceral facilities would be particularly susceptible to coronavirus outbreaks.<sup>123</sup> A major cause of this early concern was that, due to factors like overcrowding and poor medical responsiveness, outbreaks of other contagious diseases (such as influenza, measles, mumps, rubella, and diphtheria) are relatively common in these types of settings.<sup>124</sup> The fact that these institutions received notice from human rights experts and are accustomed to infectious outbreaks within their facilities indicates that the disastrous state of the coronavirus in prisons, jails, and ICE detention centers was entirely predictable, yet the officials in charge of determining policy for these carceral institutions did not heed these warnings nor devise any kind of comprehensive coronavirus safety plan that would mitigate the spread of the disease or its impact on those in custody. Instead, these officials allowed the hazardous living conditions to continue, treating incarcerated folks and detained immigrants as sacrificial populations in the face of the virus. The lack of action taken by these policy makers reflects a disregard for the health and well-being of detained individuals that contends with Pellow's doctrine of critical environmental justice asserting the indispensability and interconnectedness of all people.

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<sup>123</sup> Budd and Bersani, "The Incarceration State," 13; "US: COVID-19 Threatens People Behind Bars," *Human Rights Watch*, March 12, 2020, <https://www.hrw.org/news/2020/03/12/us-covid-19-threatens-people-behind-bars>.

<sup>124</sup> Sven Todts, "Infectious Diseases in Prison," in *Prisons and Health*, ed. S. Enggist et al. (Copenhagen: World Health Organization, 2014), 73–77.

### *Conclusion*

Despite the fact that current statistics on coronavirus rates of infection and fatality in prisons, jails, and immigrant detention centers likely underestimate the true impact of the disease in these carceral spaces, the available data clearly shows that detained populations are disproportionately vulnerable to this deadly pandemic. While the significantly worse health outcomes for incarcerated folks and immigrants in ICE facilities are indicative of environmental injustice in and of themselves, the miserable conditions of detainment (such as one's inability to socially distance, restricted access to potentially life-saving materials like soap and facemasks, consistent exposure to toxins within the carceral environment, poor quality medical care, and absence of environmental autonomy) serve to compound this injustice. Furthermore, when we look to early admonition from human rights organizations as well as the history of infectious outbreaks in these spaces, we see that the dire state of the coronavirus in custodial settings was not an inevitability, but rather a result of gross negligence on behalf of institutional policy makers. Because the unsanitary and unsafe environmental conditions of carceral facilities have been present long before the pandemic and because there exists an ongoing pattern of inaction in response to health crises in these spaces, it is also evident that these environmental justice issues in carceral facilities are not created by the coronavirus but exacerbated by it. Indeed, environmental injustice has proven to be an inherent trait of America's carceral institutions, and the current public health crises simply exemplifies and intensifies this issue.

## Conclusion

Even before the onset of the coronavirus pandemic, policing and incarceration have proven to be two facets of the American criminal justice system that consistently violate principles of environmental justice by undermining the health and security of individuals' natural, built, and bodily environments. More specifically, policing and incarceration operate under discriminatory public policies that criminalize people of color, extract these individuals as human resources from their communities, pose a perpetual threat of direct violence, and confine policed bodies within toxic environments that corrode their health and well-being.

Nevertheless, the clashes between Black Lives Matter protesters and police that occurred within the context of the current health crisis following the murders of George Floyd and Breonna Taylor provide unique case studies in which the police force's inclination to violate environmental justice principles is exemplified through their weaponization of the coronavirus. Through the use of tactics such as the confiscation of face masks, destruction of water and medical supplies, and excessive deployment of tear gas (all of which facilitate the spread of COVID-19), law enforcement officers have jeopardized protester health and safety while treating this population as disposable in the face of the pandemic. In these instances, the coronavirus has acted as a threat accelerator, exacerbating the environmental injustices of policing in America.

Even more, the coronavirus pandemic has similarly highlighted and intensified environmental injustices within carceral spaces. Due to the crowded conditions, inadequate sanitation, exposure to toxins, poor access to medical care, and inability to determine one's environmental conditions within prisons, jails, and ICE detention centers, detained populations are particularly vulnerable to infectious disease outbreaks like COVID-19. When the virus began spreading rapidly throughout America, however, policy makers failed to implement effective

social distancing measures within these facilities, conduct comprehensive coronavirus testing, or provide incarcerated individuals with potentially life-saving supplies such as face masks and soap. As a result, incarcerated people report significantly higher rates of coronavirus infection and death than the general population, indicating that these folks have been forced to bear a greater burden of the pandemic because of their inadequate environmental conditions.

Both the cases of police brutality in response to the Black Lives Matter protests and the negligent treatment of incarcerated folks during this public health crisis reflect an attitude that the affected populations are disposable and undeserving of health protections; this mindset comes into direct conflict with the critical environmental justice principle that affirms the indispensability and interconnectedness of all people. Rather than promoting healthy and equitable environments that protect all individuals from infection, these two facets of the American criminal justice system have facilitated the spread of the coronavirus in such a way that deepens existing social inequalities and undermines the health of those already disproportionately subjected to environmental harms.

While this thesis presents a broad analysis of the environmental justice implications of the coronavirus pandemic as it relates to policing and incarceration in America, it is valuable to also consider transformative solutions to these injustices. Specifically, the following questions merit further inquiry: *How can we ensure that these victims of environmental injustice caused by policing and incarceration during this pandemic receive adequate reparations for the damages suffered by their health? How can we prevent similar instances of environmental justice from repeating in the future? How can we imagine an environmentally just alternative to the current system of policing and incarceration that values all individuals as indispensable and deserving of a clean, safe, and healthy environment?*

To begin answering these questions, it is important to keep Robert Bullard’s words in mind and remember that environmental justice calls for us to ask “‘How little harm is possible?’ rather than ‘How much harm is allowable?’”<sup>125</sup> In other words, while small scale reforms such as eliminating the use of chemical weapons against protesters and providing coronavirus tests, vaccines, and hygienic materials to incarcerated populations are positive steps that may mitigate the environmental harms inflicted by police and carceral institutions, these actions alone are not sufficient because they fail to address the root of these injustices. We must begin envisioning abolitionist ecologies and futures that do not include the continuation of these inherently violent institutions. This involves redistributing police funds to social services including education, healthcare, subsidized housing, and food assistance; establishing and implementing restorative justice alternatives to prisons and jails; reforming immigration policy in such a way that acknowledges and respects the inherent humanity of all persons; and transforming our cultural mindset regarding crime and punishment through advocacy and self-reflection. Only then can we establish the active presence of positive peace—a peace characterized by systems that respect human rights and equally protect all persons against environmental harms—which is necessary to achieve environmental justice.

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<sup>125</sup> Bullard, “Introduction,” 4.

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