

Article E Nature and Space

# Intersecting hazards, intersectional identities: A baseline Critical Environmental Justice analysis of US homelessness

EPE: Nature and Space 2020, Vol. 3(3) 833–856 © The Author(s) 2019 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/2514848619892433 journals.sagepub.com/home/ene



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#### **Abstract**

Lacking access to stable shelter, infrastructure, and services, houseless people are exposed to a range of environmental hazards. Yet, environmental justice scholars have only begun to consider how environmental justice issues impact unsheltered people. In dialogue with Critical Environmental Justice (EI) Studies and geographies of homelessness research, and drawing on seven years of participant observation and a national phone survey of 47 houseless community representatives, this paper begins to chart a baseline Critical El analysis of homelessness. I argue that understanding the environmental justice experiences of houseless people requires attention not only to direct exposure to hazards, but also to criminalization. Police sweeps in downtown and residential areas push people into toxic spaces; when houseless communities express concerns, they risk further eviction. In this way, cities overwhelmingly respond to hazard exposure with displacement, creating a cycle of criminalization, dangerous living conditions, and serial forced removals. Moreover, examining such intersecting hazards and their impacts through a Black feminist lens of intersectionality reveals how systemic violence vis-à-vis environmental hazards is multiplied and magnified for houseless people along lines of race, gender, age, disability status, and so on. By bringing Critical El and geographies of homelessness into conversation, with particular attention to intersectional impacts, scholars and organizers can better attend to the complex suite of issues that differentially shape the lives of houseless people and inspire resistance.

#### **Keywords**

Environmental justice, homelessness, intersectionality, police violence, tent city, eviction

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"It was bronchitis," [Pete] Owens said last week, sitting on a bed raised off the ground by plastic milk cartons, in a little cluster of tents connected by a series of tarps. "I couldn't shake it." Then he says: "It's because I was using the fill dirt [to level out the ground under my tent]." (VanderHart, 2016)

People would live inside a nuclear reactor to avoid being swept.—Trena Sutton (quoted in VanderHart, 2016)

#### Introduction

There are few places in the US where houseless people can exist without being told to "move along" within hours of setting up camp. Throughout summer 2016, police and contracted crews conducted intensive "sweeps"—evictions—of houseless people from downtown areas. residential neighborhoods, bike paths, and green spaces throughout Portland, Oregon. Exhausted from the trauma of moving every few days, constant citations and fines, and losing survival gear, identification, medicines, and treasured mementos, about a dozen people came together to set up tents on a City of Portland-owned piece of land. The group had quietly secured approval from officials; the City agreed to provide trash service. Residents leveled out the uneven ground to make it more comfortable for walking and sleeping, and soon developed persistent respiratory problems, including bronchitis. A 2014 environmental assessment reveals that nearly half of the 22,000 cubic yards of dirt piled at the site in previous years was contaminated with carcinogenic substances, such as benzo[a]pyrene, indeno[1,2,3-cd]pyrene, lead, and arsenic. Despite knowledge of the contamination, residents decided to stay put. They felt they had no other place to go where they would not be swept. When officials learned of the toxic conditions, however, rather than work toward remediation, they deemed the site too dangerous for human habitation and evicted the fledgling community (VanderHart, 2016).

This scenario depicts a reality that houseless people across the US know all too well. There are few places where people without a lease or mortgage can legally exist. Survival activities, including sleeping, eating, sitting, and urinating, result in citations and fines, evictions and arrests, loss of property and trauma. Shelters and recovery programs are full, and represent little more than an extension of the carceral system (Beckett and Herbert, 2010; Gowan, 2002; Herring, 2019; Stuart, 2014). Criminalization of homelessness is particularly intense in downtown and residential areas. Thus, the local state implicitly pushes houseless people into the interstices of the landscape, including public green spaces, only to evict them later in the name of sustainability (Dooling, 2009; Mokos, 2017). The state also implicitly pushes people into polluted spaces, and, as I show here, evicts them later in the name of public health, hygiene, and environmental justice (EJ). This cycle of criminalization, exposure to hazards, and eviction is the focus of this paper.

Although EJ scholars have brought attention to the disproportionate ways in which pollution affects different groups, with race over-determining negative outcomes, they have largely overlooked houseless people. And while researchers focused on the geographies of homelessness have examined the criminalization of houseless people, the relationship between criminalization and exposure to environmental hazards remains unexamined. From a social movement standpoint, this omission limits the extent to which scholars might contribute to houseless-led collective action. From a scholarly perspective, attending to EJ and homelessness is crucial to more fully articulating the complexities of environmental (in)justice and resistance.

This paper begins to address such gaps, using a Critical EJ approach. Building on earlier, "first generation" EJ scholarship that primarily documents the uneven distribution of environmental inequalities through a lens of race and class, "second generation"—Critical EJ—studies move beyond straightforward distributional analysis to emphasize multiple forms of identity and inequality, the role of the state in perpetuating injustice that occurs across complex spatial and temporal scales, and the expendability of entire populations (Pellow, 2018). Critical EJ provides footing to examine the intersecting, intersectional ways that environmental hazards impact houseless people.

To chart a baseline Critical EJ analysis of US homelessness, I draw on seven years of participant observation with a grassroots houseless-led group based in Portland, Oregon, 47 phone interviews conducted in 2018–2019 with houseless community representatives across the country, and recent media accounts on the environmental politics of homelessness. I argue that understanding the EJ experiences of houseless people requires attention to not only direct exposure to hazards, but also to the criminalization of houseless people. Police sweeps in downtown and residential areas push people into toxic spaces, exposing them to hazards; when houseless communities express concerns, they risk further eviction. In this way, cities overwhelmingly respond to hazard exposure with displacement, creating a cycle of criminalization, exposure to environmental hazards, and serial evictions. Moreover, to adequately consider the EJ experiences of houseless people, it is crucial to not only examine such *intersecting* hazards and their impacts but to also view homelessness and EJ through a Black feminist lens of intersectionality. Intersectionality refers to the ways in which systemic violence is multiplied and magnified when combined in various identity-based ways (Cho et al., 2013; Crenshaw, 1991; Ducre, 2018). By bringing Critical EJ and geographies of homelessness into conversation, with particular attention to intersectional impacts, scholars and organizers can better attend to the complex suite of factors that differentially shape the lives of houseless people and inspire resistance.

Following this introduction, a section outlining relevant theoretical frameworks, and a description of research methods, my argument unfolds in four parts. First, I illustrate some of the ways in which sweeps result in houseless people becoming directly, and differentially, exposed to hazards. Next, I describe the impacts of hazards in greater detail, and explain how direct exposure is often entangled with a lack of adequate water, energy, and sanitation infrastructure access. I then articulate how the local state uses exposure to hazards to justify evicting houseless people, ensuring that environmental hazard impacts go far beyond bodily exposure to include new rounds of forced displacement. Finally, I draw on these empirics to offer an intersecting, intersectional theory of homelessness and EJ, and end by briefly highlighting one grassroots response.

# Geographies of carceral homelessness

An estimated 3.5 million people now experience homelessness each year. Today's crisis is a direct result of ongoing cuts to federal funds for affordable housing and mental health programs that began in the early 1980s, as well as a housing system that privileges profits over the human need for shelter (Mitchell, 1997; WRAP, 2014). Disproportionate rates of homelessness for Black and Indigenous people stem from ongoing legacies of settler colonialism, slavery, and racial capitalism (Goetz, 2013; Olivet et al., 2018). People living on the streets contend with a host of issues, including lack of access to food and hygiene facilities, police violence, illness and disease, and exposure to the elements (NLCHP, 2017; WRAP, 2014), with impacts occurring at the scale of the body to the neighborhood to the global (Smith, 1992).

Anti-houseless policing, involving recurrent fines, citations, "move along" orders, and seizure of belongings, ensures a state of ever-present instability for houseless people. While taking a dramatically different form of control than confined incarceration, such constant mobility is nevertheless comparably punitive (Beckett and Herbert, 2010; Herring, 2019; Herring et al., 2019). Such policing that keeps people on the move occurs in commercial and residential spaces, in the name of public safety and livability (Mitchell, 2003; Staeheli and Mitchell, 2006). It also occurs in "pristine" green spaces, in the name of environmental sustainability (Dooling, 2009; Goodling, 2019; Mokos, 2017), even as urban green spaces remain places of relative material and spiritual refuge for some houseless people (Speer and Goldfischer, 2019). Dozier (2019) and Stuart (2016) illustrate how even entire neighborhoods with dense houseless populations, such as LA's Skid Row, become extensions of the carceral system. Nevertheless, despite the constant sweeps, many houseless people prefer the streets over shelters, given the destabilizing, often jail-like conditions of shelters (Herring, 2019; Speer, 2018).

It is in this context that a growing number of houseless people in cities across North America have joined together to construct cooperative spaces for conducting daily life over the last two decades. There are more self-organized houseless communities—tent cities, rest areas, tiny house villages, encampments—today than at any time since the Great Depression (Herring, 2014; Herring and Lutz, 2015). While gauging an accurate number of such communities is impossible due to their transience and the necessity for many to remain hidden from public view to avoid eviction, a review of online media sources found a 1342% increase in the number of unique encampments reported in the media between 2007 and 2017, with two-thirds of growth coming *after* the 2007–2012 recession (NLCHP, 2017).

Contrary to media claims that such communities emerged directly out of the recent recession, scholars argue that they are actually rooted in more long-standing urban penal and welfare policies, and that self-governed houseless communities emerged as both "protest and containment" to simultaneously serve the preferences of houseless people and the needs of the neoliberal state (Herring and Lutz, 2015). "Containment" refers to cost-effective spatial control by the local state over what it considers to be a dissident population. Such spatial regulation can be seen starkly in the growing number of governments, non-profits, and religious organizations that have taken the helm of tent cities and tiny house villages, creating what Speer (2018) calls a proliferation of "tent wards" that entail a complex melding of containment *and* care. While providing the bare necessities of a roof and a cot, tent wards, like traditional shelters, also require strict adherence to dehumanizing rules and regulations. In this way, tent wards constitute an extension of what Gowan (2002) describes as a carceral system predicated on a mutually reinforced cycle of incarceration and homelessness.

On the whole, however, those communities that resist the tent ward conversion, and that remain stable and self-organized, provide a safe place for unsheltered people to rest (Heben, 2014; Herring and Lutz, 2015; Weissman, 2017). They offer a place for people to "escape the public gaze" (Sparks, 2010) and to "feel human" (Sparks, 2017: 349), and they reduce crime in surrounding neighborhoods (Schmid, 2018). Some serve as hubs of mutual support and collective action around a host of intersecting issues, such as environmental and infrastructure concerns; they implicitly challenge a "white spatial imaginary" (Lipsitz, 2007) by prioritizing the use value over the exchange value of land (Goodling, under contract; Logan and Molotch, 2007; Speer, 2016, 2017). In short, houseless people are implicitly attempting to "erase their own erasure" (Smith, 1992) through communal living and resistance strategies, however contested these may be.

But as I show here, like individuals sleeping rough on the streets, self-organized communities are far from immune to harm from environmental hazards. At the same time, such

communities offer examples of how people are working together to mitigate harm and challenge evictions that occur purportedly in the name of public health, hygiene and EJ. In response to calls for the eviction of encampments over hygiene concerns in Fresno, California, for instance, one community collectively demanded sanitation provisions (Speer, 2016). Such examples of intersecting hazards and expressions of collective action invite an examination of houselessness through a lens of EJ, and as I show here, *Critical* EJ.

Bringing Critical EJ into conversation with geographies of homelessness literature not only underscores multilayered hazards impacting houseless people, but it also points to the necessity of an intersectional analysis. Like much geography research that under-theorizes race, ethnicity, gender, and other categories of difference (Pulido, 2002), scholarship on homelessness tends to treat the houseless population as one homogenous group. Notable recent exceptions include Olivet et al. (2018), who disaggregate data on unsheltered people along racial and ethnic lines to illustrate that Black people comprise more than 40% of the US houseless population and Native people more than 4%, while accounting for just 13 and 1% of the general population, respectively. Poverty alone, they argue, does not explain disproportionate rates of homelessness for Black and Native people; racism in domains as varied as the labor market, housing system, criminal justice system, and mental healthcare systems exacerbates difficulties for people who are both poor and identify as Black or Native. Christensen (2017) articulates the experiences of First Nations houseless people in Northern Canada, with an emphasis on settler colonialism as root cause. In an ethnographic study, Dozier (2019) draws on Clyde Woods' Blues development concept to articulate how the largely Black houseless population in LA's Skid Row engages in a contradictory push-and-pull of grassroots planning, ultimately producing what Gorz (1967) refers to as "non-reformist reforms." Medical scholars examine the relationship between homelessness and health, with a focus on the experiences of elders, one of the fastest growing houseless sub-populations (Brown et al., 2016, 2017). Nicholas (2006) and Plaster (2012) likewise parse the experiences of LGBTQ+ houseless youth. On the whole, however, geographies of homelessness scholars have much to learn from Critical EJ and the frameworks upon which it draws to become more attuned to categories of difference.

# Critical EJ

Pellow (2016) defines EJ communities as those facing a "disproportionate burden of environmental harm" (222).<sup>2</sup> Poor communities of all races and ethnicities experience environmental injustice, but Black, Native, Latinx, and other communities of color are on the front lines, with persistent racial differences occurring across levels of socioeconomic status (Brulle and Pellow, 2006; Bullard et al., 2008; Morello-Frosch et al., 2001). The US-based EJ movement dates to the early 1980s, when protesters responded to the dumping of toxic PCBs in Warren County, NC. In 1991, the First People of Color Environmental Leadership Summit laid out the EJ movement's core principles. Since then, with roots in the civil rights, anti-toxics, Indigenous, labor, and traditional environmental movements, the EJ movement has mobilized people to advocate for improved living conditions around transportation, land use, public health, toxins, occupational safety, and more (Agyeman, 2013; Bullard, 2000; Corburn, 2005; Pellow and Brulle, 2005; Taylor, 2000). Notably, EJ activists brought environmentalism to the city by conceptualizing "the environment" as where people "live, work, play, pray, and learn," as opposed to some wild place outside of urbanized landscapes.

"First generation" EJ scholarship documents and analyzes this early movement. Pellow (2018) recently synthesized a newer wave of research—"Critical EJ"—that extends analysis

in four key ways (building on Adamson, 2011; Holifield et al., 2009), First, Pellow argues, scholars are now extending Walker's (2009) argument for enlarging notions of justice beyond distributive and juridical frames, to encompass procedural and other forms of justice. Researchers are also giving greater attention to the complex ways that social categories of difference (e.g. race, class, gender, sexuality, disability) intersect to magnify the ways in which people experience systemic violence, taking cues from the Black feminist tradition's intersectional lens. Intersectionality refers not simply to an additive list of identities, but rather to the ways in which forms of systemic violence are multiplied when combined in various ways. The ways in which Black women experience oppression, for instance, differ in distinct ways from those of white women, as well as Black men; the survival strategies and resistance efforts that Black women pursue likewise differ (Cho et al., 2013; Crenshaw, 1991; Ducre, 2018). Especially relevant to this paper, Dillon and Sze (2016) shine a light on the ways in which environmental racism becomes embodied for low-income Black communities via not only exposure to air pollution, a traditional EJ issue, but also through anti-Black police violence, which also literally "constricts breath," as in the death of Eric Garner at the hands of the NYPD. This example highlights what Pellow refers to as "intersecting axes of domination and control" that have differential impacts along lines of race and class, among other categories.

Pellow's other three pillars convey how Critical EJ scholars examine the role of the state in perpetuating environmental racism, bring attention to complex spatial and temporal dimensions of environmental (in)justice, and grapple with the ways in which entire populations are deemed expendable and are fighting back across lines of social difference. Expendability implies that there is no escape, no possibility of moving to safety. The state perpetuates the expendability of particular groups, given its dismal track record in intervening in the interests of EJ communities. Pulido et al. (2016) therefore urge EJ movement leaders to operate outside the state's participatory channels in fighting for better living conditions. Pellow (2018) likewise argues that EJ movement agents ought to work to deepen direct democracy in all its manifestations regardless of whether or not such actions engage the state, as doing so promises a greater likelihood of more just process and outcomes. Indeed, EJ activists are putting forth visions of *indispensability*, that is, of the fundamental necessity to view communities as interconnected, interdependent, and capable of operating in solidarity, all the while remaining sovereign.

Few researchers have examined homelessness and EJ, however, and even fewer take a *Critical* EJ lens. Exceptions include Hale (2019), who compares access to water for houseless people in LA, Athens, and Istanbul, and DeMyers et al. (2017), who find that houseless people in the US are highly vulnerable to water insecurity. Rose (2019) finds that the presence of houseless people in urban parks has little impact on housed visitors' recreational behavior and perspectives on environmental impacts, and suggests that evictions from parks therefore represent an EJ issue. Related, a handful of scholars studying medicine, social work, infectious disease, and disasters have investigated the effects of climate change on houseless people (Gibson, 2019), highlighting new geographies of West Nile Virus (Ramin and Svoboda, 2009), linkages between heavy precipitation and the rapid spread of gastrointestinal illnesses among houseless people (Hines et al., 2018), and a lack of resources for emergency managers to support houseless people during major catastrophes (Settembrino, 2017).

These studies, however, by and large do not account for the complex structural, sociospatial conditions that underlie such differential outcomes for houseless people, and nor do they account for differences within the houseless population. As this paper illustrates, hazard exposure is deeply tied to experiences of poverty, housing status, criminalization,

and displacement, with differential outcomes falling along lines of race, gender, (dis)ability, age, and other categories of difference.

# Methods and survey participants

The data for this paper come from a national phone survey of houseless community representatives—the first of its kind—conducted between August 2018 and September 2019, and is informed by seven years of participant observation with Right 2 Survive (R2S) as well as media reports depicting criminalization and environmental politics of homelessness. With a mission to educate people about the civil, constitutional, and human rights of houseless people, R2S is a Portland, Oregon-based grassroots organization led by houseless and formerly houseless people and supporters. R2S has established two self-governed houseless communities in Portland, has helped develop similar communities in over a dozen US cities, and is at the forefront of a national movement for "Sleep Not Sweeps; House Keys Not Handcuffs." The survey reported on here is part of a larger ongoing participatory action research project, focused on developing an "EJ Toolkit" by and for houseless communities seeking to address concerns such as mold and mildew, fire safety, air and soil pollution, and more, while building political consciousness.<sup>3</sup>

In summer 2016, I heard about the situation described in this paper's introduction: the City of Portland allowed houseless people to live on highly toxic public land until it became clear that residents were suffering from respiratory distress, when officials evicted the community. The group's exclusion on such grounds echoes R2S's experience searching for a new location for its self-organized community that same year, when critics raised concerns about soil and air pollution on a potential site in order to block the group's move. I also became aware of the toxic conditions in which houseless people live while working with R2S and an EJ coalition focused on the Portland Harbor Superfund Site (Goodling, under contract). R2S leaders and I had heard similar anecdotes from other cities, but had little sense of the prevalence of this criminalization—exposure—eviction cycle. With R2S's support, I therefore undertook a national phone survey, with multiple goals: to connect with as many houseless-run communities and groups as possible, to learn about the kinds of environmental hazards people face across the US, to better understand the relationship between criminalization and hazard exposure, to gain a sense of how communities are working to mitigate hazards, and to inform creation of our EJ Toolkit.

We primarily defined "houseless community representatives" eligible for the survey as self-described leaders of self-governed houseless communities. Secondarily, we targeted organizers and outreach workers from grassroots organizations led by houseless and formerly houseless people. Finally, we sought to interview a limited number of people in leadership positions of non-self-governed houseless communities (e.g. church or non-profit-run communities).

Through a combination of our networks, existing databases, secondary sources; raw data of houseless encampments reported in the media (NCLHP, 2017); social media, outreach, and snowball sampling, we identified approximately 385 organized houseless communities and houseless-led groups in existence during our timeframe. Of these, we gathered contact information for approximately 135 communities and groups, and conducted phone surveys with 47 participants based in 19 states, representing all regions of the US. Each structured phone interview lasted approximately 45 minutes. We asked all participants the same questions, addressing communities' basic characteristics (e.g. number of residents, demographics, date founded, mission); physical sites and surroundings; concerns about environmental hazards affecting residents; strategies used to address hazards; networking

with other groups and organizations; and engagements with public agencies and other organizations around environmental/EJ issues. To gauge exposure to environmental hazards, we asked participants to rate their levels of concern (i.e. "not concerned," "concerned," or "very concerned") about air pollution, soil pollution, water contamination, noise pollution, landslides or erosion, flooding, heat waves, fire, dust, cold snaps or winter weather, severe rain or storms, mosquitoes, ticks, rodents, police violence, interpersonal violence, and "other." For all areas rated as concerned or very concerned, we invited participants to elaborate.

Charting a geography of houseless-run communities as part of our efforts to better understand EJ and homelessness proved a difficult, time-consuming, imprecise undertaking. We report on the methodology, challenges, and possibilities of this survey in greater detail elsewhere (Goodling et al., under development). With regard to developing a Critical EJ analysis of US homelessness, one limitation of this study is the spatial distribution of participants. We had the most success contacting people on the west coast, in large part due to existing connections. Yet, at the same time, we heard from many people that there are likely fewer houseless-led communities and organizations in other regions, which may contribute to the ostensible unevenness of our sample. We also did not speak with any explicitly immigrant-led communities. While our survey represents an incomplete snapshot in time, when combined with extensive participant observation and media analysis it nevertheless provides one of the most detailed, thorough efforts to date to map the geography of houseless communities and to articulate a complex suite of environmental hazard impacts on houseless people.

# The criminalization-exposure-eviction cycle

# Criminalization and displacement, differential impacts

Houseless people end up in dangerous circumstances due to policing that implicitly and sometimes explicitly pushes them there. One west coast organizer describes direct linkages between criminalization and exposure to pollution:

People that are camped alongside railroads, they're at a particular risk because the trains use asbestos and arsenic in their brakes . . . and these chemicals have contaminated the soils . . . When it comes to the soil pollution, I try to encourage people to move away. I discourage them from staying there. I tell them it's a health issue for some, it's not a safe place to be. But when on a spur that is not being used, not city or state property, they don't get run off quite so quickly because railroads, they're fed[eral] and they have their own police. Those police are very limited in number and they don't patrol those spurs as much [as city and state property] until someone complains.

Policing of encampments, then, directly pushes people into toxic places. In some cities, police conduct sweeps with such regularity that it is nearly impossible to find shelter in a site free from environmental hazards:

There's been a huge increase [in sweeps]. In this last three months is when they've started where the DA has actually been filing the public lodging misdemeanor—giving them out like hotcakes. And something that I've seen that's really concerning... We're seeing a huge increase in people

sleeping hard [with no tent or tarp] and by themselves. Last week on outreach, this woman who I spoke with in the morning, the cops woke her up and took her tent. They're taking people's tents even if they're not up, and saying it's illegal, they can either confiscate it or arrest her. They took her tent and gave her a misdemeanor. In the afternoon, she was under the freeway. She was exhausted and got a tarp and tied it to the fence and slept under there—and got a second misdemeanor for sleeping. Both of them were for sleeping!

This person describes the air under the freeway overpass as toxic, "Because of the exhaust and the constant fumes and everything." They continued,

For the folks under the freeways and stuff, [air pollution] has been a concern, but it's less of a concern than the sweeps...It's safer for people there [under freeways, than in more heavily policed areas] even though the conditions are horrible.

Faced with a choice between arrest and giving up her tent, the woman had no other choice but to seek shelter in a highly toxic place upon surrendering her tent, and she *still* received two citations in one day. Another person explained how police evicted their creek-side community due to water contamination concerns, resulting in their community's dispersal, including to industrial areas. Over and over, people ask, "Where do we go?".

Police push not only individuals and unsanctioned communities into dangerous places, but also sanctioned encampments. One organizer explains how city officials forced an organized community to move to a site adjacent to subway tracks:

The train is extremely loud. If you and I were talking at the camp, we would have to stop until the train passed. And the trains pass all day and much of the night... Had anyone in city government been willing to work to help homeless people, they would not have designated that site [next to the train]. They set it up to fail.

Another person explains how their city not only disbanded a well-functioning self-governed houseless community, but established what amounts to a toxic tent ward in its stead:

The small [self-run] tent communities that were well organized have been swept. They've been disbanded, taken apart. For one example...there was a half a block street camp of women tapped into electricity, had pets, watched out for each other. They had a really nice camp there. [The mayor] told them they would all have to leave...It was the best organized camp in the area and it was the first one they wanted to tear down. It's like they target the functional ones. They come and take everyone's stuff and destroy communities, these self-created communities.

Following the eviction, some people had the option to move for six months into city-established encampments. But these "toolshed prison camps" lacked the stability of the self-organized community, and came with health hazards:

The toolsheds were not built for people to live in. They're cold and they have formaldehyde in the materials, and they also don't have access to water. The first one is [on] an empty lot surrounded by chain-link fence. They're literally toolsheds. It's just one little block of sheds on blacktop...I call that one [the] 'toolshed prison camp'.

Echoing this report of a municipally sited hazardous tent ward, we heard reports from two other cities where officials established "navigation centers" for houseless people to access services, but in the exact places where self-governed houseless communities had previously been evicted or excluded, due to ostensible pollution concerns. "The navigation center is right under the freeway ramp," one person explains. "Before they were saying we can't do it there because of the air pollution, but now *they're* doing that."

While sweeps threaten the survival of all houseless people, those with particular identities face additional, compounding threats. One person discusses the entanglements of colonization, toxic boom and bust industries, evictions, and trauma on Indigenous peoples in Alaska: "The corporate extraction industry," they explained,

has created a lot of refugees... They bring in jobs in one place which also brings in camps and destroys the environment. Some people get jobs, but others don't. That affects the community quite a bit. There's a loss of hunting grounds [with] toxic stuff going on that impacts peoples' subsistence.

Such forces push people into urban homelessness, where they are "herded to a shelter in a toxic industrial zone" in this participant's city. Those living on the streets and in parks are then constantly served "abatement" notices—move along orders—which force people to "go and hide on their own homeland."

One San Francisco organizer explained the exponential burden that sweeps pose for elders and people with disabilities. Not only is moving one's belongings exceedingly difficult with limited mobility, but contractors have confiscated people's walkers and wheelchairs during sweeps, leaving people completely immobile. Another person described the majority of their community of 20 people as elders with disabilities, which poses serious mobility issues at all times, but especially during serial forced relocations. A third person discussed daily challenges for someone who uses a wheelchair in getting from their camp to the closest port-a-potty, located across a large field.

Another participant talked about the gender dynamics involved in women seeking protection from abusive men in order to avoid sweeps and forced removal: "Women are caught in that cycle where they depend on a man to protect them from other men, but that subjects them to violence and abuse from the person protecting them." Notably, we heard time and again about the threat of rape for houseless women and trans people. Two people explicitly described rape as an "environmental hazard," one that forces people to make compromises about where and with whom they live.

Houseless people with mental health challenges face exacerbated risks when engaging with police. One person explains,

A guy was having a mental health crisis. He was a member of our community, he was homeless. He was approached by a number of police officers. He asked to be taken to the hospital. Instead, they tied him up using a device called a rip-hobble—commonly known as hog tying someone. You tie the person's arms behind their back and tie their legs to their arms. It's known that this can cause someone to choke to death and so it's specifically, it's already in the police manual saying that you couldn't do it to someone while on their stomach. But that's what they did. And he died because they hog tied him. The officers violated their own policy, but they were put back on the beat within a couple of weeks.

Several people described the ways in which Black houseless people, particularly those with disabilities and mental health challenges, face magnified threats during sweeps

and police interactions:

There's a documented history of racial profiling in the police department—and the majority of homeless folks [here] are African American. So, you just have things stacked on top of each other. The police don't treat Blacks folks well, and they don't treat homeless folks well.

Events taking place in Portland, Oregon illuminate sharply heightened risks during police interactions for Black houseless men. In 2017, Portland Police Sergeant Gregg Lewis said to officers, "If it's a Black transient we can just shoot them... If they're homeless [and white], we go and detox them, whatever and if they're Black you just kill them" (Bernstein, 2019). This sergeant *explicitly ordered police to murder Black houseless people*. Two years later, Lewis's orders came to fruition. Andre Gladen, a Black man who was houseless, blind, and schizophrenic, slept on the steps of someone's home just a few hours after being discharged from the hospital. The resident called police, who shot and killed Gladen (Zielinski, 2019).

Whether due to recurrent sweeps or an explicit siting of a community, absent truly affordable, stable, and safe housing options, houseless people are repeatedly pushed into toxic, dangerous situations. Black and Indigenous people, people of color, immigrants, non-cis-gendered people, women, trans people, elders, and people with mental health challenges and physical disabilities make particularly difficult decisions on a daily basis, calculating their odds for short-term survival given multiple, multiplied threats even if it means making health and safety tradeoffs over the long term.

# Direct exposure, collective responses

Interview participants reported that they are located in a range of spaces, including industrial, residential, commercial, and "natural" areas. Some are sited on gravel or paved surfaces, while many are located on dirt. Landowners include counties, cities, private individuals, and churches. The hazards to which houseless people are exposed in this range of settings vary, including soil contamination, air pollution, water contamination, noise pollution, landslides, fire danger, rodents, pests, and police and vigilante violence. Communities have also developed sophisticated understandings of their environments and are attempting a variety of DIY tactics to reduce harm.

As described above, air pollution is a serious concern for many houseless people. One community representative explains the intricacies of life outdoors, breathing in polluted air:

Along freeways, underneath bridges and along roadways people are breathing exhaust from vehicles. Also brake dust and rubber and asphalt things get kicked into the air. People can't get face masks. People who suffer from COPD have an opportunity to work with the county health department to get masks, but it's extremely difficult keeping a mask clean in a dirty environment. They have 'spare the air' days here where they tell you to stay indoors because the air is so bad... My question is what about the people who are living outdoors? Who don't have an indoor to go to?

With increasing heat waves and dry conditions, particularly in the West, come wildfires—and respiratory problems. "When it's wildfire season, the recommendation is to stay indoors. But when you're homeless, where do you go?" asks one participant. Urban areas have their own fire risks: "Being in a poor industrial part of town, it's [also] more frequent that there's a fire in our neighborhood—a business, warehouse. Every other month there's

some type of fire with lots of smoke." Aside from buying masks—and ensuring stable housing for all—we heard few ideas for reducing the effects of fire-induced air pollution for houseless people.

Living near creeks and rivers, too, poses challenges on a variety of fronts, from pollution to flooding, erosion to mosquitos. One outreach worker explains,

A homeless vet lost his tent to the creek the other day. The bank eroded, and his whole tent went down the creek ... They need privacy so they can't come up away from the creek much, to avoid harassment from the park staff.

Participants reported various ways they mitigate the impacts of flooding near waterways, including building elaborate platform structures.

Some participants discussed noise pollution impacts on mental health. One person explains, "We are near a super noisy highway. But we are houseless, so we are used to it." Another person reports,

On one side is the fire department. On the other side is [an airfield]. There are lots of sirens and planes taking off and landing. Across the street is train tracks. We are at a nexus of noise pollution where no one would ever want to be.

For both participants, noise contributes to a sense of resignation about the types of environment in which houseless people might reside: in places that are wholly undesirable to housed people. It is not only ambient noise, however. Police interactions, too, fall under this category. One person describes how police were using "illegal 'move along' orders" a few years ago in NYC. They continued,

This is a form of sleep deprivation. You can't get settled to get proper rest. The UN did a big study on [sleep] deprivation, not really on homelessness, but we pushed back on the illegal move along orders and put that in as a form of sleep deprivation.

Regardless of the volume of an officer's voice, in others words, viewing "move along" as *noise* that induces sleep deprivation gained houseless people traction in asserting their right to rest.

Mold and mildew also pose health concerns, especially in humid regions. One person described mold as their tiny house community's "number one issue". Another person articulates their community's vigilant response:

We're frequently just throwing things out during the wet season. We tell campers to throw away [items] as soon as they see mold or mildew... We have a local company that washes blankets for us for free. Twice a week we have a blanket run.

Rodents and other animals, too, are cause for concern, and inspire collectively managed mitigation systems. One person explains, "Along the waterways we have rats as big as cats. I tell people to clean up the trash that is food waste, not to leave food out, not to put food in their tents." One person, in Alaska, explained that while moose are unpredictable and bears occasionally take food, people who detest the existence of houseless people are ultimately more dangerous.

## Insufficient access to infrastructure and services

Lack of access to adequate infrastructure and services, including shelter itself, as well as stormwater management systems, water and sanitation infrastructure, electricity, and other basic services that usually accompany stable housing, exacerbates environmental hazard exposure. Heat, worsened by climate change in recent years, for instance, poses serious health concerns for those living in basic structures. One person describes the effects: "The entire camp gets really, really hot – today my tent was in direct sunlight and it was seventy-five degrees outside but it was low to mid-nineties in my tent – so that's a difficult process for us." We heard repeatedly how hot and cold weather is especially troublesome for elders and people with medical conditions: people become physically uncomfortable and anxious, develop back pain, and are more susceptible to serious illness during heat waves and cold snaps.

Nearly everyone who talked about staying warm and cooking while houseless also discussed localized fire danger:

We're limited in our abilities to warm things up. We have a couple of electrical heaters that we can put in the community tent but all it can do is take the edge off... Open flame heaters are strictly forbidden by fire code so that is a zero-tolerance policy we have.

### Another person echoes:

Staying warm itself is a hazard. Last year an elder had a space heater going that almost burned her tiny house down. Now we try to use 'Mr. Buddy' [brand] heaters, which turn off automatically if they get kicked or get too hot.

Two people noted how insufficient infrastructure access exacerbates fire danger. One explains, "For fire prevention [from cooking], [officials] turning the [nearby] fire hydrant off was just a horrible thing to do all around."

A lack of adequate water and sanitation provisions likewise pose serious challenges for many groups. Nearly all participants representing communities run by churches and non-profits, and about half of those representing self-governed communities, reported hookups to public water sources. The other half of self-governed communities, and nearly all those participants we spoke with who have ties to less formal arrangements, reported bringing in containers of water. One person mentioned, "There's a [public] water main running right under us, but we can't tap it." Residents of one community use five-gallon barrels to collect water for drinking and cooking, which creates its own challenges: "Algae grows when sunlight hits the clear water barrels we use to collect and store water. We clean the barrels with bleach but that also has made people sick." In terms of waste, most groups use port-a-potties for toilets, while some have flush toilets or rely on nearby park or church bathrooms. One person explained that their community prefers outhouses to flush toilets, as outhouses are less likely to back up with 50-plus people using them daily. A few communities reported onsite shower facilities; others rely on a mobile shower truck that comes around periodically, or use nearby gym, shelter, or church facilities when possible. Some rely on local waterways for washing.

A lack of stormwater infrastructure in surrounding areas, too, causes difficulties:

This is a natural city sewage drain. We are in a gutter. All the rain and water washes down the hill to this spot. A few years ago, it completely flooded. One of our residents remembered that [a]

storm drain was there. He dove down in the water and moved a bunch of debris out, including an old sofa cushion. The water flowed right down the drain and cleared the flood.

This same person explained how reports to public agencies about landslide and erosion concerns due to insufficient infrastructure have fallen on deaf ears. They referenced the inaction of local and federal authorities in New Orleans, prior to Hurricane Katrina, in their analysis: "We had a landslide on the hill down below [our tiny house village] last big rainfall. The government says it's not a problem. They always say that—until the levees break."

Along with a lack of physical infrastructure is a dearth of adequate public services. Several people tie their city's refusal to provide trash service to a proliferation of rats, and one person identifies small amounts of trash generated by their community as a magnet for *housed* people's illegally dumped trash.<sup>5</sup> Pests are another hazard that could be mitigated with adequate services (and housing). A participant from the south reports challenges with mosquitoes:

The city has a number of trucks that just sprays mosquito spray in April 'til August. Every two to three days they drive down the street misting mosquito killer. It's bad for every-body but for people who are homeless you don't have a lot of options like just going inside... Then a lot of [people] will try to budget money when they can for bug spray. It's a major concern because it comes out of their food budget or for something else that they need, like water.

Even though the city sprays for mosquitoes, disproportionately exposing those with no indoor access to dangerous chemicals, people are still forced to make tradeoff decisions about whether to spend scarce money on mosquito spray, food, or water. This same person talked about the prevalence of mosquitoes, standing water, and flooding in poorer areas – where houseless people congregate, and where housed Black people live – compared to conditions in wealthier, whiter, neighborhoods, due to the uneven ways in which the city develops and maintains infrastructure.

Day-to-day challenges around infrastructure and services multiply 10-fold during disasters. Several people reported being refused emergency services following wildfires, hurricanes, tornadoes, and floods. One California-based participant describes a particularly classist response following severe flooding:

When it all dried up a little [FEMA] had a program where they tried to restore people's houses and ... take away materials, [and] a number of people were then moved into a temporary shelter they had put together out of a community center. The people that had their names on the lease were covered, but the people who lived together but weren't on the lease [or were houseless] lost everything.

Over and over, we heard how severe storms exacerbate disparities. For instance, one person explains,

Some of the smaller communities have storm shelters, but I'm not sure how exactly homeless are treated when it comes to filling those...They just tough it out and rely on being in a wooded area for protection, and hope the tornado doesn't land in their camp.

Another says, "They set up emergency shelters at rec centers for people who lost power and we heard stories about houseless folks going to rec centers and being encouraged to go to regular homeless centers instead." Even worse, attempts to survive disasters beget *criminalization*, compounding difficulties:

I remember one woman came to see me after one of the tropical storms. She had been hiding out under an awning at a gas station, and she got arrested for trespassing...and she wound up spending seven days in jail.

Such uneven treatment echoes Neil Smith's (2006) declaration, that "there is no such thing as a natural disaster"—only disasters made worse for some than others by racism, classism, and other -isms.

Arson and harassment by vigilante groups, too, evoke entirely inadequate state responses. Several interview participants testified to the threat of arson and reported that local fire and police departments and emergency assistance organizations are of little support:

We had several fires [due to arson]. The fire department did not investigate. If it had been a fire at a home in the hills, they would have investigated. But they would just do minimal cleanup [at the encampment], that was it... Red Cross is to the point where they come and just bring a bag of toiletries.

This participant echoes reports of arson in homeless encampments across the US, to which local officials essentially shrug their shoulders (see also Baily, 2019; Queally and Ormseth, 2019). Arson, then, like police violence, constitutes a serious environmental hazard for houseless people, in part due to wholly insufficient initiatives to prevent and respond to it.

A lack of access to infrastructure and services during ordinary times and disasters alike exacerbates exposure to the elements and hazards for houseless people. At the same time, a lack of infrastructure sometimes provides a basis for communities to come together, to collectively build solutions outside of official systems, often in order to avoid eviction. The range of DIY options available to communities, however, is at least partially dependent upon the demographics of the community. One exception to inadequate infrastructure and service provisioning by local governments came from a participant who emphasized the role that the grassroots, democratic nature of their group has played in securing water access:

We are next door to the fire department. The main thing we do as a democratic community is we make friends. We have lots of experienced members who speak to our mission, and we are talking salt of the earth folks here. So, when we approached the fire department, who was hesitant [to provide water], we said, 'Let's talk!' Now we tap into the fire department water. If the city had mandated that, there would've been push back. The onus is on us to make friends, to talk. We are directly connected to the water now.

Yet, this interview participant acknowledged that their community is made up mainly of white residents, which has bearing on how they are treated. Another person questioned, "If a bunch of Black people set up an encampment in the whitest city in the US [Portland], do you know how fast they'd tear that down?". Both participants, in other words, imply that the racial makeup of houseless communities has direct bearing on the survival mechanisms available to members.

# Environmental injustice as pretext for eviction

Thus far, I have explained how sweeps and criminalization push people into hazardous situations. I have also articulated an array of direct hazards, made worse by inadequate infrastructure and services. At all points, impacts become multiplied and magnified along lines of race, gender, age, disability status, and other categories of difference.

There is yet another phase to this cycle. As in this paper's introductory example, exposure to hazards, itself, is often grounds for eviction, ostensibly in the name of hygiene, public health, or EJ. The vast majority of people with whom we spoke felt they could not approach local agencies to request assistance in dealing with hazards; doing so would be immediate grounds for removal. One person explains how past and recent land uses alike contribute to pollution concerns:

We are on clay-ass soil that is hard as hell. This used to be a battery factory; we find batteries buried all over. If you dig three feet down, there are needles, spoons, from 40 years or more of being occupied by houseless people... We grow food. There's 'fresh pollution' here, from car exhaust, dog poop, etcetera, as well as 'legacy pollution', from years as a battery recycling plant.

In existence for a few years at the time of the interview, this person's community had yet to be sanctioned by local officials, and residents felt that they could not bring attention to the soil pollution without inviting further negative attention. In a similar case, one participant discussed a nearby composting facility that releases toxins into the air. Residents of the long-standing, sanctioned community frequently experience respiratory difficulties, increasingly so on compost-turning days. They tolerate the situation, however, fearing that reporting the facility will result in eviction.

Hazard liability concerns are also cited in many actual evictions. One person spoke about living in a Superfund Site for several years, before being forcibly removed:

It was in the worst part of the area. The social workers that used to come out were told to wash their shoes off when they left. It was a horribly polluted part. I knew someone that would ride his bike back when the Navy was here, and he'd see them getting the paint off ships. A lot of lead and mercury and different things like that. There was a huge class action lawsuit... A few times people died of cancer pretty quickly... Had female trouble and miscarriages, and things like that. And I've had thyroid trouble. I've been in the hospital for so many things I can't even—just, things are wrong.

Eventually, police evicted the community, and required people to sign a form releasing various entities of liability. But some quickly returned:

It was so traumatic to get out of there that I didn't know where I was gonna sleep, plus I had left a bunch of stuff of mine. So I snuck back on and stayed there a couple months more at least. Until the trailer was moved somewhere else.

Another participant reported an eviction that purportedly occurred out of concerns for residents' wellbeing: "I've emailed the health department about health issues. They don't care. They don't have to see it or live in it, so it's not their problem." The city responded to one such email by ordering a sweep: "The park rangers...cut down a huge [tree] limb [during the sweep] and [it] fell on a camp that someone had for 11 years."

In yet another example, a houseless community representative explains things bluntly:

Housed residents up the hill in the neighborhood put fire danger as a reason for us to move. The fire department came and put smoke alarms and fire extinguishers in every single tiny house to appease the neighbors. But it's just 'theater for the housed.'

Theater for the housed has a double-meaning here: at the same time as installing alarms and extinguishers publicly demonstrated the local state's commitment to responding to neighborhood association demands, this measure would only go so far to prevent the village from becoming quickly engulfed in flames, should a fire start in the parched canyon. Nearby housed residents continue to call for the community's eviction on grounds of fire danger. In another city, the official response to arson has been eviction:

The city is going to destroy twenty-one self-built homes next Wednesday... because of the amount of fires that have happened at that encampment... The city is jumping to an extreme by destroying wooden homes that people have put their blood, sweat, and tears into instead of working on mitigating [fire danger].

Whether destroyed by fire or bulldozer, the effect is the same: peoples' lives become even more precarious.

Another participant discusses how ostensible concerns about soil and noise pollution became a lightning rod for conflict when their community was first becoming established. Nearby housed people and elected officials were vocal about pollution concerns, saying that houseless people should not be allowed to live at the proposed site due to health risks. The participant explains,

So those things are said, and framed as concern for the people who'd be living otherwise under a bridge. But usually it's just used as a delay or a stop to keep people from coming in. It's a fig leaf to say you're concerned about their health. We've seen a few sites where a do-gooder neighbor under the concern about people's health will start a lawsuit to stop an encampment ... Like the fire [at an encampment] under the overpass in Georgia, it became a new 'public health concern', or the hepatitis outbreak [amongst houseless people] in San Diego. It's a way to blame, control, and stop people. Our motto is 'don't let perfect be the enemy of good'. When you expect perfect sanitary conditions, you can't house people.

It's a fig leaf. In other words, when housed neighbors, elected officials, businesses, and others express concerns about public health, hygiene, and EJ issues, it is often a thinly cloaked desire to evict houseless communities. At the same time as exposure to hazards and lack of adequate infrastructure pose direct challenges to houseless communities, so, too, do a host of complex *politics* around these issues, which contribute to serial displacement.

# Discussion: A baseline Critical EJ analysis of US homelessness

This paper builds on Critical EJ's expanded notion of environmental injustice by illustrating the multi-dimensional, intersecting ways in which environmental hazards impact houseless people. Communities are in a catch-22: express concerns, and appeal to the local state to assist in remediating hazards, and risk eviction. Stay silent and continue living in dangerous conditions. Public agencies essentially weaponize first generation EJ orientations, using concerns as a tool to justify the displacement and abuse of houseless people, and

compounding violence experienced especially by non-white, non-cis-male, elder, disabled, houseless people. In contrast, a Critical EJ perspective accounts for the broader arc of houseless peoples' experiences, to encompass what comes before, during, and after direct exposure to hazards. This analysis substantially expands what "counts" as an EJ concern, to incorporate the defunding of public housing and mental healthcare back in the early 1980s, the dearth of meaningful tenant protections, the privatization of public space, police violence, arson, and more.

Moreover, findings indicate that geographies of homelessness research requires more careful attention to intersectional identities. It is well-established that Black, Native and Latinx people have higher body burdens of toxins in their homes and neighborhoods, *and* that Black and Native people, especially, are over-represented in the houseless population, where people are exposed to toxins every day. Police violence disproportionately impacts Black and Native people of all class categories (Camp and Heatherton, 2016; Gilmore, 2007). And houseless people are disproportionately police-involved (Lipsitz, 2016; Stuart, 2016): *over half* of all those arrested in Portland, Oregon in 2017, for instance, were houseless at time of arrest (and over 80% of arrests of houseless people were for low-level, non-violent crimes) (Ellis, 2019). It is also well-known that LGBTQ+ people are over-represented in the houseless population, poorly served by the shelter system, and experience higher rates of sexual assault than the general population (Ecker et al., 2019). Elders are one of the fastest-growing sub-populations experiencing homelessness, and they face heightened obstacles to survival.

A baseline Critical EJ analysis of homelessness, then, requires a lens that explicitly addresses *both* intersecting hazards and intersectional identities. "The environment" is where people live, work, play, and pray. Houseless people conduct their lives in shelters, jail, green spaces, industrial areas, on the streets, and in other interstices of the landscape. The entire spectrum of hazards that emerge in this range of spaces constitutes environmental injustice for houseless people, and especially for those who face multiple, multiplied threats over their lifetimes.

A key theoretical and political result of this intersecting, intersectional orientation, coupled with the documented failure of public agencies such as the EPA to intervene on behalf of marginalized groups (Pulido et al., 2016), is that houseless people cannot rely on the state to mitigate hazards. Houseless-led groups are well aware of the purported expendability of houseless people, and they connect the intersecting, intersectional hazards that people face, from lack of stable shelter to direct exposure to hazards, neglect during disasters to police violence. Participants explicitly discussed such disposability. One outreach worker explains,

The [houseless] people around here are so afraid of the government. We held a cookout a couple weeks ago, and we didn't get one homeless person there because they're afraid of getting more tickets. We had one veteran with so many tickets for illegal lodging that *he just disappeared*. Our police arrest people just for setting up camps.

Another person asserts, "I'm looking at police violence issues across the country and homelessness issues across the country... What they're hoping is that homeless people will *just die* or go away or disappear." This same person continued,

There's no plan to build affordable housing for unhoused people. The UN reporter was here interviewing and touring homeless camps, and the report says Oakland and San Fran[cisco] have some of the worst human rights violations in the world. And nobody's doing anything about it.

This participant is referring to a recent visit to California by Leilani Farha, UN Special Rapporteur on Adequate Housing and Human Rights. Farha asserted that the level of criminalization of the poor in the US is *unprecedented* (COH-SF, nd; Gee, 2018). The criminalization—exposure—eviction cycle constitutes the expendability—manifested via the disappearance—of houseless people in the US.

The local state demands adherence to impractically high standards of cleanliness and health, and in so doing shifts the onus of responsibility onto houseless people—setting them up to fail. Demands for perfection when people are in dire circumstances merely constitute thinly veiled pretexts for eviction. As this paper demonstrates, houseless communities are not standing idly by, and they are largely relying on each other rather than public agencies for support. The motto "Don't let perfect be the enemy of the good" sums up the rationale with which communities are pursuing mitigation strategies on their own. One community representative explained, "We are organized, we are taking control of our own resources. We create a safe place for displaced people to learn to interact with their neighbors, to build trust." This person emphasized how their community members are attempting to work together across lines of race, gender, and other categories of difference, not without serious challenges, because they literally have no other option. A thorough accounting of houseless-led organizing is beyond the scope of this paper. But as the brief examples of collective living throughout this paper indicate, houseless people are also practicing an ethos of *intersectional indispensability*.

In fact, the phone survey detailed here is part of an EJ initiative called RESTING SAFE, led by R2S.<sup>6</sup> In an effort to circumvent the catch-22 of exposure and evictions, our EJ Toolkit entails a series of pamphlets developed by and for houseless people, aimed at arming people with information to address hazards without relying on state intervention. Our team has also organized workshops and events bringing Black-led groups and diverse houseless-led organizations together to discuss community control over land and policing. One of RESTING SAFE's team members is leading efforts to start an "Afro Village"—a tiny house community by and for Black houseless women. This EJ-focused work complements an ongoing campaign led by the Western Regional Advocacy Project, a multi-state coalition of grassroots groups including R2S, to "stop the sweeps." Far from letting perfect be the enemy of the good, R2S's strategies embrace the messiness of change as the group seeks to improve life for houseless people in incremental ways in the short term, and, by building capacity and political consciousness toward more radical, systemic change over the long term.<sup>7</sup>

#### Conclusion

In this paper, I have articulated a baseline Critical EJ analysis of US homelessness by illustrating interrelated ways in which houseless communities are impacted by environmental hazards. The EJ experiences of houseless people demand attention to not only direct exposure to hazards, but also to the criminalization of houseless people. Police sweeps in downtown and residential areas push people into toxic spaces. When houseless communities express concerns, they risk further eviction. In this way, criminalization, serial eviction, and exposure to environmental hazards go hand in hand. Viewing such intersecting hazards and their impacts through a Black feminist lens of intersectionality reveals differential impacts as well as insights into collective action responses. This analysis pushes Critical EJ scholars to consider the experiences of houseless people, at the same time as it urges geographies of homelessness researchers to incorporate an intersectional lens as a fundamental part of inquiry and analysis.

While this baseline Critical EJ analysis lays a foundation for understanding the intersecting, intersectional ways in which houseless people are impacted by environmental hazards, it also raises several questions: How does fire provide a window into the dispensability of houseless people? How are houseless communities learning from each other to mitigate impacts and pursue modes of intersectional indispensability? What is, could, and should be the role of the state in protecting houseless people from toxic exposure, providing basic infrastructure, and ensuring that people have a safe space to exist, given houseless peoples' lack of property rights? What do housed and houseless people have in common with regard to EJ experiences, and with what implications for organizing for more just cities? What role might Critical EJ scholars play in building alternatives?

# **Highlights**

- This paper charts a baseline Critical EJ analysis of homelessness, with a focus on intersecting hazards and intersectional identities.
- Cities overwhelmingly respond to houseless peoples' environmental hazard exposure with displacement, creating a cycle of criminalization, dangerous living conditions, and serial forced removals.
- Systemic violence vis-à-vis environmental hazards is multiplied and magnified for houseless people along lines of race, gender, age, disability status, and so on.

## **Acknowledgements**

I gratefully acknowledge Lisa Fink for her attention to detail throughout the phone survey process; Right 2 Survive members Lisa Fay, Alex Gillow-Wiles, Laquida Landford, Aileen MacPherson, Ibrahim Mubarak, and Vince Masiello for their leadership of the RESTING SAFE project and work within the broader "sleep not sweeps" movement; Western Regional Advocacy Project staff and members, and especially Paul Boden, for tireless commitment to this work; Kathleen Guillozet, Chris Hawn, Nava Rastegar, Anthony Levenda, Dillon Mahmoudi, Melanie Malone, and Nathan McClintock, for their support of RESTING SAFE; Street Roots vendors and Sisters of the Road "Roadies" and staff for sharing their insights; Laura Pulido, Cristina Faiver-Serna, Tianna Bruno, Carla Osorio-Velez, Fiona de los Rios-McCutcheon, Ellie Harmon, Alex Gillow-Wiles, Jessie Speer, Stephen Przybylinski, and Ellen Kohl, for comments on various drafts of this paper; and most of all to the houseless community representatives interviewed for this project, who spoke candidly about the challenges they face, and about the ways in which they are creatively and collaboratively working to improve the environments of fellow houseless people. I am also indebted to two anonymous reviewers who offered generous and incisive comments on earlier drafts. All errors are my own.

#### **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This project is supported by a National Science Foundation Postdoctoral Research Award (No. 1808869), a Scholar-Activist Project Award from the Antipode Foundation, and a grant from the Common Counsel's Grassroots Exchange Fund. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of funders.

#### Notes

1. I follow the lead of houseless-led activist organization Right 2 Survive which refers to people living without shelter as "houseless" rather than homeless: home is where the heart is, the thinking goes, and just because someone lacks shelter does not mean they lack a heart.

- 2. While defining "environmental justice (EJ) communities" remains a contested, context-dependent undertaking, grassroots groups operating under this umbrella commonly adopt a broad definition, giving the term its "rhetorical power" (Holifield, 2001).
- 3. The RESTING SAFE survey team consisted of Lisa Fink, University of Oregon student research assistant who conducted much of the recruitment and interviews; Alex Novie, who provided technical guidance; Lisa Fay and Ibrahim Mubarak, Right 2 Survive co-founders and leaders, who advised throughout the research process; and myself. See www.right2survive.org and www.resting safe.org.
- 4. Chronic Obstructive Pulmonary Disease is an umbrella term used to describe progressive lung diseases including emphysema, chronic bronchitis, and non-reversible asthma.
- 5. A study in the Portland, Oregon metro area reveals that nearly 80% of all illegal dumping is comprised of housed people's trash (Dooris, 2018).
- 6. See www.restingsafe.org.
- 7. I draw on Edgar Pieterse's (2008) notion of "radical incrementalism" here, which I expand on in a paper under development.

#### References

- Adamson J (2011) Medicine food: Critical environmental justice studies, Native North American literature, and the movement for food sovereignty. *Environmental Justice* 4(4): 213–219.
- Agyeman J (2013) Introducing Just Sustainabilities: Policy, Planning, and Practice. New York: Zed Books
- Baily E (2019) Portland man walks into homeless camp, intentionally starts fire that torches tent, authorities say. *OregonLive*, 29 August. Available at: www.oregonlive.com/portland/2019/08/port land-man-walks-into-homeless-camp-intentionally-starts-fire-that-torches-tent-authorities-say.html (accessed 3 September 2019).
- Beckett K and Herbert S (2010) *Banished: The New Social Control in Urban America*. Oxford: Oxford University Press.
- Bernstein M (2019) Portland police sergeant's inflammatory roll call statements released a year after his firing. *OregonLive*, 30 January. Available at: www.oregonlive.com/crime/2019/01/fired-port land-police-sergeants-inflammatory-roll-call-statements-released-a-year-after-his-termination.html (accessed 3 September 2019).
- Brown R, Goodman L, Guzman D, et al. (2016) Pathways to homelessness among older homeless adults: Results from the HOPE HOME study. *PLoS ONE* 11(5): 1–17.
- Brown R, Hemati K, Riley E, et al. (2017) Geriatric conditions in a population-based sample of older homeless adults. *The Gerontologist* 57(4): 757–766.
- Brulle R and Pellow D (2006) Environmental justice: Human health and environmental inequalities. *Annual Review of Public Health* 27(1): 103–124.
- Bullard R (2000) Dumping in Dixie: Race, Class, and Environmental Quality. Boulder, CO: Westview Press.
- Bullard R, Mohai P, Saha R, et al. (2008) Toxic wastes and race at twenty: Why race still matters after all of these years. *Environmental Law* 38(2): 371–411.
- Camp J and Heatherton C (2016) Policing the Planet: Whey the Policing Crisis Led to Black Lives Matter. London: Verso.
- Cho S, Crenshaw K and Leslie M (2013) Toward a field of intersectionality studies: Theory, applications, and praxis. Signs: Journal of Women in Culture and Society 38(4): 785–810.
- Christensen J (2017) No Home in a Homeland: Indigenous Peoples and Homelessness in the Canadian North. Vancouver: UBC Press.

- Coalition on Homelessness San Francisco (COH-SF) (nd) Punishing the poor. Available at: wraph ome.org//wp-content/uploads/2015/03/Punishing.pdf (accessed 8 March 2019).
- Corburn J (2005) Street Science. Cambridge: MIT Press.
- Crenshaw K (1991) Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review* 43: 1241–1299.
- DeMyers C, Warpinski C and Wutich A (2017) Urban water insecurity: A case study of homelessness in Phoenix, Arizona. *Environmental Justice* 10(3): 72–80.
- Dillon L and Sze J (2016) Police power and particulate matters: Environmental justice and the spatialities of in/securities in U.S. cities. *English Language Notes* 54(2): 13–23.
- Dooling S (2009) Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research* 33(3): 621–639.
- Dooris P (2018) How to clean up garbage at homeless camps? That's a questions Metro is trying to answer. *KGW8*. Available at: www.kgw.com/article/news/local/homeless/how-to-clean-up-garbage-at-homeless-camps-thats-a-question-metro-is-trying-to-answer/283-614297177 (accessed 6 September 2019).
- Dozier D (2019) Contested development: Homeless property, police reform, and resistance in Skid Row, LA. *International Journal of Urban and Regional Research* 43(1): 179–194.
- Ducre K (2018) The Black feminist spatial imagination and an intersectional environmental justice. Environmental Sociology 4(1): 22–35.
- Ecker J, Aubry T and Sylvestre J (2019) A review of the literature on LGBTQ adults who experience homelessness. *Journal of Homosexuality* 66(3): 297–323.
- Ellis R (2019) Review: Half of PPB's 2017–18 arrests were of people experiencing homelessness. *OPB*, 17 July. Available at: www.opb.org/news/article/portland-police-homeless-arrests-half-review-2018/ (accessed 3 September 2019).
- Gee A (2018) San Francisco or Mumbai? UN envoy encounters homeless life in California. *The Guardian*. Available at: www.theguardian.com/us-news/2018/jan/22/un-rapporteur-homeless-san-francisco-california (accessed 20 April 2018).
- Gibson A (2019) Climate change for individuals experiencing homelessness: Recommendations for improving policy, research, and services. *Environmental Justice* 12(4).
- Gilmore RW (2007) Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California. Berkeley: University of California Press.
- Goetz E (2013) New Deal Ruins: Race, Economic Justice, & Public Housing Policy. Ithaca, NY: Cornell University Press.
- Goodling E (2019) Urban political ecology from below: Producing a 'peoples' history' of the Portland Harbor. *Antipode*.
- Goodling E (under contract) Green City Rising: Contamination, Cleanup & Collective Action in an Urban Harbor. Athens: University of Georgia Press.
- Goodling E, Fink L and Novie A (under development) Geographies of US Homeless-Led Resistance. Reflections from a First-Ever National Survey.
- Gorz A (1967) Reform and revolution. In: *Le Socialisme Difficile*. Editions du Seuil. Translated by Ben Brewster. pp. 111–143.
- Gowan T (2002) The nexus: Homelessness and incarceration in two American cities. *Ethnography*, 3(4): 500–534.
- Hale M (2019) Fountains for environmental justice: Public water, homelessness, and migration in the face of global environmental change. *Environmental Justice* 12(2).
- Heben A (2014) Tent City Urbanism: From Self-Organized Camps to Tiny House Villages. Eugene, OR: Village Collaborative.
- Herring C (2014) The new logics of homeless seclusion: Homeless Encampments in America's West Coast Cities. City & Community 13(4): 285–308.
- Herring C (2019) Between street and shelter: Seclusion, exclusion, and the neutralization of poverty. In: Flint J and Poweel R (eds) *Class, Ethnicity and State in the Polarized Metropolis*. Switzerland: Palgrave Macmillan, pp. 281–306.

Herring C and Lutz M (2015) The roots and implications of the USA's homeless tent cities. *City* 19: 689–701.

- Herring C, Yarbrough D and Alatorre LM (2019) Pervasive penalty: How the criminalization of poverty perpetuates homelessness. *Social Problems* 1–19.
- Hines J, Jagger M, Jeanne T, et al. (2018) Heavy precipitation as a risk factor for shigellosis among homeless persons during an outbreak Oregon, 2015–2016. *Journal of Infection* 76(3): 280–285.
- Holifield R (2001) Defining environmental justice and environmental racism. *Urban Geography* 22(1): 78–90.
- Holifield R, Porter M and Walker G (2009) Introduction Spaces of environmental justice: Frameworks for critical engagement. *Antipode* 41(4): 591–612.
- Lipsitz G (2007) The racialization of space and the spatialization of race: Theorizing the hidden architecture of landscape. *Landscape Journal* 26(1): 10–23.
- Lipsitz G (2016) Policing place and taxing time on Skid Row. In: Camp J and Heatherton C (eds)

  Policing the Planet: Why the Policing Crisis Led to Black Lives Matter. London: Verso, pp. 95–107.
- Logan J and Molotch H (2007) Urban Fortunes: The Political Economy of Place. Berkeley: University of California Press.
- Mitchell D (1997) The annihilation of space by law: The roots and implications of anti-homeless laws in the United States. *Antipode* 29(3): 303–325.
- Mitchell D (2003) The Right to the City: Social Justice and the Fight for Public Space. New York: Guilford Press.
- Mokos J (2017) Stigmatized places as therapeutic landscapes: The beneficial dimensions of riverbottom homeless encampments. *Medicine Anthropology Theory* 4(1): 123.
- Morello-Frosch R, Pastor M and Sadd J (2001) Environmental justice and Southern California's 'riskscape': The distribution of air toxics exposures and health risks among diverse communities. *Urban Affairs Review* 36(4): 551–578.
- National Law Center on Homelessness & Poverty (NLCHP) (2017) Tent City U.S.A: The Growth of America's Homeless Encampments and How Communities Are Responding.
- Nicholas R (2006) Lesbian, Gay, Bisexual, and Transgender Youth: An Epidemic of Homelessness. New York: National Gay and Lesbian Task Force Policy Institute and National Coalition for the Homeless.
- Olivet J, Dones M, Richar M, et al. (2018) Supporting Partnerships for Anti-Racist Communities. Needham, MA: Center for Social Innovation.
- Pellow D (2016) Toward a critical environmental justice studies: Black lives matter as an environmental justice challenge. *Du Bois Review* 13(2): 221–236.
- Pellow D (2018) What Is Critical Environmental Justice? Cambridge: Polity Press.
- Pellow D and Brulle R (2005) Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement. Cambridge: MIT Press.
- Pieterse E (2008) City Futures: Confronting the Crisis of Urban Development. London: Zed.
- Plaster J (2012) Imagined conversations and activist lineages: Public histories of queer homeless youth organizing and the policing of public space in San Francisco's Tenderloin, 1960s and present. *Radical History Review* 113: 99–109.
- Pulido L (2002) Reflections on a white discipline. The Professional Geographer 54(1): 42-49.
- Pulido L, Kohl E and Cotton N (2016) State regulation and environmental justice: The need for strategy reassessment. *Capitalism Nature Socialism* 1–20.
- Queally J and Ormseth M (2019) Friends gather to recall the skid row guitarist who died when his tent was set ablaze. *LA Times*, 28 August 2019. Available at: www.latimes.com/california/story/2019-08-27/homeless-man-burned-to-death-in-skid-row-area (accessed 4 September 2019).
- Ramin B and Svoboda T (2009) Health of the homeless and climate change. *Journal of Urban Health* 86(4): 654–664.
- Rose J (2019) Unsheltered homelessness in urban parks: Perspectives on environment, health, and justice in Salt Lake City, Utah. *Environmental Justice* 12(1).

- Schmid T (2018) No link between homeless villages and crime rates, Guardian review suggests. *The Guardian*. Available at: www.theguardian.com/us-news/2018/may/23/homeless-villages-crime-rate-seattle-portland (accessed 23 July 2018).
- Settembrino M (2017) 'Sometimes you can't even sleep at night': Social vulnerability to disasters among men experiencing homelessness in Central Florida. *International Journal of Mass Emergencies & Disasters* 35(2): 30–48.
- Smith N (1992) Contours of a spatialized politics: Homeless vehicles and the production of geographical scale. *Social Text* 33: 55–81.
- Smith N (2006) There's no such thing as a natural disaster. SSRC. Available at: understandingkatrina. ssrc.org/Smith/ (accessed 5 May 2017).
- Sparks T (2010) Broke not broken: Rights, privacy, and homelessness in Seattle. *Urban Geography* 6: 842–862.
- Sparks T (2017) Citizens without property: Informality and political agency in a Seattle, Washington homeless encampment. *Environment and Planning A* 49(1): 86–103.
- Speer J (2016) The right to infrastructure: A struggle for sanitation in Fresno, California homeless encampments. *Urban Geography* 7: 1049–1069.
- Speer J (2017) "It's not like your home": Homeless encampments, housing projects, and the struggle over domestic space. *Antipode* 49(2): 517–535.
- Speer J (2018) The rise of the tent ward: Homeless camps in the era of mass incarceration. *Political Geography* 62: 160–169.
- Speer J and Goldfischer E (2019) The city is not innocent: Homelessness and the value of urban parks. *Capitalism Nature Socialism*.
- Staeheli L and Mitchell D (2006) *The People's Property? Power, Politics, and the Public.* New York: Routledge.
- Stuart F (2014) From 'rabble management' to 'recovery management': Policing homelessness in marginal urban space. *Urban Studies* 51(9): 1909–1925.
- Stuart F (2016) Down, Out, and Under Arrest: Policing and Everyday Life in Skid Row. Chicago, IL: University of Chicago Press.
- Taylor D (2000) The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist* 43: 508–580.
- VanderHart D (2016) Portland might have found a site for its next homeless camp. The problem? It's contaminated. *Portland Mercury*. Available at: www.portlandmercury.com/news/2016/06/08/18194976/portland-might-have-found-a-site-for-its-next-homeless-camp (accessed 14 September 2018).
- Walker G (2009) Beyond distribution and proximity: Exploring the multiple spatialities of environmental justice. *Antipode* 41(4): 614–636.
- Weissman E (2017) Tranquility on the Razor's Edge: Changing Narratives of Inevitability. Oakville, ON: Rock's Mills Press.
- Western Regional Advocacy Project (WRAP) (2014) Without Housing: Decades of Federal Housing Cutbacks, Massive Homelessness, and Policy Failures. Available at: wraphome.org//wp-content/uploads/2008/09/2010%20Update%20Without%20Housing.pdf (accessed 8 September 2018).
- Zielinski A (2019) No criminal charges for Portland cop who fatally shot blind, mentally ill Black man. *The Portland Mercury*. Available at: www.portlandmercury.com/blogtown/2019/02/22/25983390/no-criminal-charges-for-portland-cop-who-fatally-shot-blind-mentally-ill-black-man (accessed 4 September 2019).