Environmental Inequalities and the U.S. Prison System: An Urgent Research Agenda

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In this commentary, I explore how ecosystems are facing serious threats and how the right to public and environmental health is being systematically denied to thousands of people in the United States as a result of harms sustained within and outside the nation's prison and jail systems.

I start with the field of environmental justice (EJ) studies, an area of scholarship in which I have worked for many years. The field of EJ studies has demonstrated that where we find social inequalities by race and class, we tend to also find environmental inequalities in the form of marginalized groups being exposed to greater levels of pollution, toxics, "natural" disasters including the effects of climate change as well as the exclusion of these groups from policy-making bodies that influence those outcomes [1-3]. A growing number of scholars use the term Critical EJ Studies as a perspective intended to address a number of limitations and tensions within earlier generations of EJ studies, which I address later in this commentary. In the next segments, I detail how the prison and jail systems in the U.S. produce and exacerbate public and environmental health risks for inmates and surrounding communities and ecosystems.

Prisons as Site of Study for Health, Environmental Inequalities and Justice

In January of 2015 when the Prison Ecology Project started up, this non-governmental organization had no idea that they would uncover so many cases of prison-related environmental inequalities. It is now clear that the location of a prison and the spatial organization of a prison can produce internal threats to the bodies of prisoners and corrections officers who work and live on site [4]. The following is just a sampling: 1) there are confirmed reports of water contaminated with arsenic, lead, and other pollutants at prisons in nearly 20 states, including the now infamous case of Flint, Michigan where the Genesee County jail's inmates including pregnant women were forced to drink toxic water while prison guards drank filtered water out of bottles; 2) the Rikers Island jail in New York City was built atop a landfill that for years has produced methane gas explosions and is plagued with health complaints from cancer-stricken corrections officers; 3) the Victorville Federal Correctional Complex in California was built on a former nuclear Weapons Storage Area (WSA) and is now a military superfund site (which means it is recognized by the federal government as contaminated land that poses a threat to human and/ or environmental health); 4) the Northwest Detention Center in the SEATAC area here, is a privately-operated prison designed to house more than 1500 immigrant detainees and is built adjacent to a federally designated toxic Superfund site; 5) Texas prisoners face some of the worst heat and humidity of any inmates in the nation, because of extreme weather combined with a lack of air conditioning and deficient medical care at facilities throughout the state [5,6]. A University of Texas Law School investigation discovered that fourteen prisoners died between 2007 and 2014 due to extreme heat and neglect by the Texas Department of Criminal Justice; and 6) In another example, the State Correctional Institution Fayette in LaBelle, Pennsylvania, is right next to a coal ash dump containing an estimated 40 million tons of waste and two coal slurry ponds. An investigation revealed that an unusually high percentage of prisoners report declining health and symptoms and illness consistent with exposure to toxic coal waste, including cancer, respiratory, throat and sinus conditions, thyroid disorders, blurred vision, fatigue, hair loss, dizziness, headaches, gastrointestinal problems, and much more [7,8]. Moreover, residents of the adjacent town of LaBelle suffer from the exact same health conditions. A particularly noteworthy aspect of this study is that most prisoners’ symptoms and illnesses did not emerge until after they arrived at SCI Fayette, and in numerous instances prisoners who left the facility experienced dramatic improvements in health.

How has the government responded? The United States Environmental Protection Agency did a series of inspections across several prisons in the mid-Atlantic region of the U.S. from 1999 through 2011. Complaints they received that prompted these inspections included concerns about noxious odors from overloaded sewage treatment plants to improper storage and disposal of hazardous waste. In what might surprise the reader, the EPA was particularly interested in investigating prisons with a variety of manufacturing areas (industrial shops) that generated hazardous waste in some quantity [9]. That's right prisons frequently produce hazardous waste from industrial activity occurring within their walls. That activity involves the labor of inmates who are not afforded the same health and safety protections as non-prisoners in other industry sectors.

Interestingly, the EPA's website featuring this Prison Initiative repeatedly stressed the importance of its focus on environmental justice, which it defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. So one can imagine the surprise when, activists working with the non-governmental organization called the Prison Ecology Project were repeatedly told that the USEPA does not include prisoner populations in its environmental justice mandate. That is, the USEPA is charged with health complaints from cancer-stricken corrections officers; 3) the Victorville Federal Correctional Complex in California was built on a former nuclear Weapons Storage Area (WSA) and is now a military superfund site (which means it is recognized by the federal government as contaminated land that poses a threat to human and/ or environmental health); 4) the Northwest Detention Center in the SEATAC area here, is a privately-operated prison designed to house more than 1500 immigrant detainees and is built adjacent to a federally designated toxic Superfund site; 5) Texas prisoners face some of the worst heat and humidity of any inmates in the nation, because of extreme weather combined with a lack of air conditioning and deficient medical care at facilities throughout the state [5,6]. A University of Texas Law School investigation discovered that fourteen prisoners died between 2007 and 2014 due to extreme heat and neglect by the Texas Department of Criminal Justice; and 6) In another example, the State Correctional Institution Fayette in Labelle, Pennsylvania, is right next to a coal ash dump containing an estimated 40 million tons of waste and two coal slurry ponds. An investigation revealed that an unusually high percentage of prisoners report declining health and symptoms and illness consistent with exposure to toxic coal waste, including cancer, respiratory, throat and sinus conditions, thyroid disorders, blurred vision, fatigue, hair loss, dizziness, headaches, gastrointestinal problems, and much more [7,8]. Moreover, residents of the adjacent town of LaBelle suffer from the exact same health conditions. A particularly noteworthy aspect of this study is that most prisoners’ symptoms and illnesses did not emerge until after they arrived at SCI Fayette, and in numerous instances prisoners who left the facility experienced dramatic improvements in health.

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with ensuring that various socially vulnerable populations are not also facing disproportionate environmental risk, but prisoners are excluded from that charge. In response, a coalition of civil society groups wrote letters to the USEPA in July of 2015 and 2016 to request that the agency include prisoners in its EJ enforcement framework to ensure that these populations receive the protections that are guaranteed under federal U.S. law [10,11]. The letters asked, if we can recognize the problem with forcing people to live in close proximity to toxic and hazardous environmental conditions, then why are we ignoring prisoners who are forced to live in detention facilities impacted by such conditions?

The vast majority of prisoners in the U.S. are low-income persons, people of color, and immigrants. Many of them are clearly facing exposure to a range of environmental and public health hazards, as the USEPA itself has found. So why not include these populations under the banner of environmental justice communities? The USEPA’s reasoning appears to be that prisons should be regulated as sources of environmental pollution only insofar as that pollution might harm surrounding communities and ecosystems and not the health of prisoners who are in immediate proximity to those hazards [12]. In numerous enforcement actions agency representatives discuss the importance of improving, for example, the air quality for communities near correctional facilities, but not the air quality within the prisons. This would suggest that when activists at the Prison Ecology Project claim that “prisoners are viewed as less than human” perhaps they are not too far off the mark. Not only are prisoners not afforded human rights or basic civil rights (they are arguably enslaved, after all, if we consider the 13th amendment to the U.S. Constitution) [13], if imprisonment of so-called “criminals” is a solution to the social problem of crime then prisons become a form of waste management, a technology of containment and control of social contamination. In other words, there is a double contamination threat being managed here by the USEPA and the Department of Justice and Bureau of Prisons: 1) the environmental hazards associated with air, land, and water pollution that emanate from prisons that threaten surrounding communities (i.e., the USEPA jurisdiction) and 2) the social contamination and social pollution embodied in the prisoners themselves, who tend to be from populations that are criminalized (i.e., the DOJ and BOP jurisdiction). So the EPA seeks to regulate prison pollution threats only insofar as they may affect nearby residential areas while they ignore the plight of prisoners facing myriad toxic exposures, and the DOJ and BOP manage the social pollution problem via the construction of prisons and the incarceration of human “waste” in those facilities. Here I am reminded that criminologist Jonathan Simon calls prisons “human toxic waste dumps.” Unfortunately, that leaves little protections for the prisoners themselves and minimal consideration for affected ecosystems. It is my hope that scholars and policy makers will intensify efforts to document these challenges and offer workable solutions.

**Competing Interests**

The authors declare that they have no competing interests.

**References**