

An update on water crises facing Black communities

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INTRODUCTION

Albert Picketti, a 63-year-old Black man from Cleveland, Ohio, lost everything after the Cleveland Water Department shut off his water. In 2010, Mr. Pickett's mother passed away from Alzheimer's disease. He moved back into her house, which was his childhood home, in East Cleveland, a suburb bordering Cleveland city limits that is 89% Black and one of the poorest cities in the country.1 In the last few years of her life, Mr. Pickett's mother had fallen behind on paying her water bills and had outstanding debt of about \$3,000 from unpaid water bills. Mr. Pickett was now responsible for paying off the debt. Mr. Pickett lives off disability benefits totaling about \$700 per month and could not afford to pay off the debt in full. In addition, the City denied his requests to set up a payment plan to pay it off over time. In 2013, the City shut off Mr. Pickett's water. Mr. Pickett lived without water in his home for six years. He was forced to borrow water from neighbors and to use buckets of water to bathe and fill his toilet. He spent part of his \$700 monthly benefits to buy bottled water to drink and take his medications. In 2019, a small fire started in Mr. Pickett's home and, because his water had been shut off, he was unable to extinguish the fire. His home was partially destroyed, and the vast majority of his possessions were destroyed. After a period of homelessness, he was able to secure housing with the help of the Northeast Ohio Coalition for the Homeless. Since the NAACP Legal Defense and Educational Fund, Inc. (LDF) filed a lawsuit against the City of Cleveland for its discriminatory water practices, many other Cleveland residents have come forward with stories

of egregiously expensive water bills, water shutoffs, and property liens placed on their homes for unpaid water bills of just a few hundred dollars.

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Without water you can't do anything. I lost my family, my wellbeing, my self-esteem. It was humiliating, like I was less than human.

- Albert Pickett²

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Clean water is essential for our survival—yet millions of people in the United States lack access to clean water, plumbing, and wastewater services. Nearly 77 million Americans (almost one in four) are served by water systems that have violated the Safe Drinking Water Act (SDWA), the federal law regulating contaminants in our drinking water.3 More than two million Americans lack access to running water, indoor plumbing, or wastewater services altogether.4

The burden of unsafe drinking water and lack of water access is not felt equally across the country:

i Albert Pickett is a LDF client.

race is the strongest predictor of water and sanitation access.⁵ Several studies have documented how communities of color are more likely to experience SDWA violations, more likely to have slow and inadequate enforcement of the SDWA, and more likely to lack complete plumbing. 6 Black and Latinx households are nearly twice as likely to lack complete plumbing than white households, and Native American households are 19 times as likely to lack complete plumbing than white households.7

In 2019, LDF's Thurgood Marshall Institute (TMI) published a seminal report titled "Water/Color: A Study of Race and the Water Affordability Crisis in America's Cities." This report was among the first to interrogate how failing water infrastructure and water unaffordability has severely impacted Black communities in U.S. cities. The report exposed how municipalities historically deprived majority-Black neighborhoods of access to essential services, including water services, as racial residential segregation increased throughout the 20th century. This systematic discrimination has continued to shape current access to water systems for Black communities.

Today, water infrastructure across the country is failing. The United States loses six billion gallons of drinking water every day due to broken and leaking pipes.8 Because of a lack of sufficient federal funding for water infrastructure, local municipalities have been bearing the burden of increasing costs. In

majority-Black neighborhoods and cities, which have faced historic disinvestment, these costs get transferred to consumers resulting in water affordability crises.9 TMI's 2019 Water/Color report documented how recent water affordability crises in Baltimore, Maryland; Cleveland, Ohio; and Detroit, Michigan have disproportionately impacted Black residents.¹⁰ Black residents in Baltimore and Cleveland have faced high risks of having water liens placed on their homes, potentially resulting in loss of homeownership, and Black residents in Detroit have faced high risks of water shutoffs.11

This Brief picks up where our 2019 *Water/ Color* report left off. We begin by providing an abridged review of the drivers of racial inequity in water access and placing current water access and affordability crises within the contexts of the COVID-19 pandemic and the ongoing climate crisis. We then highlight examples of recent and ongoing water crises in Black communities, including lack of sewer access in rural Alabama and drinking water contamination in majority-Black cities. Next, we review strategies to address water affordability through legislation and litigation using examples from Baltimore, Cleveland, and Detroit. Finally, we offer an overview of the current federal funding landscape for water infrastructure and provide recommendations for steps federal, state, and local governments can take to ensure all people have access to clean, safe, and affordable water.ii

This Brief is focused on a subsection of a larger set of water challenges: drinking water and wastewater crises facing Black communities. The Brief does not review all water challenges in the U.S. including increasing risk of drought due to climate change and industrial sources of water contamination, which also impact communities of color.



DRIVERS OF HISTORIC AND ONGOING **RACIAL INEQUITY IN WATER ACCESS**

Water access and affordability remains an urgent racial justice issue with implications for public health and human rights.iii In urban areas, racial residential segregation has locked Black residents into cities and neighborhoods with deteriorating water and sewer infrastructure and declining tax bases that are unable to fund needed repairs.12 In rural areas, the construction of water and sewer infrastructure has excluded many Black communities.¹³ These issues have been exacerbated by a historic decline in federal funding for water and a lack of political will to address long-standing inequities. For a more detailed overview of the historical drivers of racial inequity in water access, read TMI's 2019 Water/Color report.14

Together, these factors have created a national environmental justice crisis in which Black communities lack equal access to plumbing, face higher risks of water contamination, and suffer disproportionately from water unaffordability.

Lack of access to complete plumbing. Nationally, five out of every 1,000 Black households lack complete plumbing (i.e., hot-and-cold running water and a shower/bath), double the rate among white households. 15 In rural areas, these disparities are even starker: in rural Alabama, Black households lack complete plumbing at nine times the rate of white households according to 1990 Census data, the last time such data was collected.¹⁶

Failing infrastructure and contamination. Even

Failing infrastructure and unaffordability. Failing water infrastructure is also responsible for rising water costs, creating a water affordability crisis.20 Multiple analyses have documented how the cost of water has risen faster than other household utilities.21 The combined water and wastewater bill for the average U.S. household has increased 43% from 2012 to 2021 at an average of 4.2% per year, outpacing other utilities (electricity and natural gas bills average a 1% increase per year).22 Available evidence suggests that communities of color face higher water and sewer costs, despite being served by lower-quality water and sewer systems.23 As a result, communities of color are more likely to experience water service shutoffs and property liens for unpaid water bills.24

communities with access to water infrastructure are often living with the consequences of unsafe, aging, and crumbling infrastructure, which in turn leads to an increased risk of water contamination due to broken pipes and/or lead pipes. A growing body of research has documented a relationship between race and risk of exposure to contaminated water.¹⁷ For example, two recent studies of nationwide drinking water violations found that counties with more people of color have higher rates of drinking water violations.18 An Illinois-based study determined that Black people are more than twice as likely to live in communities containing 94% of the state's known lead service lines compared to white people.19

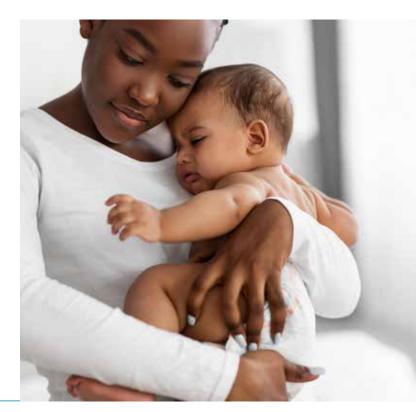
iii To learn more about local efforts to advocate for safe, affordable water access across the United States, see https://www.katelevydocumentary. com/2012/12/01/big-water-film/.

CONSEQUENCES OF UNEQUAL ACCESS TO WATER

Lack of plumbing access, water contamination, and water unaffordability have serious consequences for the health, safety, and well-being of Black communities and other communities of color. At a basic level, clean water is necessary for sanitation and hygiene. Infectious diseases can spread more easily when communities lack water and sewer access. For example, in Lowndes County, Alabama, where a third of residents have raw sewage pooling in their yards or sewage backup in their homes due to a lack of sewer infrastructure and failing septic tanks, scientists identified people infected with hookworm, a parasitic disease thought to be eradicated in the United States.25 Toxic drinking water can lead to lead and arsenic poisoning, which can have longlasting physical and mental health consequences, such as nervous system damage, learning disabilities, hearing impairment, heart disease, and reproductive health conditions.26 During the Flint water contamination crisis, the rate of infants born to Black mothers diagnosed as low birth weight increased by 19%.27 Nakiya Wakes, a Black Flint resident, reported that her young son developed intellectual disabilities and was labeled a "nonreader" and her daughter had a miscarriage at 18 years old while Nakiya herself suffered from two miscarriages following the water contamination crisis.

In addition to the health consequences of inequitable water access and affordability, there are collateral social, economic, and criminal legal

consequences of water unaffordability that impact safety and well-being. People may be evicted from their homes or lose their homes for failure to pay water bills; face temporary or permanent loss of child custody; and face criminal charges for reconnecting water after a service disconnection or for failing to maintain a functioning septic system.28 Families without water service are at risk of involvement with Child Protective Services because lack of running water is a factor in determining whether parents are providing a suitable home for their children.²⁹ Further, in Detroit, residents have been prosecuted for "malicious destruction of utility property" for reconnecting their water supply.30 During the Flint water contamination crisis, the rate of infants born to Black mothers diagnosed as low birth weight increased by 19%.



INCREASING URGENCY OF WATER EQUITY IN THE WAKE OF COVID-19 AND CLIMATE CHANGE

The COVID-19 pandemic and climate crisis have further demonstrated the urgency of clean water access. At the start of the pandemic, many states and municipalities recognized that the punitive practice of shutting off water services due to inability to pay is a direct threat to public health, especially during an infectious disease pandemic, because without water in their homes, people are unable to cook, bathe, flush their toilets, and wash their hands. As a result, 35 states and almost 500 cities enacted water shutoff moratoriums in March and April 2020.31 Water shutoff moratoriums were associated with significant reductions in COVID-19 infection rates and COVID-19 death rates.32 However, many of these moratorium policies fell short: some did not cover all water systems (public and private), some did not require that water access be restored if it had been disconnected, and some required late fees to continue accruing during the moratorium.³³ Additionally, the large majority of moratoriums were temporary, some lasting for less than two months, even though the federal COVID-19 public health emergency continued until May 2023 and water shutoffs pose a threat to public health even under non-pandemic conditions.³⁴ Black communities in the United States experienced some of the highest rates of infection, hospitalization, and death due to COVID-19,35 and lack of water access during the pandemic may have exacerbated already existing inequities.



Moreover, climate change will continue to threaten water infrastructure and access through extreme weather events, and people of color disproportionately live in areas that are more vulnerable to the impacts of climate change.35 Hurricanes and extreme precipitation can cause sewer systems to back up and overflow in neighborhoods with poor sewer infrastructure.36 This overflow pollutes the water supply with wastewater and other contaminants.³⁷ Extreme temperatures can have equally disastrous effects: During high temperatures and drought, algae blooms and excess sediment can contaminate water reservoirs.³⁸ During freezing temperatures and winter storms, water pipes can freeze and burst, which has led to recurring water contamination crises in Jackson, Mississippi.³⁹ Finally, wildfires can cause water contamination by releasing ash pollution into the water supply, which can include cancer-causing benzene.⁴⁰ As the effects of climate change continue to wreak havoc on the United States' failing water and sewer infrastructure, Black communities will continue to be disproportionately burdened by the consequences.

PERSISTENT WATER CRISES IN BLACK COMMUNITIES

Drinking water and wastewater/sewer crises remain an urgent public health and human rights challenge in Black communities in the United States. In this section, we highlight recent examples of sewer and water contamination crises in Black communities.

Sewer access and infrastructure challenges in Alabama

Communities of color have struggled for decades to obtain quality sewer and wastewater access. Black rural communities located in the Alabama's "Black Belt," have especially struggled with sewer access and sewage backups.⁴¹

The Black Belt originally got its nickname from the region's dark, fertile soil that was ideal for cotton farming. 42 Most of Alabama's population of enslaved people was concentrated within the Black Belt. 43 Today, the "Black Belt" is also used in reference to the majority-Black population in this region that increased as a consequence of slavery and Jim Crow segregation. 44

The soil that originally gave the Black Belt its name is notoriously terrible for water absorption and drainage, necessitating specialized wastewater systems to maintain sanitation.⁴⁵ A long history of discrimination in rural Alabama has resulted in a lack of political will and government funding to construct adequate wastewater systems. As a result, many Black residents are not connected to a municipal sewer line and have been left without

adequate sanitation access.⁴⁶ In Alabama, the state requires residents who are not connected to municipal sewer lines to pay for their own private septic systems and has made it a misdemeanor to not have a functioning septic system.⁴⁷ Black residents of small cities in Alabama have also been systematically excluded from newly constructed municipal sewer lines.⁴⁸

An estimated 90% of septic systems in Alabama's Black Belt region are malfunctioning or failing due to poor soil conditions, and outdated sewer systems frequently get backed up and overflow.⁴⁹ These problems have been exacerbated by heavier rainfall due to climate change, causing widespread sewage backups and flooding in Alabama.⁵⁰

Lowndes County, Alabama

Lowndes County, Alabama is a majority-Black rural county that is located along the route of the historic 1965 Selma to Montgomery March. More recently, Lowndes County has received attention because untreated sewage is surging through the community. Residents are exposed to untreated sewage that sits in open pools, leaks out of cracked pipes, and is flushed back up kitchen sinks and



An example of sewage overflow and flooding for illustration.

bathtubs in storms.⁵¹ As a result, residents have tested positive for hookworm (a parasitic disease previously thought to be eradicated in the United States).52 At least 40% of Lowndes County households lack an adequate septic system or lack a septic system altogether.⁵³ In 2021, the U.S. Department of Justice initiated an investigation into the Alabama Department of Public Health (ADPH) and the Lowndes County Health Department due to their neglect of the sanitary conditions facing Black residents of Lowndes County.⁵⁴ In May 2023, an agreement was reached that requires ADPH to suspend criminal penalties and liens for residents lacking functioning septic systems and to develop a plan to create a sustainable and equitable wastewater management system in Lowndes County.55

Athens, Alabama

Athens, Alabama is a small city outside Huntsville, Alabama, where recent expansions of the city's sewer lines have excluded the city's Black residents. Luke Street and Strain Road, a small Black section in Athens, still runs on a century-

old well system and relies on outdated septic tanks which often have sewage overflows and flooding problems.⁵⁶ It has been decades since the City cleaned the drainage ditches and wells.⁵⁷ Recently, the City installed sewer lines to serve new luxury residential developments in Athens while excluding the Black community from this expansion. Most residents of Luke Street and Strain Road are priced out of the new luxury developments in Athens and do not benefit from the new sewer lines.⁵⁸ Athens residents like Kirk Parker are frustrated by the lack of investment in the Luke Street-Strain Road community while the City officials are heavily investing in more affluent parts of the city. Mr. Parker, who is a longtime resident of Athens said, "We have been totally left out of everything. All the communities around us are on the new sewer system and yet our community is still on septic tanks. When it rains here most of the people in our community are getting flooded out, they are not able to flush their toilets or take showers and it causes mildew and mold to fester in people's homes. It feels like we are being walked over."59

Recent drinking water contamination crises in majority-Black cities

Racial residential segregation continues to shape water access and quality in many U.S. cities. Jackson, Mississippi; Baltimore, Maryland; and Flint, Michigan are three majority-Black cities that have long histories of racism, segregation, and economic disinvestment which have resulted in failing water infrastructure systems. These three cities have recently faced dire water contamination crises. Jackson, Baltimore, and Flint residents continue to organize to fight for equal access to safe drinking water.



Members of Progressive Morningstar Baptist Church move cases of water following a Sunday morning service in Jackson, Mississippi. The city of Jackson, where 80 percent of the population is Black and poverty is rife, has experienced water crises for years. But this one is particularly severe, with many residents lacking clean running water for nearly a week. Photo by Seth Herald/AFP via Getty Images

Jackson, Mississippi

In Jackson—where Black people make up more than 80% of the population—residents have been plagued by longstanding issues due to the city's aging water infrastructure and financial disinvestment in its drinking water system. ⁶⁰ Water problems, like chronic boil-water advisories and low water pressure, have been so commonplace that residents have learned to hoard bottled water in expectation of the next round of boil-water notices and outages. ⁶¹

In February 2021, severe winter weather froze water lines and caused a major equipment failure at the city's main water treatment plant. Water mains throughout the city burst and water pressure dropped, leaving tens of thousands of residents without water service—some of whom did not regain service until a month later.⁶² A similar outage occurred due to freezing temperatures in December 2022.⁶³ These outages were preceded by outages in 2010, 2014, and 2018 that also resulted from winter storms.

The systemic problems with Jackson's drinking water system have prompted actions by private citizens and government agencies aimed at affecting change. In September 2022, the NAACP filed a Title VI complaint with the U.S. Environmental Protection Agency (EPA)'s Office of Environmental Justice and External Civil Rights, requesting an investigation into the use of federal drinking water



Charles Wilson III boils pots of water in his kitchen to use for his son Charles Wilson V's (pictured on the refrigerator) bath on December 9, 2022 in Jackson, Mississippi. Wilson III says his son Wilson V started drinking tap water as a baby but switched to bottled water a year ago after he started suffering stomach problems and headaches. Jackson residents have been suffering from unsafe drinking water for years, forcing people to use bottled water to drink, cook, and brush their teeth. Flooding in August caused the water treatment facility to malfunction, leaving residents without water to bathe or even flush toilets. Photo by Joshua Lott/The Washington Post via Getty Images

funds in Jackson.⁶⁴ According to the complaint, Jackson's failing water infrastructure is the result of Mississippi state officials "engag[ing] in a longstanding pattern and practice of systematically depriving Jackson the funds that it needs to operate and maintain its water facilities in a safe and reliable manner."65 In addition, the complaint alleges that Mississippi state agencies have been aware of the need for water infrastructure investment in Jackson, yet have starved the city of funds—despite it being the most populous city in Mississippi.⁶⁶ The complaint argues majority-white areas have received more funds from the state despite having less acute needs and smaller populations.⁶⁷ Further, the complaint alleges that state officials have repeatedly prevented Jackson from raising its own funding to improve its drinking water systems.⁶⁸

The state has refused to engage in formal talks with the EPA to resolve the complaint, claiming that the allegations of discrimination are unfounded.69

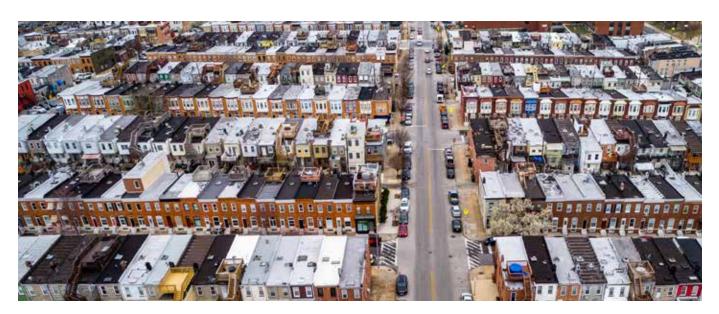
In addition to water outages, Jackson residents have had concerns that their water is contaminated. Last year, a group of residents filed a federal class action lawsuit against the City of Jackson and numerous current and former local officials.70 The lawsuit alleges that—even before the recent bout of water service outages—Jackson's water was not fit for consumption due to high lead levels, and that residents have experienced severe health issues from consuming the water.71 The DOJ also filed a complaint against the City of Jackson, on behalf of the EPA, alleging that the City failed to provide drinking water compliant with the SDWA.72

Baltimore, Maryland

Baltimore faces the challenges of an aging water system. The average age of Baltimore's water mains are at least 75 years old, and many pipes are exceeding 100 years old.73 The City is trying to expeditiously upgrade its water infrastructure, aiming to replace 15 miles of pipe across its 4,000 mile system each year,74 at an estimated cost of \$2 billion.⁷⁵ To raise the necessary funds, the City increased water bills, creating an affordability crisis.76 The increasing infrastructure costs and decreasing federal funding have led to a 500% increase in Baltimore water bills over the last two decades.⁷⁷ Fifty percent of Baltimore residents are currently billed more than the international standard for affordable water service.78

Using data from the Maryland Department of the Environment, LDF Data and Senior Research Analyst Tonya Farrow Chestnut, PhD and TMI Senior Research Fellow Daniel Johnson, PhD conducted an analysis demonstrating that from 2020-2022 Maryland severely underfunded Baltimore and other majority Black jurisdictions in the state (see Figure 1).79 The Clean Water State Revolving Loan Fund (CWSRF) is the mechanism through which the federal government partners with states to provide low-cost financing for water infrastructure and is one of very few ways in which local municipalities have access to capital to fund major infrastructure investments in clean water. In 2021, Baltimore applied for over \$300 million in CWSRF funds from the state of Maryland. Despite its history of problems with clean drinking water, Baltimore was not awarded any funds from the state to address its clean water issues.

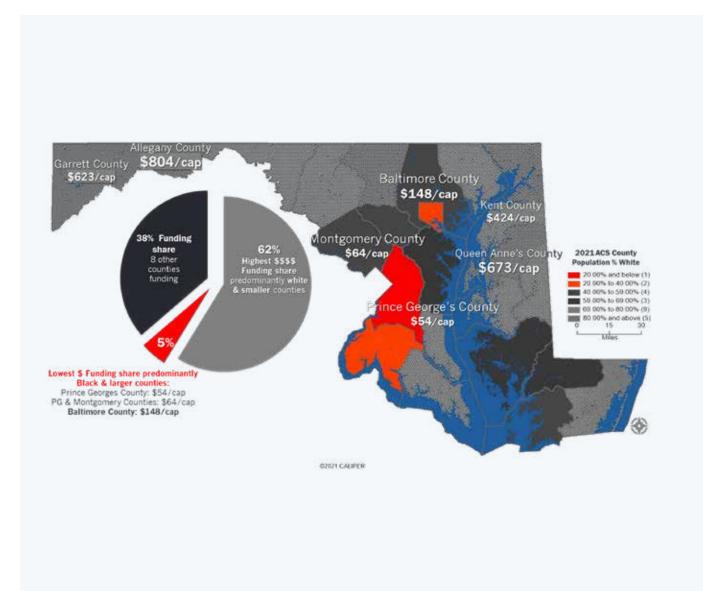
In comparison, majority-white jurisdictions in Maryland received substantially more funding through the CWSRF. For example, Allegany County (Black population: 5,757, total population: 67,729)80 received more funding than Baltimore (Black population: 357,428, total population: 576,498), despite being one-tenth of the size.81 As shown in Figure 1, Allegany County received \$804 per person while Baltimore received \$148 per person. Overall, 62% of the funding share went to predominantly white and smaller counties, while Black and larger counties received just 5% of funding for clean water investments.



An aerial view of the Patterson Park neighborhood of Baltimore

FIGURE 1.

Smaller, white counties in Maryland received disproportionately more Clean Water State Revolving Loan Fund (CWSRF) funds (2020-2022)



SOURCE: Maryland Department of the Environment CWSRF project applications submitted 2020-2022. Funding per capita = loan/total pop. Map prepared by Tonya Farrow Chestnut, LDF 08/2023.

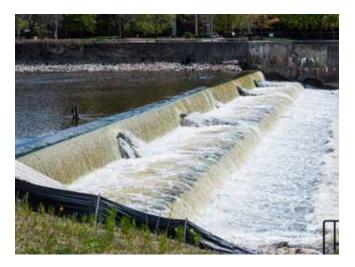


Workers with the Baltimore City Department of Public Works distribute jugs of water to city residents at the Landsdowne Branch of the Baltimore County Library on September 6, 2022 in Baltimore, Maryland. The City of Baltimore has issued a boil water advisory to over 1500 residential and commercial facilities in West Baltimore after E. coli bacteria was found in drinking water. Photo by Drew Angerer/Getty Images

Without adequate state and federal funding to make repairs, Baltimore's aging water system has created several water quality issues that have disproportionately harmed Black Baltimore residents. Recently, in September 2022, E. coli contaminants and total coliform were found in water samples in West Baltimore, a predominantly Black section of the city, where some of the oldest water mains are located.82 More than 1.500 West Baltimore homes and businesses were placed under a boil water advisory.83 The E. coli outbreak was determined to be "the result of aging infrastructure."84 According to Kelly Davis, a community leader who helped pass out bottled water in West Baltimore after the E. coli outbreak, "When something this huge occurs, it's felt a little

bit stronger here because it's a community that's already not getting what it needs."85

The Baltimore wastewater treatment system is also facing several challenges resulting from the aging system. Black communities in Baltimore face more frequent sewage backups and have inferior sewage infrastructure compared to predominantly white communities. ⁸⁶ Using data from 311, the city's system for non-emergency reports including reports of sewage backups, the top five neighborhoods experiencing the most raw sewage backups from 2021-2022 were primarily Black communities. ⁸⁷ Loch Raven, a community in Baltimore which is 87% Black, had the most issues, with 525 reported backups. ⁸⁸



In 2014, the water source for Flint, Michigan was changed from the Detroit water system to the Flint River (pictured above) without adding the necessary chemicals to treat the water. This triggered a devastating water contamination crisis



Bottled water distribution in downtown Flint.

Flint, Michigan

Flint was placed in the national spotlight in 2014 when the state-appointed emergency manager oversaw the decision to change the city's water source from the Detroit water system to the Flint River without adding the necessary chemicals to inhibit the spread of Legionnaires' disease and prevent lead from aging pipes from leaching into the water. This triggered devastating water contamination. The outbreak of Legionella bacteria (the bacteria that causes Legionnaires' disease) killed 12 people and sickened at least 87 people between June 2014 and October 2015.89 Due to lead exposure, many children were presenting to hospitals with rashes and hair loss, and pregnant people who drank the contaminated water faced higher risks of pregnancy complications and pregnancy loss.90

Key city and state officials faced criminal charges due to their negligence in the Flint water crisis. The charges included willful neglect of duty charges against former Governor Rick Snyder and involuntary manslaughter charges against the state's former top health officials.91 In 2022, the charges were dismissed.92

In March 2023, a judge approved a \$626 million class action settlement for Flint residents, the largest civil settlement in Michigan history.93 The majority of the settlement funds (about 80%) will be dedicated for children who were exposed to the lead-contaminated water.94

Flint residents are still dealing with the longlasting ramifications of the water contamination crisis. Lead exposure can have life-long mental and physical health consequences, especially for children.95 Many Flint parents have reported that their children continue to suffer from effects of lead exposure, such as intellectual disabilities and behavioral disorders.⁹⁶ The state continues to monitor lead levels in Flint water and they currently meet federal standards.97 Still, nine years after the crisis, residents report that their water intermittently smells of sewage and is visibly discolored.98 Many residents remain hesitant to use the city water.99

ADDRESSING WATER INEQUITY IN BLACK COMMUNITIES THROUGH LEGISLATION AND LITIGATION

Legislative change and litigation can be used to address water inequity and unaffordability. Cities and states can pass legislation to enact water affordability programs, ban water service shutoffs, and ban the placement of property liens for unpaid water bills. Lawsuits can challenge discriminatory and unconstitutional practices, such as discriminatory water shutoffs, overbilling, and discriminatory placement of property liens. In this section, we discuss how legislation and litigation have been deployed to create a new water affordability program in Baltimore and challenge discriminatory water practices in Cleveland and Detroit.

Legislative change in Baltimore, Maryland (Water4All)

In November 2019, the Baltimore City Council passed the Water Accountability and Equity Act (WAEA). The Baltimore Right to Water Coalition spearheaded the passing of the WAEA after years of advocacy and grassroots organizing. The WAEA created a new water affordability program, Water4All, that has helped thousands of residents. The program uses a formula to calculate the maximum amount residents are billed based on a percentage of their annual household income. The maximum percentage could be 1%, 2%, or 3%, depending on income and household size. The program applies to both income-eligible homeowners and tenants. In addition, the WAEA established a new Office of Water-Customer

Advocacy and Appeals to serve as an intermediary for customers dealing with water and wastewater billing disputes and established a formal appeals process for water and wastewater billing disputes and disputes concerning the new water affordability program.¹⁰³

As of July 2023, the Water4All program has provided 3,310 residents with \$2.8 million in water credits. ¹⁰⁴ The program has been largely effective at targeting residents and neighborhoods where water affordability has been an issue. The Baltimore ZIP codes with some of the highest poverty rates and highest percentage of Black residents (21215, 21213, 21216, and 21217) also have some of the highest numbers of applications for the credit program (see Figure 2). ¹⁰⁵

FIGURE 2.

Baltimore Zip Codes by Water4All Applicants and Demographics

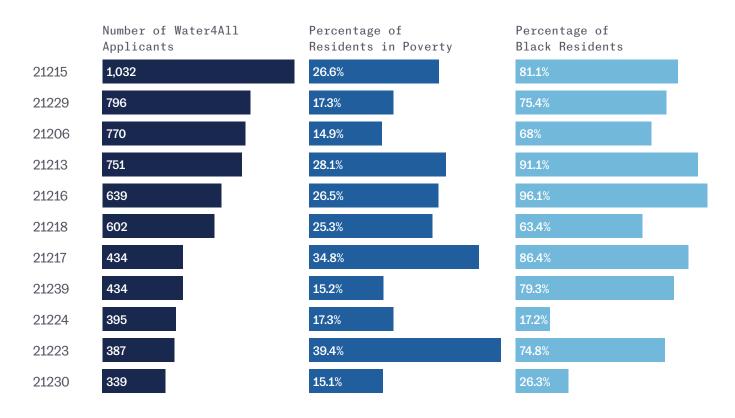


CHART: Thurgood Marshall Institute • Source: Water4All Dashboard 7/19/23 and Maryland American Community Survey and Census Data • Created with Datawrapper.

Litigation in Cleveland, Ohio (Pickett v. City of Cleveland)

In December 2019, LDF and local counsel filed a federal class action lawsuit against the City of Cleveland on behalf of several Black homeowners and several proposed classes of Cleveland Water customers who have been subjected to discriminatory and unfair water billing policies and practices. Specifically, the lawsuit brings claims under the Fair Housing Act, the Due Process and Equal Protection Clauses of the Fourteenth Amendment, the Ohio Constitution, and the Ohio Civil Rights Act. The policies/practices that the lawsuit challenges include (1) Cleveland's policy of

placing liens on properties with overdue water bills; (2) Cleveland's practice of overbilling customers and making them financially responsible for erroneous charges; and (3) Cleveland's practice of terminating water service for unpaid water debt with little to no notice.106

The Fair Housing Act is a federal law that prohibits discrimination in housing because of race, color, national origin, sex, religion, disability, or familial status.107 The Ohio Civil Rights Act is a state law that provides similar protections against discrimination in housing because of race, color, national origin, sex, religion, disability, familial status, ancestry

or military status.108 The plaintiffs allege that Cleveland placed more than 11,000 water liens on properties in Cuyahoga County from 2014 to 2018 and that significantly more water liens were placed in majority-Black census blocks than in majoritywhite blocks in Cuyahoga County. In fact, in 2014, 2015, and 2017, the number of water liens placed in majority-Black census blocks was more than triple the number placed in majority-white blocks. 109 In addition, almost 6,000 residents were subject to tax foreclosure in that timespan. 110 Having a water lien places a property at a higher risk of tax and/ or mortgage foreclosure and places the owner or tenant at risk of eventual eviction.111

The lawsuit further alleges that the City of Cleveland violates customers' rights to procedural due processiv and equal protection (under the U.S. Constitution) by failing to notify customers of impending water service disconnections and their right to a hearing to contest their water bills prior to service disconnection.¹¹² Lastly, the lawsuit alleges that the City of Cleveland violates customers' rights to procedural due process through their overbilling procedures.113 The plaintiffs allege that Cleveland Water has a documented history of erroneously and arbitrarily overbilling many of its customers, often making them financially responsible for illegitimate charges.114

In February 2020, Cleveland moved to dismiss the plaintiffs' claims.115 In September 2020, the court issued an order that denied, in part, Cleveland's motion to dismiss.¹¹⁶ In its order, the court denied

Cleveland's request to dismiss the plaintiffs' Fair Housing Act and Ohio Civil Rights Act claims, finding that the plaintiffs sufficiently alleged that Cleveland's water lien policy disparately impacts Black residents. In addition, the court denied Cleveland's request to dismiss the plaintiffs' due process claims, finding that the plaintiffs' argument that Cleveland's municipal code and a previous federal court order created a property interest in continued water service that is protected by the U.S. and the Ohio Constitutions was reasonable. The court also found that the plaintiffs sufficiently alleged that Cleveland's municipal code and a previous federal court order created an entitlement to accurate billing that is protected by the U.S. and Ohio Constitutions. The court only dismissed the plaintiffs' equal protection claim and their request for damages for their Ohio Civil Rights Act claim.

In September 2022, the plaintiffs filed a motion to certify three "classes" of people who may be entitled to relief as a result of Cleveland's discriminatory water practices: (1) a class of Black homeowners or residents in Cuyahoga County who were required to pay a lien that was placed on their property because of their water bill; (2) a class of people who had their water service shut off without advance written notice of the shutoff or their right to request a hearing to contest the shutoff; and (3) a class of people who overpaid for water services and did not receive a hearing to contest their bill.117

The case is ongoing as of October 2023.

iv Procedural due process is the right to fair processes and procedures under the law before a person can be denied life, liberty, or property.



The Detroit Water and Sewer Department have disconnected water to thousands of Detroit residents who are delinquent with their bills. (Photo by Joshua Lott/ **Getty Images)**

Litigation in Detroit, Michigan (Taylor v. City of Detroit)

The City of Detroit has had a water affordability crisis for decades.118 Although water is generally considered "affordable" when families spend no more than 2% to 2.5% of their household incomes for water services, low-income residents in Detroit paid an average of 10% of their household incomes on water. This has often led to many of the city's most vulnerable community members struggling to pay their water bills.119

Historically, Detroit aggressively employed water shutoffs as a collection method for unpaid water debt, which principally impacted the city's majority Black population. Between 2014 and 2019, more than 141,000 households in Detroit had their water service disconnected for non-payment.¹²⁰ United Nations experts declared the "unprecedented scale" of water shutoffs in Detroit as being "contrary to human rights to disconnect water from people who simply do not have the means to pay their bills."121

Despite efforts to urge local and state officials to suspend water shutoffs, the City and State refused to do so prior to the COVID-19 pandemic. 122 On March 28, 2020, in response to the pandemic, Michigan Governor Gretchen Whitmer issued an executive order directing public water utilities in Michigan to restore water service to occupied residences where water service was previously shut off due to non-payment. 123 Although Detroit restored water service to many residents pursuant to the executive order, evidence suggested that there were still families in the city that lacked water service. 124 In addition, Detroit Mayor Michael Duggan indicated that the City would resume water service disconnections once the Governor's executive order was lifted. 125

In July 2020, LDF and local counsel filed a federal class action lawsuit against Governor Whitmer, the City of Detroit, Mayor Duggan and Detroit Water and Sewerage Department (DWSD) Director Gary Brown. ¹²⁶ The lawsuit was filed on behalf of six individual plaintiffs and the People's Water Board Coalition as an organizational plaintiff. ¹²⁷

The lawsuit alleges that the City of Detroit and DWSD maintain a discriminatory policy of disconnecting service to customers for non-payment, which has a disproportionate and unjustified impact on Black residents in violation of the Fair Housing Act and the Elliott-Larsen Civil Rights Act.¹²⁸ The Elliott-Larsen Civil Rights Act is a Michigan state law that prohibits discrimination in housing and other areas because of race, color, national origin, religion, age, sex, height, weight, familial status, marital status, gender identity or expression, and sexual orientation.¹²⁹

An analysis of water shutoffs throughout Detroit revealed that the greatest number of water shutoffs occurred in the areas of the city with the highest percentage of Black residents.¹³⁰ This pattern

persisted even after accounting for differences in income and taking account of the number of unoccupied homes in Detroit.¹³¹

The lawsuit further alleges that the City and other defendants violated the plaintiffs' bodily integrity by exhibiting deliberate indifference to the known risks of living without water service that causes harm to residents. ¹³² In support of this claim, the lawsuit alleges that Governor Whitmer and Detroit officials have been aware of the health consequences associated with a lack of water even before the COVID-19 pandemic, as studies have shown that Detroit's water shutoff policy has resulted in outbreaks of various forms of infectious diseases. ¹³³

In addition, the lawsuit alleges that the City of Detroit violated the Equal Protection guarantees of the Fourteenth Amendment to the U.S. Constitution and the Michigan Constitution of 1963 by disconnecting customers' water service without first determining whether they had the means to pay their bills.¹³⁴

The lawsuit further alleges that there are more reasonable means for Detroit to collect unpaid water debt, including reducing or forgiving arrearages or adopting a water affordability program that takes a customer's level of income and ability to pay into account prior to the disconnection of water service. 135

Governor Whitmer and the Detroit defendants filed motions to dismiss the complaint, ¹³⁶ which LDF and co-counsel opposed. ¹³⁷ The Court held a hearing regarding the motions to dismiss in February 2021. The parties are currently waiting for the court to rule on the motions to dismiss.

FEDERAL FUNDING LANDSCAPE

The historical decline in federal spending on water infrastructure has driven many of the water access, infrastructure, and affordability problems facing Black communities that we've described in this Brief. Federal spending on water and wastewater utilities has decreased dramatically over the last few decades — from \$16.8 billion in 1977 to \$4.4 billion in 2014.138 This funding decrease also coincided with a shift in the funding mechanism for water and wastewater utilities: Federal funds in the 1970s and 1980s were generally provided as grants, while funds provided since the 1990s have primarily been loans that local jurisdictions must pay back.139

In 2021, Congress passed the Infrastructure Investment and Jobs Act and appropriated about \$50 billion to the EPA to improve drinking water, wastewater, and stormwater infrastructure—the federal government's single largest investment in water to date.¹⁴⁰ The majority of the Infrastructure Investment and Jobs Act water infrastructure funding is administered through state revolving fund programs.141 The law mandates that about half (49%) of funds provided through the state revolving fund programs must be provided as grants and forgivable loans to communities identified as disadvantaged or for project types consistent with the Clean Water Act. 142 This once-in-a-generation federal investment in water infrastructure is direly

needed and has the potential to spur necessary improvements to our nation's failing water systems.^v However, there are potential limitations to the new federal water infrastructure funding:

Insufficient funding: Every four years, the EPA conducts a needs assessment to determine the amount of funding needed for our nation's drinking water infrastructure over the next 20 years. The most recent estimate, reported in April 2023, for national drinking water infrastructure needs is \$625 billion.143 When accounting for the entire water sector's infrastructure needs (e.g., including wastewater replacement, lead line replacement, and growth and replacement of water mains), the 20-year funding need is estimated to be \$2.9 trillion, or \$146 billion per vear.144 While the Infrastructure Investment and Jobs Act's investment in water and wastewater infrastructure is the largest in American history, 145 it is still insufficient to address the substantial water infrastructure needs caused by aging infrastructure and decades of inadequate federal funding.

Inequities in access to funds: As stated above, the majority of funding is administered through state revolving fund programs, and states have broad discretion over how the funding

v Also, in June 2023, the Biden Administration announced its plan to invest \$115 million to improve Jackson's water infrastructure.



is distributed.146 Historically, small and disadvantagedvi public water systems have had less access to the Drinking Water State Revolving Loan Fund (DWSRF) compared to larger, betterresourced systems due to structural barriers and a lack of capacity.¹⁴⁷ For example, lower-resourced systems may require 100% grant funding where there is an inability to pay back loans or they may lack appropriately trained staff who can support with grant writing.148 Additionally, a recent study by the Environmental Policy Innovation Center (EPIC) and the Natural Resources Defense Council (NRDC) found that municipalities

with larger populations of people of color are statistically less likely to receive funds through the Clean Water State Revolving Fund (CWSRF).149 Specifically,

an increase in a municipality's percentage of white residents was associated with an increase in the likelihood of receiving funds.150

To effectively address ongoing water crises and long-standing racial inequity in water access, quality, and affordability, more federal funding is needed and it must be administered through a racially-equitable process.

vi Each state has its own definition of "disadvantaged community" as it relates to the Drinking Water State Revolving Loan Fund. Almost all states use median household income as an indicator and about half of states of states also include water rates as an indicator. See https://www.epa.gov/system/files/documents/2022-10/ DWSRF%20DAC%20Definitions%20Report October%202022%20Updates FINAL 508.pdf.

RECOMMENDATIONS FOR FEDERAL, STATE, AND LOCAL GOVERNMENTS

Federal and state governments: Increase equitable investments in water infrastructure

Given the potential limitations with new federal investments in water infrastructure, we recommend that federal and state governments take further action.

First, additional federal investment is needed to repair our nation's crumbling water infrastructure. The need for adequate water infrastructure will only be exacerbated as the climate changes and natural disasters become more frequent. Congress should continue to build upon the progress of the Infrastructure Investment and Jobs Act by continuing to increase investments in water infrastructure over time so localities can build strong water and wastewater systems that can withstand the challenges posed by our changing climate.

Second, state governments should also increase investments in water infrastructure and use strategies to ensure more equitable access to existing funds. For example, states should reexamine their water infrastructure programs to ensure that municipalities and communities with larger low-income populations and populations of color—which have historically been underserved by water infrastructure funding—have priority access to funds, especially grants and principal forgiveness loans that do not need to be repaid, and are not excluded from access to new sewer lines. 151 States should also support lower-resourced communities with funding application processes by actively soliciting applications from underserved communities and providing technical assistance with funding applications.152

Finally, federal and state legislation should be enacted to ensure that future water investment funding is partially tied to past disinvestment, and additional financial assistance is set aside for aging urban water systems and communities historically excluded from public sanitation systems. This would ensure that cities like Jackson and Baltimore and counties like Lowndes County, Alabama receive their fair share in funding.

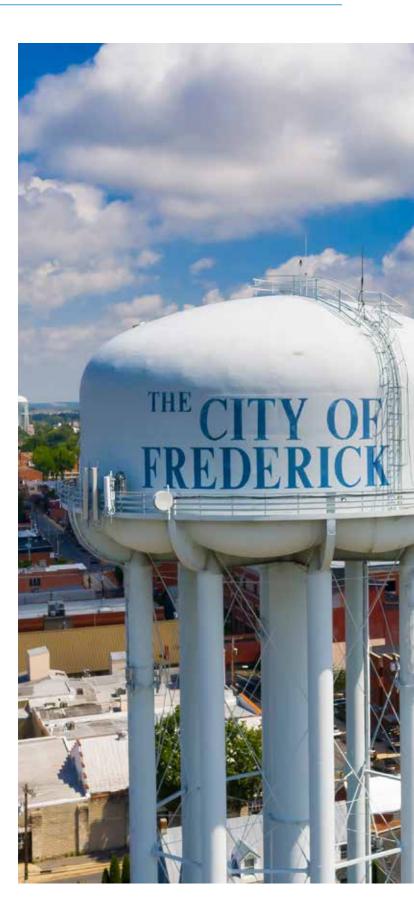
Local governments: Enact water affordability legislation

We recommend that municipalities follow the example set by Baltimore and enact legislation that protects fair access to water for all residents. Legislation should include a water affordability program for low-income residents that is tied to income. These programs should be available to both property owners and tenants. Programs such as these can help ensure that no one is denied their basic human right to water. Model legislation should also include a transparent appeals system for water and wastewater billing disputes. Municipalities and other local jurisdictions (e.g., counties) should create an office within the local water department that handles water and wastewater disputes and has the authority to make corrections to bills. Such an office should be easily accessible to the public and create an end-of-year report on how

disputes were resolved by the jurisdiction to encourage transparency and accountability. Lastly, model legislation should include a ban on the placement of property lines due to unpaid water or sewer bills and a ban on disconnecting water services for unpaid water or sewer bills. LDF advocates for an end to these practices even if they are not integrated into broader water affordability legislation.

CONCLUSION

Water crises continue to imperil Black communities in the United States, and the COVID-19 pandemic and climate change have heightened the urgency of addressing these crises. As demonstrated in this Brief, legislation and litigation are useful strategies to address water inequity. Ultimately, increased federal and state funding that is equitably distributed and local water affordability legislation are required to ensure access to safe, affordable water for everyone.





Endnotes

- QuickFacts: East Cleveland City, OH, 2017-2021 American Community Survey 5-Year Estimates, at section "Race and Hispanic Origin," U.S. Census Bureau, https://www.census.gov/quickfacts/eastclevelandcityohio (last visited Oct. 2, 2023); Evan Comen, Who Is Missing Out on Economic Recovery? America's 30 Poorest Towns, USA Today (June 18, 2018), https://www.usatoday.com/story/money/economy/2018/06/18/who-missing-out-economic-recovery-americas-30-poorest-towns/35936583/.
- Nina Lakhani, *They Shut His Water Off Over an Unpaid Bill and Then a Fire Broke Out*, Guardian (June 30, 2020), https://www.theguardian.com/us-news/2020/jun/30/us-water-poverty-crisis-shut-offs-unpaid-bills.
- 3 Kristi P. Fedinick et al., *Threats on Tap: Widespread Violations Highlight Need for Investment in Water Infrastructure and Protections* 4, Nat. Res. Def. Council (May 2, 2017), https://www.nrdc.org/resources/threats-tap-widespread-violations-water-infrastructure.
- 4 U.S. Water All., Closing the Water Access Gap in the United States: A National Action Plan 3 (2019), https://uswateralliance.org/sites/uswateralliance.org/files/publications/Closing%20the%20Water%20Access%20 Gap%20in%20the%20United%20States DIGITAL.pdf.
- 5 *Id.* at 22.
- Kristi P. Fedinick et al., Watered Down Justice, Nat. Res. Def. Council (Mar. 27, 2020), https://www.nrdc.org/sites/default/files/watered-down-justice-report.pdf; David Switzer & Manuel P. Teodoro, Class, Race, Ethnicity, and Justice in Safe Drinking Water Compliance, 99 Soc. Sci. Q. 524 (2017), https://doi.org/10.1111/ssqu.12397; Yolanda J. McDonald & Nicole E. Jones, Drinking Water Violations and Environmental Justice in the United States, 2011–2015, 108 Am. J Pub. Health 1401 (Oct. 1, 2018), https://doi.org/10.2105/AJPH.2018.304621; James VanDerslice, Drinking Water Infrastructure and Environmental Disparities: Evidence and Methodological Considerations, 101 Am. J. Pub. Health S109 (Nov. 28, 2011), https://doi.org/10.2105/AJPH.2011.300189; U.S. Water All., https://doi.org/10.2105/AJPH.2011.300189;
- 7 U.S. Water All., *supra* note 4, at 13.
- 8 2021 Report Card for America's Infrastructure, *Drinking Water* 36 (2021), https://infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-2021.pdf.
- 9 NAACP Legal Def. & Educ. Fund, Inc., Thurgood Marshall Inst., *Water/Color: A Study of Race & the Water Affordability Crisis in America's cities* (May 31, 2019); Fedinick, *supra* note 6.
- Thurgood Marshall Inst., *supra* note 9.
- 11 *Id.* at 4, 26.
- 12 *Id.* at 10.
- Id. at 58; Catherine C. Flowers, JoAnn K. Ward, & Inga Winkler, Flushed and Forgotten: Sanitation and Wastewater in Rural Communities in the United States, Alabama Ctr. for Rural Enter., Columbia Law School Hum. Rts. Clinic, Inst. for the Study of Hum. Rts. at Columbia Univ. (May 2019), https://www.humanrightscolumbia.org/sites/default/files/Flushed%20and%20Forgotten%20-%20FINAL%20%281%29.pdf.
- 14 Thurgood Marshall Inst., *supra* note 9.

- U.S. Water All., *supra* note 4, at 22.
- 16 Flowers et al., *supra* note 13, at 17 (citing the *U.S. Census Bureau*, *Detailed Housing Characteristics: Alabama (1990)*).
- Junghwan Bae & Michael J. Lynch, *Ethnicity, Poverty, Race, and the Unequal Distribution of US Safe Drinking Water Act Violations*, 2016-2018, 64 Sociological Q. 274 (Jul. 25, 2022), https://doi.org/10.1080/00380253.2022.2096148.
- 18 Fedinick, *supra* note 6; Bae & Lynch, *supra* note 17.
- Tara Jagadeesh & Justin Williams, *Data Points: The Environmental Injustice of Lead Lines in Illinois*, Metro. Planning Council (Nov. 10, 2020), https://www.metroplanning.org/news/9960/Data-Points-the-environmental-injustice-of-lead-lines-in-Illinois.
- Thurgood Marshall Inst., *supra* note 9.
- Brett Walton, *High Cost of Water Hits Home*, Circle of Blue (May 10, 2022), https://www.circleofblue.org/2022/world/high-cost-of-water-hits-home/; *Up 43% Over Last Decade, Water Rates Rising Faster than Other Household Utility Bills*, Bluefield Rsch. (Aug. 23, 2021), https://www.bluefieldresearch.com/ns/up-43-over-last-decade-water-rates-rising-faster-than-other-household-utility-bills/.
- Bluefield Rsch., *supra* note 21.
- Rachel Butts & Stephen Gasteyer, *More Cost per Drop: Water Rates, Structural Inequality, and Race in the United States—The Case of Michigan*, 13 Env't Prac. 386 (2017), https://doi.org/10.1017/S1466046611000391; Thurgood Marshall Inst., *supra* note 9, at 31.
- Butts & Gasteyer, *supra* note 23; Thurgood Marshall Inst., *supra* note 9; Mikael Omstedt & C.S. Ponder, *The Violence of Municipal Debt: From Interest Rate Swaps to Racialized Harm in the Detroit Water Crisis*, 132 Geoforum 271 (2022), https://www.sciencedirect.com/science/article/abs/pii/S0016718519302192.
- Megan L. McKenna et al., *Human Intestinal Parasite Burden and Poor Sanitation in Rural Alabama*, 97 Am. J. of Tropical Med. & Hygiene 1623 (2017), https://doi.org/10.4269/ajtmh.17-0396; Arielle Duhaime-Ross, *Scientists Think Alabama's Sewage Problem Has Caused a Tropical Parasite. The State Has Done Little About It.*, Vice (Dec. 17, 2018), https://www.vice.com/en/article/pa5wdg/scientists-raised-the-alarm-about-hookworm-in-alabama-a-year-ago-the-state-has-done-little-about-it; Dave Davies, 'Waste' Activist Digs Into The Sanitation Crisis Affecting The Rural Poor, NPR (Nov. 11, 2020), https://www.npr.org/sections/health-shots/2020/11/23/937945160/waste-activist-digs-into-the-sanitation-crisis-affecting-the-rural-poor.
- 26 Clean Water for All, Water, Health, and Equity: The Infrastructure Crisis Facing Low-Income Communities & Communities of Color and How to Solve It 9 (2018), http://protectcleanwater.org/wp-content/uploads/2018/10/FINAL-CWC Report Full report lowres-003-3.pdf.
- Rui Wang, Xi Chen & Xun Li, *Something in the Pipe: The Flint Water Crisis and Health at Birth*, 35 J. Population Econ. 1723 (2022), https://doi.org/10.1007/s00148-021-00876-9.
- Thurgood Marshall Inst., *supra* note 9, at 28; Lee Flannery, *Lack of Septic Systems Spell Disaster for Low-Income Alabama Residents*, Planetizen (Dec. 3, 2020), https://www.planetizen.com/news/2020/12/111420-lack-septic-systems-spell-disaster-low-income-alabama-residents.

- Mich. Dep't of Health & Hum. Servs., Assessments: Section 1: Safety Assessment, Number 9, 6 (Feb. 1, 2019), 29 https://dhhs.michigan.gov/OLMWEB/EX/PS/Public/PSM/713-11.pdf#pagemode=bookmarks.
- Valerie V. Panne, Detroiters Fear Losing Their Water May Mean Losing Their Kids, In These Times 30 (Sept. 11, 2018), https://inthesetimes.com/article/detroit-water-shutoffs-child-services-debt.
- Marcela G. Rivas, Mildred E. Warner, & Xue Zhang, Which States and Cities Protect Residents from Water Shutoffs in 31 the COVID-19 Pandemic?, 67 Util. Pol'y (Sept. 25, 2020), https://doi.org/10.1016/j.jup.2020.101118.
- 32 Mary Grant, Mildred E. Warner & Xue Zhang, Water Shutoff Moratoria Lowered COVID-19 Infection and Death Across U.S. States, 62 Am. J. Preventive Med. 149 (2021), https://doi.org/10.1016/j.amepre.2021.07.006.
- Alexandra Campbell-Ferrari & Luke Wilson, The COVID-Water Disconnect: How Statewide Moratoriums Are 33 Leaving People Behind, Ctr. for Water Sec. & Coop. (May 14, 2020), https://www.ourwatersecurity.org/covid-19watershutoffmoratoriums.
- *Id.* at 3. 34
- Clean Water for All, supra note 26; Kimberley Thomas et al., Explaining Differential Vulnerability to Climate Change: 35 A Social Science Review, 10 WIREs Climate Change e565 (2018), https://doi.org/10.1002/wcc.565.
- 36 Clean Water for All, *supra* note 26, at 6, 12.
- 37 *Id.* at 9–12.
- 38 Brady Dennis & Sarah Kaplan, Jackson, Miss., Shows How Extreme Weather Can Trigger a Clean-Water Crisis, Wash. Post (Aug. 31, 2022), https://www.washingtonpost.com/climate-environment/2022/08/31/jackson-water-crisismississippi-floods/.
- Joseph W. Kane, Andre M. Perry & Carl Romer, In Jackson, Miss., A Water Crisis Has Revealed the Racial Costs of 39 Legacy Infrastructure, Brookings Inst. (Mar. 29, 2023), https://www.brookings.edu/blog/the-avenue/2021/03/26/injackson-miss-a-water-crisis-has-revealed-the-racial-costs-of-legacy-infrastructure/.
- Juneseok Lee et al., Wildfire Caused Widespread Drinking Water Distribution Network Contamination, 40 2 Am. Water Works Ass'n e1183 (2020), https://doi.org/10.1002/aws2.1183.
- Kim Chandler, DOJ: Alabama Ignored Sewer Issues, Harmed Black Residents, AP News 41 (May 4, 2023), https://apnews.com/article/alabama-department-justice-environmental-sewage-lowndes-8e4ce5be35f54c23ld9fa14506fea24c
- 42 Allen Tullos, The Black Belt, Southern Spaces (Apr. 19, 2004), https://southernspaces.org/2004/black-belt/. ("The unusually fertile Black Belt (or Prairies) soil is produced by the weathering of an exposed limestone base known as the Selma Chalk, the remnant of an ancient ocean floor.").
- 43 Id.
- Id.44

- Sarah Kaplan, *Battling America's 'Dirty Secret*,' Wash. Post (Dec. 17, 2020), https://www.washingtonpost.com/climate-solutions/2020/12/17/climate-solutions-sewage.
- 46 Flowers et al., *supra* note 13, at 26.
- Alexis Okeowo, *The Heavy Toll of the Black Belt's Wastewater Crisis*, New Yorker (Nov. 23, 2020), https://www.newyorker.com/magazine/2020/11/30/the-heavy-toll-of-the-black-belts-wastewater-crisis; Ala. Code § 22-26-1 (2014), https://law.justia.com/codes/alabama/2014/title-22/title-1/section-22-26-1.
- 48 Archie Snowden, *Athens Residents Say They Are Left Out of City's New Plans*, WHNT Huntsville News (June 7, 2020), https://whnt.com/news/athens-residents-say-they-are-left-out-of-citys-new-plans/.
- 49 Columbia World Projects, *Transforming Wastewater Infrastructure in the United States*, Columbia Univ., https://worldprojects.columbia.edu/transforming-wastewater-infrastructure-united-states (last visited Sept. 25, 2023).
- Kaplan, supra note 46.
- Ed Pilkington, *Hookworm, A Disease of Extreme Poverty, Is Thriving in the US South. Why?*, Guardian (Sept. 5, 2017), https://www.theguardian.com/us-news/2017/sep/05/hookworm-lowndes-county-alabama-water-waste-treatment-poverty.
- Megan L. McKenna et al., *Human Intestinal Parasite Burden and Poor Sanitation in Rural Alabama*, 97 Am. J. Tropical Med. & Hygiene 1623 (2017), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5817782/; John W. Sanders & Karen A. Goraleski, *The Hookworm Blues: We Still Got 'Em*, 97 Am. J. Tropical Med. & Hygiene 1277 (2017); https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5817787/#b1.
- Alexis Okeowo, *The Heavy Toll of the Black Belt's Wastewater Crisis*, New Yorker (Nov. 23, 2020), https://www.newyorker.com/magazine/2020/11/30/the-heavy-toll-of-the-black-belts-wastewater-crisis.
- Press Release, U.S. Dep't of Just. Off. of Pub. Affs., Departments of Justice and Health and Human Services Announce Interim Resolution Agreement in Environmental Justice Investigation of Alabama Department of Public Health (May 4, 2023), https://www.justice.gov/opa/pr/departments-justice-and-health-and-human-services-announce-interim-resolution-agreement.
- 55 *Id.*
- Luke Street Residents Want Answers to Infrastructure Issues, WHNT News 19 (July 19, 2022), https://whnt.com/video/luke-street-residents-want-answers-to-infrastructure-issues/7847739/; Keneisha Deas, Athens Residents Are Feeling the Pains of a Growing City, Fox54 (June 8, 2022), https://www.rocketcitynow.com/article/news/local/athens-residents-are-feeling-the-pains-of-a-growing-city-whats-new-in-athens/525-502290f6-0438-4880-a4b1-a051dfde24b1.
- 57 *Id.*
- See Archie Snowden, *Luke Street Residents Searching for Answers to Infrastructure Issues*, WHNT News 19 (July 19, 2022), https://whnt.com/news/athens/luke-street-residents-searching-for-answers-to-infrastructure-issues/.

- This quote was provided by Kirk Parker directly to LDF staff.
- Molly Hennessy-Fiske, White then Black Residents Abandoned Jackson, Propelling Its Water Crisis,
 Wash. Post (Sept. 4, 2022), https://www.washingtonpost.com/nation/2022/09/04/jackson-water-crisis/; Brad
 Franklin & Earnest McBride, Fixing Jackson's Infrastructure a Matter of Politics, Access to Resources for Beleaguered
 City, Clarion Ledger (Dec. 30, 2021), https://www.clarionledger.com/story/news/2021/12/30/jackson-ms-water-crisis-race-politics-access-resources/9008198002/.
- Alan Greenblatt, *Jackson Residents Long Ago Learned to Cope Without Water*, Governing (Sept. 8, 2022), https://www.governing.com/now/jackson-residents-long-ago-learned-to-cope-without-water.
- Richard M. Mizelle, Jr., A Slow-Moving Disaster The Jackson Water Crisis and the Health Effects of Racism,
 New Eng. J. Med. (June 15, 2023), https://www.nejm.org/doi/full/10.1056/NEJMp2212978#:~:text=More%20
 https://www.nejm.org/doi/full/10.1056/NEJMp2212978#:~:text=More%20
 <a href="https://www.nejm.org/doi/full/10.1056/NEJMp2212978#:~:text=More%20
 <a href
- 63 Scott Neuman, *Burst Pipes in Jackson, Mississippi, Are Just the Latest of the City's Water Woes*, NPR (Dec. 31, 2022), https://www.npr.org/2022/12/31/1145966097/water-problems-jackson-mississippi-explanation.
- 64 Kayode Crown, NAACP Files Race Discrimination Complaint Against State Over Jackson Water Crisis,
 Miss. Free Press (Sept. 28, 2022), https://www.mississippifreepress.org/27798/naacp-files-race-discrimination-complaint-against-state-over-jackson-water-crisis.
- Letter from Janette McCarthy Wallace, Gen. Counsel, NAACP, to Michael S. Regan, Adm'r, U.S. Env't Prot. Agency, & Anhthu Hoang, Acting Dir., U.S. Env't Prot. Agency (Sept. 27, 2022), https://www.epa.gov/system/files/documents/2022-10/07R-22-R4%20Complaint_Redacted.pdf.
- 66 *Id.* at 4.
- 67 *Id.*
- 68 *Id.* at 2.
- Anthony Warren & Quentin Smith, MDEQ Refuses EPA's Offer to Resolve Civil Rights Complaint; Says Discrimination Claims Are Not True, WLBT 3 (Jan. 20, 2023), https://www.wlbt.com/2023/01/20/mdeq-refuses-epas-offer-resolve-civil-rights-complaint-says-discrimination-claims-are-not-true/.
- Ross Reily, Class-Action Lawsuit Brought Against Jackson Regarding Water Crisis, Clarion Ledger (Sept. 19, 2022), https://www.clarionledger.com/story/news/2022/09/19/jackson-ms-water-crisis-class-action-lawsuit-brought-against-city/69504449007/; Mirna Alsharif, Phil McCausland & Anthony Cusumano, Jackson Residents File Class-Action Suit Against Mississippi Officials Seeking Damages for Water Crisis, NBC News (Sept. 20, 2022), https://www.nbcnews.com/news/us-news/jackson-residents-file-class-action-suit-mississippi-officials-seeking-rcna48532.
- 71 Complaint, *Sterling v. City of Jackson*, No. 3:22-cv-00531-KHJ-MTP (S.D. Miss. filed Sept. 16, 2022), https://www.classaction.org/media/sterling-et-al-v-the-city-of-jackson-mississippi-et-al.pdf.

- https://www.justice.gov/opa/pr/united-states-files-complaint-and-reaches-agreement-proposal-city-jackson-and-72 state.
- Adam Willis, Aging Water Infrastructure at the Root of Baltimore E. coli Contamination, City Officials 73 Say, Baltimore Banner (Sept. 29, 2022), https://www.thebaltimorebanner.com/politics-power/localgovernment/aging-water-infrastructure-at-the-root-of-baltimore-e-coli-contamination-city-officials-say-OWQ4VB3FKREYBBLQPYN6DRBGA4/.
- Id. 74
- 75 Joan Jacobson, Keeping the Water On: Strategies for addressing high increases in water and sewer rates for Baltimore's most vulnerable customers, 29 The Abell Report (Nov. 2016), https://abell.org/wp-content/uploads/2022/02/Keepingthe-Water-On.pdf.
- NAACP Legal Def. & Educ. Fund, Inc., Thurgood Marshall Inst., Water/Color: A Study of Race & the Affordability 76 Crisis in American Cities (2019), https://www.naacpldf.org/wp-content/uploads/Water Report FULL 5 31 19 FINAL OPT.pdf.
- 77 Water Affordability in Maryland, Maryland Advisory Committee to the U.S. Commission on Civil Rights (2022), https://www.usccr.gov/files/2022-07/md-sac-water-affordability.pdf.
- 78 Lowell Melser, Baltimore Launches Water Discount Program to Help Eligible Residents Pay Bills, WBALTV (Feb. 8, 2022), https://www.wbaltv.com/article/baltimore-water-discount-program-water-4-all/39013587.
- Md. Water Quality Fin. Admin., Maryland FINAL Project Priority List for Federal FY2020 & State FY2022 Drinking 79 Water Funds (State Revolving Loan/State Grant), Md. Dept. of the Env't (Sept. 30, 2020), https://mde.maryland.gov/programs/Water/WQFA/Documents/FINAL%20DW%20FFY20%20SFY%2022%20 DW%20PPL Amend%202.pdf; Md. Water Quality Fin. Admin., Maryland FINAL Project Priority List for Federal FY2021 & State FY2023 Drinking Water Funds (State Revolving Loan/ State Grant), Md. Dept. of the Env't (Aug. 13, 2021), https://mde.maryland.gov/programs/water/WQFA/Documents/Final%20FFY21%20SFY23%20 DW%20PPL.pdf; Md. Water Quality Fin. Admin., Maryland FINAL Project Priority List for Federal FY2022 & State FY2024 Drinking Water Funds (State Revolving Loan/State Grant), Md. Dept. of the Env't (Sept. 6, 2022), https://mde.maryland.gov/programs/water/WQFA/Documents/FFY22%20SFY24%20Final%20DW%20PPL. pdf: Md. Water Quality Fin. Admin., Final FFY 2020 (SFY 2022) Intended Use Plan Maryland Water Quality Revolving Loan Fund, Md. Dept. of the Env't, https://mde.maryland.gov/programs/Water/WQFA/Documents/ FINALCWFFY20IUPTable%201.pdf; Md. Water Quality Fin. Admin., Final FFY 2020 (SFY 2022) Intended Use Plan Maryland Water Quality Revolving Loan Fund, Md. Dept. of the Env't (Aug. 19, 2021), https://mde.maryland. gov/programs/water/WQFA/Documents/Final%20CW%20FFY21%20IUP%20Table%201.pdf; Md. Water Quality Fin. Admin., Final FFY 2020 (SFY 2022) Intended Use Plan Maryland Water Quality Revolving Loan Fund, Md. Dept. of the Env't (July 18, 2022), https://mde.maryland.gov/programs/water/WQFA/Documents/FINAL%20 CW%20FFY22%20IUP%20Table%201.pdf.
- 80 Quick Facts: Alleghany County, MD, U.S. Census Bureau (July 1, 2022), https://www.census.gov/quickfacts/alleganycountymaryland.
- 81 U.S. Census Bureau, Quick Facts: Baltimore City, MD, U.S. Census Bureau (July 1, 2022), https://www.census.gov/quickfacts/baltimorecitymaryland.

- 82 Adam Willis, Aging Water Infrastructure at the Root of Baltimore E. coli Contamination, City Officials Say, Balt. Banner (Sept. 29, 2022), https://www.thebaltimorebanner.com/politics-power/localgovernment/aging-water-infrastructure-at-the-root-of-baltimore-e-coli-contamination-city-officials-say-OWQ4VB3FKREYBBLQPYN6DRBGA4/.
- 83 Amanda Holpuch, Fearing E. Coli, West Baltimore Boils Water in Latest Crisis, N.Y. Times (Sept. 7, 2022), https://www.nytimes.com/2022/09/07/us/e-coli-baltimore-water.html.
- 84 Willis, supra note 83.
- 85 Scott Dance, For West Baltimore Neighborhoods, Water Contamination Is Yet Another Crisis That Compounds Intractable Inequities, Balt. Sun (Sept. 10, 2022), https://www.baltimoresun.com/maryland/baltimore-city/bs-md-ciwest-baltimore-water-crisis-20220910-k5nknpunczbsxbaynyhocxm7be-story.html?gclid=CjwKCAjwwb6lBhBJEiwA $\underline{buVUSt12CWkJtNfgb2xma-7h2ddvCZ7IgUtoSNiXxhqogWNyOQ9l0q1pahoCQPIQAvD_BwE.}$
- 86 Matthew Price, Baltimore's Sewage Issues Are Rooted in Racial Injustice, Blue Water Balt. (Jan. 16, 2023), https://bluewaterbaltimore.org/blog/baltimores-sewage-issues-are-rooted-in-racial-injustice/.
- 87 Id.
- 88 Id.
- 89 Melissa Denchak, Flint Water Crisis: Everything You Need to Know, NRDC (Nov. 8, 2018), https://www.nrdc.org/stories/flint-water-crisis-everything-you-need-know#summary.
- Susan Cosier, Unleaded, Please, NRDC (Oct. 9, 2015), https://www.nrdc.org/stories/unleaded-please; 90 Wang et al., supra note 27; Terry Gross, Pediatrician Who Exposed Flint Water Crisis Shares Her 'Story Of Resistance', NPR (June 25, 2018), https://www.npr.org/sections/health-shots/2018/06/25/623126968/pediatricianwho-exposed-flint-water-crisis-shares-her-story-of-resistance.
- Brakkton Booker, Ex-Michigan Gov. Rick Snyder and 8 Others Criminally Charged in Flint Water Crisis, 91 NPR (Jan. 14, 2021), https://www.npr.org/2021/01/14/956924155/ex-michigan-gov-rick-snyder-and-8-otherscriminally-charged-in-flint-water-crisi.
- 92 Steve Carnody, Judge Dismisses Charges Against Last of the Flint Water Crisis Criminal Defendants, Mich. Radio (May 22, 2023), https://www.michiganradio.org/criminal-justice-legal-system/2023-05-22/judgedismisses-charges-against-last-of-the-flint-water-crisis-criminal-defendants; Press Release, Mich. Dep't of Att'y Gen., Flint Prosecution Team Issues Statement (Dec. 9, 2022), https://www.michigan.gov/ag/news/pressreleases/2022/12/09/flint-prosecution-team-issues-statement.
- Dejanay Booth-Singleton, Judge Gives Final Approval of \$500 Million Flint Water Settlement, CBS News Detroit 93 (Mar. 21, 202), https://www.cbsnews.com/detroit/news/judge-approves-flint-water-settlement/.
- Tim Stelloh, Judge Approves \$626 Million Settlement in Flint Water Crisis, NBC News (Nov. 10, 2021), 94 https://www.nbcnews.com/news/us-news/judge-approves-626-million-settlement-flint-water-crisis-rcna5183.
- Talia Sanders et al., Neurotoxic Effects and Biomarkers of Lead Exposure: A Review, Rev. Env't Health, Jan. 2009, at 95 15, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2858639/.

- 96 Jaclyn Lee, Tesfaye Negussie & Deena Zaru, Flint Residents Grapple with Water Crisis 9 Years Later: 'No Justice', ABC News (Apr. 21, 2023), https://abcnews.go.com/US/water-crisis-plagues-flint-residents-decade/ story?id=98724950.
- Taking Action on Flint Water, State of Mich., https://www.michigan.gov/flintwater (last visited Oct. 2, 2023). 97
- 98 Jordan Chariton, Flint's Water Crisis Isn't Over, Jacobin (May 10, 2023), https://jacobin.com/2023/05/flint-water-crisis-ongoing-attorney-general-prosecution-investigation.
- Kelly Vaughen, Michigan Still Dealing with Fallout from Flint Water Crisis 9 Years Later; Plus New Water Worries, 99 CBS News Detroit (Mar. 23, 2023), https://www.cbsnews.com/detroit/news/michigan-still-dealing-with-fallout-fromflint-water-crisis-9-years-later/.
- 100 Emily Poor, Water Accountability and Equity Act – A Summary, Maryland ProBono Resource Center, https://probonomd.org/water-accountability-and-equity-act-a-summary/ (last visited Oct. 2, 2023).
- 101 Baltimore Mayor's Office of Children and Family Success, Water Assistance FAQ, February 6, 2022, https://www.bmorechildren.com/residents/#water.
- 102 Lowell Melser, Baltimore Launches Water Discount Program to Help Eligible Residents Pay Bills, WBALTV, February 8, 2022, https://www.wbaltv.com/article/baltimore-water-discount-program-water-4-all/39013587.
- 103 Id.
- These numbers from the Water4All program were shared with the Legal Defense Fund directly from the Baltimore 104 City Department of Public Works.
- These numbers from the Water4All program were shared with the Legal Defense Fund directly from the Baltimore 105 City Department of Public Works.
- 106 Complaint, Pickett v. Cleveland, No. 1:19-cv-02911 (N.D. Ohio filed Dec. 18, 2019).
- 107 42 U.S.C. §3601 et seq.; See also U.S. Dep't Housing and Urb. Dev., Housing Discrimination Under the Fair Housing Act, https://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_act_overview.
- 108 See Ohio Rev. Code § 4112.02(H).
- 109 Complaint, supra note 107, at 4.
- 110 Id.
- 111 *Id* at 13.
- 112 *Id.* at 10-12.
- Id. at 7-12, 36-37. 113
- *Id* at 3. 114

- Def's Mot. to Dismiss, *Pickett v. Cleveland*, No. 1:19-cv-0911 (E.D. Ohio filed Feb. 13, 2020).
- Order to Granting in Part and Denying in Part Def's Mot. to Dismiss, No. 1:19-cv-0911 (E.D. Ohio filed Sept. 29, 2020), ECF No. 11.
- Pls' Mot. for Class Certification, *Pickett v. Cleveland*, No. 1:19-cv-0911 (E.D. Ohio filed Sept. 15, 2022) ECF No. 65; Am. Mot., *Pickett v. Cleveland*, No. 1:19-cv-0911 (E.D. Ohio filed on Oct. 3, 2022), ECF No. 79.
- Detroit Water and Sewage Dep't Bd. Water Comm'rs, Detroit City Council, City of Detroit Blue Ribbon Panel on Affordability (Feb. 3, 2016), https://detroitmi.gov/sites/detroitmi.localhost/files/2018-03/BRPA%20Final%20 Report%20%28incl%20Transmittal%20and%20App%29.pdf; Sara Hughes et al., U. Mich. Poverty Sols., *Addressing the Links Between Poverty, Housing, and Water Access and Affordability in Detroit (2021), https://sites.fordschool.umich.edu/poverty2021/files/2021/06/Poverty-Solutions-Brief Detroit-Water-Access June21.pdf.
- Dahlia Rockowitz et al., U. Mich. Poverty Sols., *Household Water Security in Metropolitan Detroit* (2018), https://poverty.umich.edu/10/files/2018/08/PovertySolutions-PolicyBrief-0818-r2.pdf.
- Joel Kurth & Mike Wilkinson, *I Hate to Complain, but I Haven't Had Water in a Year. A Detroit Story.*, Bridge Michigan (Feb. 17, 2020), https://www.bridgemi.com/michigan-health-watch/i-hate-complain-i-havent-had-water-year-detroit-story.
- 121 *UN Officials Criticise Detroit Water Shutoffs*, BBC (Oct. 20, 2014), https://www.bbc.com/news/world-us-canada-29697767.
- ACLU Mich., ACLU, Civil Rights Coalition Files Petition Urging the Michigan Department of Health and Human Services to Suspend Detroit Water Shutoffs to Avoid Public Health Emergency (July 23, 2019); Joel Kurth, Detroit Saus No Proof Water Shutoffs Harm Health. Get Real, Experts say., Bridge Mich. (Feb. 26, 2020), https://www.bridgemi.com/michigan-health-watch/detroit-says-no-proof-water-shutoffs-harm-health-get-real-experts-say; Christine Ferretti, State: 'Insufficient' Data to Support Ban on Water Shuttoffs in Detroit, Detroit News (Feb. 26, 2020), https://www.detroitnews.com/story/news/local/detroit-city/2020/02/26/state-insufficient-data-support-moratorium-detroit-shutoffs/4881623002/.
- Whitmer Orders All Shut-off Water to be Restored During COVID-19 Outbreak, WXYZ Detroit, ABC 7 (Mar. 28, 2020) https://www.wxyz.com/news/coronavirus/whitmer-orders-all-shut-off-water-to-be-restored-during-covid-19-outbreak.
- Poppy Noor, *Detroit Families Still Without Clean Water Despite Shutoffs Being Lifted*, Guardian (May 20, 2020), https://www.theguardian.com/us-news/2020/may/20/detroit-water-shutoffs-covid-coronavirus; Aaron Mondry, *As COVID-19 Spreads*, *Detroit Struggles to Restore Water to Shutoff Customers*, Curbed Detroit (Mar. 16, 2020), https://detroit.curbed.com/2020/3/16/21182075/covid-19-coronavirus-detroit-water-shutoffs-moratorium.
- 125 Sarah Cwiek, *Detroit Announces Expanded Testing Plans, Stimulus Money for Struggling Residents*, NPR (Apr. 27, 2020), https://www.michiganradio.org/politics-government/2020-04-27/detroit-announces-expanded-testing-plans-stimulus-money-for-struggling-residents.
- 126 Complaint at 1, Taylor v. Detroit, No. 2:20-cv-11860, (E.D. Mich. July 9, 2020), ECF No. 1.

- 127 *Id.*
- 128 *Id.* at 12.
- Mich. Complied L. §37.2502 (2023) (In March 2023, the Michigan Legislature passed an amendment to the Elliott-Larsen Act that expanded protections against discrimination on the basis of sexual orientation and gender identity or expression.); Joey Cappelletti, *Michigan Adds LGBTQ Protections to Anti-Discrimination Law*, AP News (Mar. 16, 2023), https://apnews.com/article/lgbtq-elliott-larsen-michigan-whitmer-discrimination-6dab85a296020e9612ed417 028b6cf09.
- 130 Complaint, *supra* note 127, at 51.
- 131 *Id.* at 47–57.
- 132 *Id.* at 37-47.
- 133 *Id.* at 37–47, 82–89.
- 134 *Id.* at 89–93.
- 135 *Id.* at 92–93.
- 136 Mot. to Dismiss, *Taylor v. Detroit*, No. 20-cv-11870 (E.D. Mich. filed Aug. 6, 2020), ECF No. 17; Mot. to Dismiss, *Taylor v. Detroit*, No. 20-cv-11870 (E.D. Mich. filed Aug. 27, 2020), ECF No. 21.
- Resp. to Mot. to Dismiss, *Taylor v. Detroit*, No. 20-cv-11860 (E.D. Mich. filed Aug. 27, 2020), ECF No. 20; Resp. to Mot. to Dismiss, *Taylor v. Detroit*, No. 20-cv-11860 (Sept. 17, 2020), ECF No. 25.
- Francine Stefan, Env't Fin. Ctr., Sch. of Gov't, \$napshot: Federal Funding Trends for Water and Wastewater Utilities (1956-2014), Env't Fin. Blog (May 14, 2015), https://efc.web.unc.edu/2015/05/14/federal-funding-trends-for-water-and-wastewater/.
- 139 *Id.*
- U.S. Env't Prot. Agency, *Bipartisan Infrastructure Law: State Revolving Funds Implementation Memorandum* (Mar. 2022), https://www.epa.gov/system/files/documents/2022-03/bil-srf-memo-fact-sheet-final.pdf.
- 141 U.S. Env't Prot. Agency, *How the Drinking Water State Revolving Fund Works* (Dec. 7, 2022), https://www.epa.gov/dwsrf/how-drinking-water-state-revolving-fund-works#tab-1; A Guidebook to the Bipartisan Infrastructure Law for State, Local, Tribal, and Territorial Governments, and Other Partners (2014), https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf#page=226.
- 142 U.S. Env't Prot. Agency, *Bipartisan Infrastructure Law*, supra note 141.
- U.S. Env't Prot. Agency, 7th Drinking Water Infrastructure Needs Survey and Assessment (2023), https://www.epa.gov/system/files/documents/2023-04/Final DWINSA%20Public%20Factsheet%204.4.23.pdf.

- 144 Nat. Ass'n of Clean Water Agencies, Water Infrastructure Funding Parity Report (2022), https://www.nacwa.org/docs/default-source/resources---public/water-sector-funding-parity-whitepaperfinal-(7-21-22).pdf?sfvrsn=63a5c461_2.
- 145 U.S. Env't Prot. Agency, Bipartisan Infrastructure Law Resources for Drinking Water (Aug. 8, 2023), https://www.epa.gov/infrastructure/bipartisan-infrastructure-law-resources-drinking-water.
- 146 María Inés Zamudio, Study Finds Disparities in States' Distribution of Federal Funds for Water Systems, Ctr. for Pub. Integrity (Jan. 20, 2023), https://publicintegrity.org/environment/natural-resources/study-finds-disparities-in-statesdistribution-of-federal-funds-for-water-systems/.
- Ass'n of State Drinking Water Adm'rs, State Drinking Water Program Challenges and Best Practices: Small and 147 Disadvantaged Water System Funding and Assistance, White Paper (Aug. 2022), https://www.asdwa.org/wp-content/uploads/2022/08/ASDWA-White-Paper-Small-and-Disadvantaged-Water-System-Funding-and-Assistance-FINAL-080822.pdf.
- 148 Joseph W. Kane & Andy Kricun, Seizing the Water Infrastructure Moment Nationally and Locally, Brookings Inst. (Apr. 6, 2022), https://www.brookings.edu/2022/04/06/seizing-the-water-infrastructure-moment-nationally-andlocally/; Ass'n of State Drinking Water Adm'rs, supra note 148.
- 149 Env't Pol'y Innovation Ctr., A Fairer Funding Stream: How Reforming the Clean Water State Revolving Fund Can Equitably Improve Water Infrastructure Across the Country (2022), https://www.nrdc.org/sites/default/files/clean-water-state-revolving-fund-infrastructure-report.pdf.
- 150 *Id.* at 11
- See id. 151
- See id.; Ass'n of State Drinking Water Adm'rs, supra note 148. 152



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