Drinking water is treated as a commodity in the United States, not as a human right. With the onset of the Covid-19 pandemic, many US cities and states enacted moratoria on water shutoffs. We explore what differentiates these states and cities from others. We find states that regulate private utilities are more likely to impose moratoria, and those with higher Covid-19 case rates did so earlier. States with Republican legislative control were less likely to impose water shutoff moratoria. Cities with more capacity and more need were more likely to impose moratoria, but cities in counties with more Republican voters were less likely.

These results show the politicization of public health and water access in the US. The shift toward recognition of the public health value of water may lead the US to acknowledge water as a human right. We conclude with policy recommendations for cities, states and the federal government.
INTRODUCTION

During the Covid-19 pandemic, many US states and localities enacted moratoria on water disconnection. This is new. Historically, the United States has been reluctant to protect consumers from water shutoffs, as water is considered a commodity in the US. Protections from shutoffs are limited, and some states even restrict utilities and cities from providing support to low-income consumers (UNC 2017). Many cities, especially older cities in the rust belt, face aging infrastructure and the need to raise water rates to cover upgrades to their systems (Swain et al. 2020).

Baltimore is a well-known case. To enhance investment in water infrastructure, the city approved a 33% water rate increase in 2016, even though 15% of residential customers already had delinquent bills (totaling $20 million of uncollected debt for the city) (Jacobson 2016). During the early months of the Covid-19 pandemic, the public water system in that city took several steps to ensure water access for households. However, the Baltimore mayor, Bernard Young, used his emergency powers to delay legislation that would have provided lasting protections. In the face of delay, a coalition of labor, environmental, legal aid, housing and religious groups worked with the city council to put in place a comprehensive water affordability program and a customer advocate’s office to safeguard long-term access to water service for every person in the city. The Baltimore Right to Water Coalition sought to advance water justice by banning water privatization, stopping water shutoffs and tax sales of homes over unpaid water bills, and setting up a percentage-of-income water affordability program and an independent dispute resolution process (see the chapter by Grant in this volume).

The Baltimore case reflects the intended core principles of public water – accountability, access and participation – as articulated by the United Nations (de Albuquerque 2012). Accountability requires transparency, and access requires affordability, but partici-
pation is also needed, as the public sector alone cannot be counted on to ensure access.

Water is becoming less affordable to many US households, especially low-income households and communities of colour, as rates for water bills rise above the UN recommended level of 3% of household income (Montag 2019). Shutoffs due to nonpayment are common across the US, but with the onset of the Covid-19 pandemic, policy changed. For example, since 2014, over 141,000 Detroit households have been disconnected from water service due to unpaid bills. But on March 12, 2020, the day after WHO declared the Covid-19 pandemic, Michigan’s governor, Gretchen Whitmer, and Detroit city officials announced plans to stop shutoffs and temporarily reconnect water services for all residents (The Guardian 2020). On the same day, Mayor Kate Gallego of the City of Phoenix, Arizona, tweeted:

As of today @PHXWater will be halting all water shut-offs for non-payment to ensure residents have access to water for COVID-19 sanitation purposes. Those currently disconnected will be re-connected by @PHXWater for #COVID19 sanitation. These residences will receive low-flow water service that is adequate for sanitation and cooking <https://twitter.com/MayorGallego/status/1238163868876025858?s=20>.

The next day, the State of Louisiana declared that,

Due to the risks to public health associated with the COVID-19 Coronavirus, Governor John Bel Edwards has declared a statewide Public Health Emergency. Given the severity of these events and the uncertain impact it may have on Commission-jurisdictional ratepayers, immediate action is required to ensure utility service is not disconnected for nonpayment. (LA Public Service Commission, Executive Order 13 March 2020)
The Covid-19 pandemic has shifted the attention of state and local officials towards the public health importance of water. But this was not always the case.

**RISING SUPPORT FOR SHUTOFF PROTECTION**

A 2015 national US survey found only 8% of cities protected residents from water shutoff – just 153 out of a sample of 1897 municipalities (Homsy and Warner 2020). The study found that cities were more likely to protect residents from water shutoff if the municipality owned the water utility, had a Democrat-majority governing board and had an articulated social equity goal in its municipal plan. Public ownership matters; so too does planning for social equity (Liao et al. 2019).

At the onset of the Covid-19 pandemic, Food and Water Watch, an advocacy group for public water, began tracking cities and states enacting moratoriums on water shutoffs. While Phoenix, Arizona, Detroit, Michigan, and the State of Louisiana were among the first to announce moratoriums, as of April 30, 2020, over 483 cities and 35 states had imposed them as well (FWW 2020) (see Figure 5.1). The Covid-19 pandemic has alerted states and local governments to the critical public health importance of drinking water access.

What differentiates states that imposed moratoriums from those that did not? We conducted a study and found that states which regulate private water operators were more likely to impose a moratorium, and those with higher Covid-19 case rates imposed their moratoriums more quickly (Warner et al 2020). We also found states with consolidated Republican control of both the state legislature and the governor’s office were less likely to impose a moratorium. Water access, as well as other public health measures in the Covid-19 pandemic, are highly politicized in the US (Warner and Zhang 2020). This makes the participation of civil society especially important to secure water access, as the Baltimore case shows.

The role of the public sector is complicated and sometimes con-
Public Water and Covid-19

Contradictory. Research finds that states are the best level for providing low-income assistance programs in the utility sector (Pierce et al. 2020). While some states provide consumer protections, others may prohibit preferential treatment of specific customers; and some limit the ability of utilities or communities to fund low-income assistance programs (Pierce et al. 2020, UNC Environmental Finance Center 2017).

Figure 5.1

*US states and cities enacting water shutoff moratoriums in the pandemic*

Where states fail to act, cities can. In the 15 states that did not impose a statewide moratorium on shutoffs, 135 cities imposed their own. These cities are characterized by having larger minority populations and higher income inequality, and are thus made more aware of the need for water equity (Warner et al. 2020). These cities also have more local capacity – as measured by higher per capita income and higher community health status. However, our study also found cities in counties with higher percentage of population voting for Trump in 2016 were less likely to impose moratoriums.

As indicated by these results, water equity is highly politicized in
the US, at both the city and state level. Cities and states with Democratic control are more likely to protect residents from water shut-off. Many private water utility operators also voluntarily enacted moratoriums on water shutoffs during the pandemic (AWWA 2020). But will these protections persist as the pandemic drags on? Given the absence of federal leadership during the Covid-19 crisis, some US cities and states have emerged as champions of water equity. But how effective can cities be given the complexity and fragmentation in US water governance and US exceptionalism in water policy?

**US WATER POLICY: COMPLEX AND FRAGMENTED**

In many countries, water governance reforms provide a coordinating framework for sustainable and integrated water management. In the US, experts have called for a sustainable approach to water management, as the current systems is fragmented and responsibility falls on a multiplicity of actors (DigDeep and US Water Alliance 2019).

One unifying factor is that the majority of Americans are served by public utilities, although the regulation of water service provision involves a multi-level government approach. At the state level, there are health and environment agencies and departments involved in water regulation, in addition to the Public Utilities Commissions (PUCs), which oversee tariff regulation of private and sometimes public utilities. At the federal level, policies are mainly focused on environmental regulation, establishing water quality and discharge standards.

The Covid-19 pandemic has demonstrated the challenges of issuing a rapid response in a multi-actor governance structure. For example, while California did not issue a moratorium on shutoffs until April 2, 2020, various cities in the state were ready to suspend water shutoffs right after the crisis was declared a pandemic on March 12. To do so, they needed to get approval from various other agencies. For example, San Francisco’s utilities commission required
approval by the health department before it could act (Buford and Campbell 2020), which delayed the shutoff protection for 48 hours, meaning that delinquent households whose water was shut off had to pay and wait before their service was restored.

To add to this governance complexity, there is also the challenge of fractionalized service areas: i.e. city jurisdictions do not necessarily coincide with water utility service areas. How can cities protect low-income residents that are not served by their own utility? City leadership is crucial here, but there is a need for state and national governments to provide resources and strong guidelines on water access protection as well.

In addition to the complexity of water governance, the US is an exception with respect to the rest of the world in the lack of recognition of water as a human right. This is in stark contrast to European countries, where various mechanisms ensure access to water, including the provision of a household minimum subsistence level (following the World Health Organization guidelines), discounted rates (social tariffs or social funds), and full water disconnection bans. In the European Union, Austria, France, Ireland and the United Kingdom have full disconnection bans in place, while in several other countries, legislation requires water operators to provide the minimum subsistence amount using flow reduction devices or, in some cases, coin-operated water meters. In countries that do permit water disconnections (such as Belgium, Norway and the Netherlands), some of the requirements include approval by an appointed court or other government agency (EurEau 2016).

The European approach is consistent with the United Nations’ Sustainable Development Goals (SDG) for 2030. There is general agreement that water access is central to development, as reflected in the commitment to SDG 6 on access to water, sanitation and hygiene, and the 2010 milestone of the UN General Assembly on recognition of water as human right. The Trump administration has generally abandoned a leadership role in this global development forum. While there is variation in how the SDGs are embraced by
different countries, a report of the G20 countries looking at the extent to which countries align national agendas to the SDGs, strategies, action plans and accountability systems reveals that the US shows the lowest levels of political leadership (Bertelsmann Stiftung and SDSN 2018).

**POTENTIAL FOR WATER EQUITY IN THE US**

The disdain of the US to join global development efforts is alarming because, even though the US is one of the wealthiest countries, it experiences urgent water services needs. An estimated 1.4-2 million Americans lack running water (DigDeep and US Water Alliance 2019), and many communities face the risk of water contamination and inability to pay for rapidly increasing bills. This has had devastating consequences for low-income communities, Native American communities and communities of colour, which face higher disconnection rates and the structural effects of bill delinquency (Montag 2019, DigDeep and US Water Alliance 2019).

In this context, many cities and state governments responded swiftly with temporary moratoria for non-payment to ensure access to water for the most vulnerable groups during the Covid-19 pandemic. However, these are temporary measures, and by August 2020, moratoria in 11 states had expired, but the Covid-19 pandemic and resulting economic crisis continue (FWW 2020). This raises the question of how to make access to water long-lasting. There are various challenges to making the protection of water access more permanent beyond the current pandemic. These challenges are not just because of the complexity of US water governance policy, but also because of the US reluctance to embrace a human right to water (for a longer discussion of the relevance of Covid-19 to the human right to water, see Loftus and Sultana in this volume).

The water affordability crisis in the US is happening at the same time cities and regions are facing problems with decaying infrastructure and the need to address climate change, which presents
cities and water systems with important challenges (as the chapter on Pittsburgh by González Rivas in this volume shows). Action on water policy has been focused on efficiency, investment in new technologies and green infrastructure, while overlooking equity issues such as guaranteeing access to water (Homsy and Warner 2020).

However, cities can implement a more comprehensive, sustainable approach. Philadelphia is an example of how a public water department integrated its affordability program as part of the rate increases that finance the infrastructure investment plan. Despite many water challenges, Philadelphia has implemented a leading program of affordability. Like many other cities in the US, Philadelphia has decaying water infrastructure. The city has not been able to keep up maintenance and investments because of high costs and limited federal funding since the 1970s. However, in 2011 the city launched an infrastructure investment plan to comply with water quality and environmental standards. Water rates increased to finance the investment, and this resulted in an increase in the number of water disconnections. Although the Department of Water had several customer assistance programs for low-income households, the programs were limited, and as bills increased, so did the number of households that could not afford to pay water bills. In response, the city launched a Tiered Assistance Program in the summer of 2017 (City of Philadelphia 2017). The program is a novel approach because it is based on a household’s affordability level (versus the common approach of providing a discount on the water service bill). This program is consistent with the United Nation’s affordability standard of 3% of household income by making sure low-income households are able to afford their water bills.

In order to have a comprehensive sustainable approach in which equity is not an afterthought, cities and states need to broaden the focus of sustainable water management to ensure protection to water access for the most vulnerable groups. The UN special rapporteur on the human right to safe drinking water and sanitation notes
that access, accountability and participation are core principles that underlie the human right to water. Water must be available, accessible and affordable, and quality and safety must be secured, as well as long-term sustainability (de Albuquerque 2012). But this is a challenge in the US context of rising unaffordability and the need for cities to reinvest in their water systems, as the chapters on Pittsburgh and Baltimore in this volume show. Thus, public participation is critical to putting pressure on government to secure access.

CONCLUSION

The global pandemic has shone a spotlight on the importance of water access for public health. While hundreds of localities and 35 states in the United States suspended water shutoffs in March and April 2020, the patchwork of local and state regulation left millions of Americans unprotected and vulnerable to losing water service. Below are recommendations for each of the three levels of government to take action to ensure that no person is left without the water necessary to protect themselves, their families and their communities from the spread of disease.

Local action
Local water providers are at the frontlines and can most quickly adopt policies and protections for their residents to ensure access to safe water during the pandemic and beyond. These providers can suspend disconnections, safely restore service, waive late fees and penalties, and delay rate increases both during the pandemic and for at least 180 days following the end of the state of emergency. There are 483 cities in the US that imposed moratoriums during the Covid-19 pandemic, but not all moratoriums followed these recommendations on service restoration and fee waivers.

To achieve longer-term sustainability, local water providers must expand existing assistance programs to allow households experiencing Covid-related job loss and lost wages to be automatical-
ly eligible for assistance. As the moratoriums expire, they should extend payment plan periods to 24 months to spread repayment of outstanding bills over a longer period and reduce the monthly burden on households. Money should be set aside for debt forgiveness for low-income households. Local governments can aid in this process by increasing funding for water assistance, including allocating federal Community Development Block Grant assistance and any Coronavirus Relief Fund money to cover the cost of low-income water debt forgiveness. The CARES Act (passed in April 2020) provided $150 billion to the Coronavirus Relief Fund for states and local governments.

Cities can move beyond assistance toward real, long-term affordability by establishing percentage-of-income payment plans with debt forgiveness for low-income households. This affordability model effectively caps water bills at a level that a household can afford to pay based on its income, such as the United Nations’ threshold of 3% of household income for basic water and sewer service. While this affordability model is relatively common in the U.S. gas and electricity sector, only Philadelphia and Baltimore have adopted similar programs in the water sector (Reuters 2020). However, efforts are underway in major metropolitan areas of Detroit and Chicago (Detroit People’s Water Board 2020, the Real News Network 2020). More broadly, cities should explore moving to ban water shutoffs permanently. New York City, the largest US water provider, no longer performs shutoffs for nonpayment. A number of cities including Madison, Wisconsin and Albany, New York, do not use shutoffs for collections at all (Food & Water Watch 2020). As the Covid-19 pandemic demonstrates the critical public health importance of the human right to water, cities across the US should shift from this punitive collection method toward more humane practices.

**State action**

While 35 state governments have taken some form of action to suspend water disconnections, these actions have been varied in their
scope and reach. By late June 2020, 17 states had ordered a water shutoff moratorium that applies to all water utilities, but only California, Michigan, New York, Ohio, Washington and Wisconsin included service restoration for previously disconnected homes. By the end of July, a number of these state orders had expired. The US Senate Environment and Public Works Committee report from July 2020 found that only 10 states and Washington, D.C., had comprehensive statewide moratoriums on water and electricity disconnections still in effect.

To meet the standards set by the UN Rapporteur for Water and Sanitation (de Albuquerque 2012), states should ensure accountability, accessibility and public participation in local water systems. California provides a model for data collection and recording policies. In 2020, California became the first US state to require every water system to track and report water system disconnections due to the inability to pay. This is a model that all states should adopt, so that all water providers can track household water service disconnections and reconnections and publish this information online in a manner that is easily accessible for the public.

Participation requires more than information to ensure accountability. It also requires a voice in utility decision-making. Democratic protections should be offered prior to the sale or lease of water or wastewater services to for-profit entities. Several states, including Wisconsin, require a vote of the electorate of the area served by a municipal utility prior to its sale or lease to a private entity. This is a good model that other states could adopt. Some cities, such as Missoula, Montana have used democratic means to restore public ownership and control (Mann and Warner 2019).

To ensure accessibility, states should establish lasting shutoff protections for vulnerable populations. Legislation could be modeled on New York City’s 2008 regulations prohibiting service disconnections to homes with people with serious illnesses and significant medical conditions, young children, elderly persons, blind persons and disabled persons.
**Federal action needed**

States and municipalities alone cannot address the affordability crisis. The US Congress should pass legislation to impose a nationwide moratorium on utility disconnections with service restoration for all households previously disconnected for nonpayment. In addition, the federal government should provide financial relief for low-income households to help cover the costs of overdue water bills. In May 2020, the House of Representatives passed the HEROES Act, which included a national water shutoff moratorium with service restoration, $1.5 billion for low-income water assistance, and substantial local government aid, but it is unclear if the Senate will include these provisions in the new Covid-19 stimulus package in August. Participation is required to ensure public accountability and access. A national No Shutoffs Coalition is organizing to press for the inclusion of a national utility shutoff moratorium.

Shutoff protections alone are not sufficient either. We must address long-term affordability and investment needs. Public water providers have been hit hard financially by the crisis. Water systems need to be well funded so they can continue to provide safe water and pay their workforce. The federal government should provide emergency financial relief for public sector water and wastewater utilities, which project revenue losses in excess of $25 billion, largely due to diminished industrial and commercial usage (American Water Works Association and Association of Metropolitan Water Agencies 2020, National Association of Clean Water Agencies 2020). For the long term, US Congress should pass the Water Affordability, Transparency, Equity and Reliability Act (HR 1417, S 611) to restore the federal government’s commitment to water infrastructure. This legislation would provide $35 billion a year – the amount necessary to comply with existing federal water quality law, according to the latest needs surveys by the US Environmental Protection Agency (2016, 2018). This would provide local water providers with the resources necessary to provide safe and affordable water for all.

The Covid-19 pandemic could help move the US toward more in-
vestment and more equity in its drinking water systems. States and cities have led the way, but they alone cannot rebuild local water systems. Federal assistance is needed. State and local moratoriums on water disconnections during the Covid-19 pandemic are a first step toward recognition of the human right to water. Accessible, affordable and transparent water systems are key to democratic governance of water; and water access is critical to public health.

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