H₂Equity:

Rebuilding a Fair System of Water Services for America

America's water systems used to deliver drinking water and remove wastewater from the homes and businesses of 327 million people are broken. Far too many Americans lack consistent access to affordable and safe water supplies to meet their needs. Far too many Americans distrust their tap water, even when it is safe. Far too many Americans experience sewage overflows, polluted riverfronts, and flooded streets. The failures of our water systems prevent all Americans, and especially low-income individuals and people of color, from having the healthy and prosperous lives they deserve.

Maintaining the vast water and wastewater infrastructure network across the country is a complex operation. Construction and maintenance of these systems to ensure safe drinking water in our taps and clean water in our rivers and lakes takes enormous resources, which only some large cities can afford all on their own.

Race is now the strongest predictor of lack of water and sanitation access, especially in the South. Even when racially disadvantaged households have access to piped water and wastewater infrastructure, communities of color report greater levels of drinking water health violations and sewage backups during heavy storm events. Deliberate policies, or lack thereof, at the national, state, and local levels of government have exacerbated inequities in our water system.

We conducted a strategic review of water issues to identify the overarching challenges in addressing health equity in water infrastructure – and how to make progress in reducing inequity. While there is a general public interest in water issues across the country at a profoundly higher level than in past decades, this moment may not last. We must prove that we can solve problems of water quality, like the cities of Lansing, Madison, and Washington DC have done or are doing. That faith is critical to keeping all populations involved in efforts to keep making progress with America's water needs.

FULL REPORT can be accessed here: *H₂Equity*

Recommendations

There are eight critical areas where investments – not just capital, but social and governance reforms – can improve health equity outcomes for all persons and create wide-ranging benefits.

CONSOLIDATE UTILITIES AND PROMOTE SHARED SERVICES: There are 50,000 water systems, 15,000 wastewater systems, and a growing number of stormwater systems operating in the U.S. More than half the water systems each serve 500 persons or less. Small utilities struggle to meet today's health standards while staying solvent, resulting in inequity for those served by such systems. We need a massive reorganizational effort to consolidate small utilities or regionalize services to improve health outcomes for millions of households.

ELIMINATE LEAD WATER PIPES ACROSS AMERICA: Removal of all of America's 9 million lead pipes is a solvable problem in a generation or less. Nonetheless, most utilities are reluctant to remove them – certainly not on a fast time scale. Lead is a neurotoxin and is especially harmful to young children under the age of six, and may also contribute to heart disease in older Americans. Lead pipes could be eliminated in America by 2040 through a combination of policy reform, regulation, and supportive government funding that backs utilities' ability to fund and carry out lead pipe removal on private property.

RESTRUCTURE WATER RATES AND ASSISTANCE PROGRAMS TO IMPROVE AFFORDABILITY: Water rates have nearly doubled since 2000, making water unaffordable for the poorest households and putting a significant strain on middle-income households. We believe intentional revision of water rates using household income and more equitable tier structures, and expansion of rate assistance programs, together with strong oversight from public utility commissions, are needed to make water services affordable to all.

INCREASE PUBLIC TRUST IN TAP WATER AND UTILITIES: Tap water is mistrusted by roughly one-third of consumers, and such mistrust is particularly high among Black and Latino households. Improving trust in tap water is an immediate goal for water utilities and EPA, but these entities are seen as part of the problem. Trusted third parties and local community advocates need to do more to help drinking water utilities regain public trust in the large percent of the country where tap water is safe.

IMPROVE REPRESENTATION IN UTILITY LEADERSHIP: Utility leadership is more likely to be old, white, and male than their consumers. This lack of diversity hampers the utility's understanding its diverse customers' needs and changing priorities for service improvements. We outline strategies for utility leadership to expand the ranks of women and individuals of color and become more inclusive and effective institutions.

REDUCE THE INEQUITY OF STORMWATER IMPACTS: Communities are experiencing 500-year flood events, coastal storm surges, sewer overflows, and basement backups with increasing frequency. These disasters have a disproportionate impact on low-income residents and communities of color. Increased investment in distributed systems like green infrastructure are needed to improve community resilience.

MAKE DECENTRALIZED SYSTEMS SUSTAINABLE: Large number of rural communities rely on decentralized drinking water and wastewater systems such as wells and septic tanks. Poor design, maintenance, and a lack of monitoring means that such systems often fail to protect public health, and government programs are disproportionately restricted to centralized water services. Public-private-philanthropic partnerships are needed to encourage robust and targeted public financial support for their construction, repair, and ongoing monitoring.

RIGHT-SIZE INFRASTRUCTURE TO FIT COMMUNITY NEEDS: Many communities view water infrastructure as a driver of economic growth, and are susceptible to "build it and they will come" investment decisions. A cultural shift to thinking more flexibly about water infrastructure is needed to help communities avoid over-sizing their infrastructure.