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Much More Than a Drop in the Bucket

Impacts of water
debt and shutoffs
on residents
and utilities



*This is a report brief –
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Publications/More-
Than-A-Drop](https://ElevateNP.org/Publications/More-Than-A-Drop)*

“Much More Than a Drop in the Bucket” aims to synthesize the work of Elevate and other water advocates, with a specific focus on household water debt and shutoffs in northeastern Illinois.

Introduction

As the cost of water service rises nationally, it is imperative that decisionmakers understand the scale and scope of water affordability challenges for residents and municipal drinking water utilities, including the impacts of water debt and shutoffs.

To date, much of the focus on addressing water affordability challenges has centered on escalating water rates and creating affordable rate structures. While this research is invaluable, it is equally important to understand how residential water debt and shutoffs affect



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people's lives, their access to water service, and how these phenomena factor into the broader issue of water affordability.

For this project, Elevate conducted research to better understand what is known about the extent of water debt and shutoffs, their impact on residents and utilities in northeastern Illinois, and any promising solutions to address this growing challenge. Elevate interviewed residents directly impacted by water debt and shutoffs to highlight their lived experience, including the day-to-day challenges of living without water. We also interviewed water utilities about how water debt can impact system operations, regulatory compliance, and capital improvements for water infrastructure. These interviews were supplemented by stories produced by local media outlets.

“Much More Than a Drop in the Bucket” is designed to bring attention to the significant challenges residents and utilities face with mounting levels of water debt. These challenges include the externalities of water debt and shutoffs such as physical and psychological stressors, the ends to which people must go to access water after a shutoff, the impact of shutoffs on the broader community, and more. Additionally, the report brings to attention key considerations for tackling water debt and overall affordability challenges moving forward.

The data indicate that the status quo is not working, requiring the industry to rethink how municipal water services are financed, implement affordable rate structures, develop broad and deep assistance programs, and more.

Water Debt and Shutoffs

Comprehensive data are not readily available on the level of water debt and shutoffs in

municipalities. The data exist within municipal billing software, but generally they are not systematically analyzed outside of periodic reviews for determining rates or, even less frequently, made public. A Circle of Blue analysis used public records requests and found the cumulative water bill debt in 12 U.S. cities topped \$1 billion, ranging from \$568,427 in San Francisco to \$341 million in Chicago. For individual households in the study, median past due amounts ranged from \$79.27 in Denver to \$662.80 in Philadelphia.¹

When looking specifically at water shutoffs, a Food and Water Watch Study found that in a typical year, approximately 15 million people in the U.S. experience water shutoffs for nonpayment.² This translates to about 5% of any given population experiencing water insecurity due to shutoffs. Across 284 municipalities in the Lake Michigan water service area of northeastern Illinois, water utilities reported an average of 120-360 shutoffs per year.³

Elevate, along with our partners at Metropolitan Planning Council and Illinois-Indiana Sea Grant, conducted in-depth water affordability analyses in four northeastern Illinois municipalities – City of Chicago, City of Evanston, City of Harvey, and Village of Broadview – to uncover water debt and shutoff trends. Through these analyses, we found that many customers pay on time, some pay late but carry small balances and bring their account current within a few billing cycles, and a smaller group of customers have a considerable amount of debt and hold it for an extended period. Water affordability is a function of the interaction between cost of service and income, and the same water bill can be affordable to one household but a high burden for another.

1. Walton, B. (2020, August 5). *Millions of Americans Are In Water Debt*. Circle of Blue. circleofblue.org/2020/world/millions-of-americans-are-in-water-debt/
2. Food & Water Watch (2018). “America’s Secret Water Crisis: National Shutoff Survey Reveals Water Affordability Emergency Affecting Millions.” foodandwaterwatch.org/wp-content/uploads/2021/03/rpt_1810_watershutoffs-web2.pdf
3. Carroll, D.A., Albrecht, K., Medwid, L., Khalaf, C., Michnick, J., Huang, D., Wetmore, B., & Li, J. (2023). *Water rate setting in the Lake Michigan service area*. University of Illinois Chicago, Government Finance Research Center. gfrc.uic.edu/our-work/featured-projects/water-rate-setting-study/



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The concentration of high outstanding balances among communities of color must also be considered and addressed by water utilities. As noted by the NAACP Legal Defense Fund, “Unsurprisingly, rising water rates are most likely to impact communities of color,”⁴ exacerbating existing disparities including income and other cost-of-living burdens. Indeed, this was one of the main findings of our water affordability analysis with the City of Chicago. Namely, census tracts with a majority Black, Latinx, and/or Asian population face on average a higher water burden while using comparatively less water than accounts in majority white tracts, with Chicago’s lowest income census tracts with a majority Black population paying on average 19% of their income on water bills.⁵

People, Not Data

To understand the human side of this story, we looked beyond the numbers and explored some of the reasons behind outstanding balances and how individual households are impacted. Themes from our research and interviews with residents are included below.

LIVING WITHOUT WATER

When water stops flowing through the tap, residents are forced to find other ways to get this vital resource – whether by relying on the kindness of friends and neighbors or by resorting to more extreme measures.

- Robert’s water service was disconnected while rinsing a cup at his kitchen sink; he

was later forced to shower at a friend’s home and use a bucket in his garage as his toilet.⁶

- Vernal opened a fire hydrant with a wrench and filled a five-gallon jug for his daily water needs, saying this was his only source of water after a frozen pipe burst in his home two years earlier, which he could not afford to fix.⁷
- Sheila was living without water during the pandemic because, she assumed, the building was in foreclosure, and her landlord was not paying the bills. She said, “I can’t wash my hands. I use wipes all day [and] sanitizer.”⁸

DESPERATE MEASURES

Residents may make all sorts of tradeoffs to get their water restored after a shutoff, or to make a payment to avoid losing water service.

- Ruthie’s water bill was \$85 per month. She is on a fixed income and needs assistance from her son to pay the bill while she cuts costs by buying fewer groceries and forgoing haircuts.⁹
- Illora receives a fixed income \$1,034 per month, of which \$900 goes to rent. Although her water is billed at the senior discount rate of \$65, not much money is left after housing expenses and utility bills are paid. Illora supplements her income by gathering aluminum cans for \$0.25 per pound and gets free meals at the senior center.¹⁰

4. Montag, C. (2019). *Water/Color: A Study of Race and the Water Affordability Crisis in America’s Cities*. NAACP Legal Defense & Educational Fund, Inc. naacpldf.org/our-thinking/issue-reports/

5. Elevate & Metropolitan Planning Council (2022). *City of Chicago Water Affordability Analysis*. elevatenp.org/publications/city-of-chicago-water-affordability-analysis/

6. Gregory, T., Reyes, C., O’Connell, P.M., & Caputo, A. (2017, October 25). *Same Lake, Unequal Rates: Why our water rates are surging – and why black and poor suburbs pay more*. *Chicago Tribune*. graphics.chicagotribune.com/news/lake-michigan-drinking-water-rates/index.html

7. Zamudio, M.I. (2020, May 26). *Some Chicago Renters Are Stuck Living Without Water During The COVID-19 Pandemic*. *WBEZ Chicago*. wbez.org/stories/some-chicago-renters-are-stuck-living-without-water-during-the-covid-19-pandemic/ad932905-006e-40d6-b6fc-a414ceb20d06

8. *Ibid.*

9. Gregory, T., Reyes, C., O’Connell, P.M., & Caputo, A. (2017, October 25). *Same Lake, Unequal Rates: Why our water rates are surging – and why black and poor suburbs pay more*. *Chicago Tribune*. graphics.chicagotribune.com/news/lake-michigan-drinking-water-rates/index.html

10. *Ibid.*



ELEVATE

- Facing high levels of debt and the threat of a water shutoff, many Chicago residents decided to reconnect their own water – almost 62,000 times in a span of 12 years, according to reporting by WBEZ Chicago in 2019 – risking an “unauthorized water restoration fee” of \$500.

HEALTH AND SAFETY IMPACTS OF WATER SHUTOFFS

The most obvious impacts of not having reliable, safe access to water are on people’s health. With water disconnected, residents are unable to cook, bathe, clean, or flush toilets. Additionally, some medical devices require water for operation and cleaning, further compromising the health of people living without water.

According to research by DigDeep, for 2.2 million people in the U.S., living without running water or basic plumbing in their homes resulted in quality-of-life issues – including 219,000 cases of waterborne illness and 71,000 reported cases of mental illness annually.¹¹

Toxic levels of stress, especially chronic stress, contribute to disparate health outcomes, especially for people of color and those living in disinvested communities.

- Eleanor has stress-related heart problems, due in part to high water bills. She said it is hard to wake up every day and wonder if her water will be off.
- Angela received a \$14,000 bill for water she did not use in a home she did not own. With tears in her eyes, she said, “It’s made me stronger. It’s made me angry – you know, sometimes I have a pity party,” but, mostly, she “feel[s] like a victim.”

WATER SHUTOFFS COMPROMISE HOUSING

Buildings are designed to be lived in, and turning off a critical service like water can create a myriad of related challenges. Reconnecting water is not as easy as flipping a

switch – it can require repairs and replacement of plumbing as well as other parts of the building that are affected.

- Sharon had water debt that accumulated to \$12,000 and led to a water shutoff. She lived without water for about two years, during which time she relied on others in her community for bathing, cooking, and sometimes staying in their homes. When she started the process to turn her water back on, Sharon discovered that the pipes in her home had developed leaks. Elevate worked with Sharon to repair extensive plumbing issues and had her water tested to ensure it was safe to drink.
- Sylvia turned off the water service at her family-owned building after her parents passed away so the pipes would not freeze. However, the unmetered, vacant property continued to collect water bills for 14 years. When she dealt with the outstanding balance and had the water turned back on, multiple leaks were found. Elevate worked with Sylvia to replace all the plumbing in the building.

FINANCIAL STRAIN OF WATER AFFORDABILITY, DEBT, AND SHUTOFFS

Most municipalities charge a combination of late fees, shutoff fees, and reconnection fees when an account falls past due. While ostensibly designed to deter people from being late, our research shows that these fees in fact compound challenges for people who cannot afford to pay. Water debt can quickly grow to life-altering levels – sometimes even due to simple administrative errors. Families saddled with water bills they cannot afford and arrearages they cannot pay off can suffer significant financial hardship with long-term impacts, sometimes landing in debt collections, taking hits to their credit, or even facing liens on their homes, which can include the threat of eviction.

- Angela received a court summons in 2022 only to learn that she had \$14,000 in unpaid water debt for a home she lost in

11. DigDeep (2022). *Draining: The Economic Impact of America’s Hidden Water Crisis*. digdeep.org/draining



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a foreclosure in 2008. The bank had failed to record the deed in its name and charges continued to accrue on the unmetered account: \$8,000 for usage (on a vacant home¹²) and \$6,000 in late fees. “They broke down the bill and I was floored,” said Angela. She attempted to dispute the charges, even seeking legal assistance, to no avail.¹³

- Taleia attempted to take possession of a family home and discovered it carried an outstanding water bill of \$10,000, mostly from when the unmetered property sat vacant. She cannot apply for bill assistance because she is not the property owner, and she cannot take ownership of the property because she cannot afford to pay off the large debt. This administrative hurdle is the only thing between her and owning her first home.

IMPACT OF WATER DEBT ON COMMUNITIES

The impact is felt beyond the individual household, as well. “Homeowners stuck in water debt can lead to properties stuck in disrepair and communities locked into disinvestment,” according to WBEZ Chicago’s “Drowning in Debt” series. “And communities riddled with hundreds of such homes are hard pressed to attract economic investments,” impacting access to opportunity, schools, jobs, and even fresh food.¹⁴

WATER SHUTOFFS AND PUBLIC TRUST

Another consequence of water shutoffs and other punitive actions is that they erode public trust in the utility. As the U.S. Water Alliance points out, “This makes it harder for utilities to get assistance to those who need it, and it damages other aspects of utility operations,

like gaining community support for new construction projects.” Water utilities and their customers must work together to advocate for the funding needed to achieve their common goal – safe, clean, affordable water.

Non-payment Hurts Utilities, Not Just Customers

As the cost of water service continues to rise, utilities are faced with the issue of providing a public good at an affordable rate but also needing to raise enough revenue to sufficiently cover their expenses. Many communities are facing the financial challenge of funding capital-intensive repairs and improvements, like lead service line replacement programs, with already limited funds. Debt from unpaid accounts will always exist, said a finance department employee in Lansing, Illinois, “but it should be only 2-3% of revenue.” Their village sees around 18% of billed revenue tied up in delinquent accounts, and, “It creates cash flow problems and affects capital improvement projects like [lead service line replacement]. Necessary infrastructure improvement projects are delayed or deferred because of the unpaid accounts.”¹⁵

It can seem like a cruel twist, then, that the need to fund operations and maintenance via ratepayer fees can put utilities in a position of threatening the very mission they were designed to fulfill. Patrick from Homewood told us, “There’s really nothing worse than going and shutting people’s water off.”¹⁶ In a U.S. Water Alliance-led pilot study with eight municipalities seeking alternatives to shutoffs, some municipalities reported that 10-15% of accounts experienced repeated shutoffs, indicating that underlying issues of water

12. Note: In an unmetered home, usage is estimated and billed based on size of the building, size of the lot, and number of water fixtures. / City of Chicago (n.d.). General Billing Questions. chicago.gov/city/en/depts/fin/supp_info/utility-billing/common-questions-on-utility-services.html

13. Knowles, J., and Pistone, A. (2022, October 31). Chicago homeowners stuck with expensive fines for ‘zombie foreclosures,’ ‘zombie properties.’ WLS-TV Chicago (ABC, Inc.). abc7chicago.com/chicago-property-fines-zombie-foreclosure-department-of-finance-water-bill/12401691/

14. Zamudio, M.I. (2021, November 8). Drowning in debt: For years, Chicago leaders turned the city’s water supply into a revenue stream. Now tens of thousands can’t keep up with the rising costs. WBEZ Chicago. interactive.wbez.org/waterdebt/

15. B. Hanigan, personal communication, May 15, 2023.

16. P. McAneny, personal communication, May 22, 2023



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affordability and on-time payments are not addressed by shutoff policies. Furthermore, where municipalities track such data, they reported frequent overlaps between geographic concentrations of water service disconnections and urban heat islands, poor air quality, high unemployment, and historical redlining.¹⁷

The Path Forward

Elevate strongly encourages utilities to end the practice of shutoffs, property liens, and excessive fees for non-payment and explore ways to promote water affordability instead. We cannot know what tradeoffs people make to bring their account current, and there are many harmful health, financial, and social effects that result from shutoffs and mounting debt.

Instead of asking, “Should utilities use shutoffs as a punitive tool for bill collection,” we must recognize the far reaching, devastating impacts of water shutoffs. What we should be asking is, “How can utilities, communities, and policymakers work together to create an environment in which shutoffs for low-income families are not necessary?”

Our research leads us to believe that steps can be taken by municipalities, residents, government, and community groups to make clean, affordable drinking water accessible to all. We must continue to explore legislation and funding geared towards improving affordability. We must advocate for local policy changes to help municipalities fund their water systems without forcing people into debt or disconnecting service – because everyone deserves access to safe drinking water.

WATER AFFORDABILITY BEST PRACTICES

Through our research, we have identified promising practices for communities to consider in addressing challenges associated with water affordability.

- **Tailor solutions to the local context.** Utilities should use municipality-specific billing and census data combined with resident and stakeholder conversations to better understand the debt and affordability challenges facing members of their community.
- **Develop a strong sense of mission, leadership, and accountability.** Adopting both a mission statement and affordability plan can provide clarity of vision and purpose for a utility. Through interdepartmental stakeholder collaboration and community engagement, utilities display leadership while creating accountability mechanisms to keep them on track to achieving their goals. In addition, continuing to hold to a grounding principle of service will keep the utility rooted in the best outcomes for their community.
- **Modernize operations and data management systems.** Accurate data, robust customer relationship management systems, and updated metering and billing systems can improve operational efficiency and build trust in the community through transparency.
- **Broaden customer service and outreach approaches.** Intentional efforts to be part of and in service to the community include developing or strengthening the public-facing elements of the municipal drinking water utility.
- **Offer flexible payment plans and expand affordability programs.** Billing structure can make a difference for families struggling to make ends meet. Smaller, more frequent bills (monthly instead of quarterly billing), the ability to make partial payments, and access to online billing are all ways utilities can help residents stay out of debt.
- **Offer proactive programs that forgive debt and reduce bills.** Proactive programs are needed for all types of residential customer

17. U.S. Water Alliance (2022). *The Path to Universally Affordable Water Access: Guiding Principles for the Water Sector*. uswateralliance.org/resources/publications

18. *Ibid.*



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classes. Municipalities should identify pathways for residents to receive assistance with their water bills and actively share that information with residents.

- **Offer assistance for residents who experience large plumbing leaks.** Utilities should work with residents who cannot afford the cost of unexpected leaks. The necessary plumbing repairs and large water bills often lead to unpaid balances that may result in a vicious cycle of debt. A one-time bill adjustment can help keep residents current on their water bills.
- **Stop the practice of water shutoffs.** Water is a basic human need, and cutting off a household from safe drinking water can carry both immediate and long-term, devastating health and financial impacts on a family. A significant portion of water customers face repeated shutoffs, showing that shutoffs are not an effective mechanism to enforce payment, but rather punish a true inability to pay. Punitive fines and fees, plus the costs of water reconnection only further push customers into debt.

INNOVATIVE FUNDING, FINANCING, AND EFFICIENCY STRATEGIES

We recognize that investing in solutions to tackle water debt and affordability challenges requires financial and staff capacity. The following investments can help municipalities reduce operating costs and improve their ability to offer solutions to water debt and affordability challenges:

- **Prioritize federal dollars for capital improvement projects that will improve water infrastructure.** For example, in addition to traditional capital projects, utilities could leverage low-interest federal loans to invest in innovative technologies such as leak detection, advanced metering infrastructure projects, and water reuse systems that reduce water loss and lower long term operational costs. Reducing non-revenue water (from leaks in the distribution system and underbilled/unbilled water) will help municipalities

save money by reducing waste due to costs associated with water treatment, storage, and transmission.

- **Explore how water rates, fees, and taxes impact affordability challenges in the municipality.** Cost of service and water rate studies help municipalities make data-informed decisions about rate adjustments that can assist with affordability challenges while also maintaining sufficient revenue for utility operations. Technical assistance programs may be available to qualifying utilities to receive pro-bono support with these types of studies.
- **Invest in energy efficiency and renewable energy management projects to generate additional operational savings and revenue.** Energy use is one of the top three overall expenses for water and wastewater utilities. Moreover, energy usage from water and wastewater treatment plants can account for 30-40% of a municipal government's overall energy consumption. Improving energy efficiency at water and wastewater treatment plants can significantly reduce energy costs, minimize utilities' overall carbon footprint, and improve resilience.

STATE AND FEDERAL POLICY NEEDS

In addition to needed reforms and deeper investments at the local level, state and national policy can provide much needed support for municipalities, and in particular smaller, historically disinvested communities. Based on our research, as well as the voices of others in the water sector, Elevate advocates for the following policy priorities to promote water affordability long term:

- **Establish a permanent LIHWAP program at the federal level.** Utility billing relief programs for energy have been around for years, but funds have not historically been available for water assistance. The pandemic highlighted for many the foundational need for water and COVID-era policies should be developed for the long term for the water sector, specifically by reviving the Low Income Home Water



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Assistance Program (LIHWAP).

- **Establish a statewide Customer Assistance Program (CAP).** Due to the fragmented nature of public utilities, and limited capacity of many small water utilities, a cooperative CAP at the state level could provide assistance to some of the most vulnerable water burdened residents missed by existing CAPs. This could include funding for water reconnections and help reduce fees.
- **Create a statewide resource that aims to stabilize utility revenue.** Through providing technical assistance and funding resources, states can get to the underlying issues of water affordability by helping municipalities make necessary investments in their operational capacity as well as address pressing infrastructure needs. After decades of shrinking investment from state and national governments, more resources need to be made available to replace and maintain deteriorating water infrastructure.
- **Ban water shutoffs and other punitive measures aimed at those unable to pay their water bills.** A state or countywide ban would be more effective than a patchwork city-by-city approach and encourage utilities to seek alternative methods of payment collection.
- **Establish statewide data transparency laws requiring public utilities to uniformly publish information on water rates, fees, debt, and affordability programs.** This will not only increase accountability, but also provide greater visibility around water burden and needs at scale, which can better inform future program development.

Water is a foundational need. As time goes on, demand, regulations, pressure on utilities, and prices are all increasing while infrastructure is quickly degrading. We believe through these policies, actions, and investments we can work together with leaders and water advocates to make safe, affordable access to water a possibility for our region.

Keep Reading

Read the full report, “Much More Than a Drop in the Bucket: Impacts of Water Debt and Shutoffs on Residents and Utilities,” as well as our other water affordability research at ElevateNP.org/Water-Affordability.