Evaluating Proposals for a Federal Water Bill Assistance Program

EXECUTIVE SUMMARY

In recent years, water rates have been rising steadily, leading to increased concerns about the ability of low-income households to pay their bills. This trend may be amplified by coronavirus-related hardships and could lead to widespread service shutoffs. Members of both parties in Congress have made providing aid to low-income families to help pay water bills a COVID-19 relief priority, including a proposal passed by House Democrats that would provide $1.5 billion to support water and sewer bill reductions for low-income households. This brief explores the merits of a federal water bill assistance program, lessons learned from the federal Low Income Home Energy Assistance Program (LIHEAP), current legislative proposals and options, and the prospects for bipartisan action in Congress.

BACKGROUND

A primary challenge for water and wastewater systems is how to price water services to fully cover costs and maintain affordability for customers who already struggle to pay their bills. U.S. water and sewer services are provided by thousands of different small and large entities, publicly and privately owned. Many of these systems face aging and deteriorating infrastructure, changing customer bases, regulatory compliance burdens, and climate-related risks—all of which add to the growing costs of providing their services and often necessitate higher rates. Though the long-term fiscal
sustainability of utilities depends on setting customer rates to fully cover the costs of services, ongoing maintenance, and necessary capital improvements, an estimated 64% of water utilities do not generate enough revenue to cover such obligations, despite years of rising rates.¹

These rising rates can be especially problematic for low-income families whose water and wastewater costs represent a comparatively higher proportion of their household expenditures. Particularly for those on fixed incomes, this can lead to difficult trade-offs between paying for water services and other necessities like housing, food, medicine, and other utility bills. Even before the pandemic and the economic disruption it has caused, nearly 14 million U.S. households struggled to afford their water bills, and 2 million people lacked access to adequate running water and basic indoor plumbing.² Moreover, one study found if water rates rise at projected amounts over the next five years, the percentage of U.S. households that will find their water bills unaffordable could triple from 11.9% to 35.6%.³

While “affordability” is an amorphous term—dependent on each household’s unique circumstances, finances, and local rates—water industry stakeholders generally interpret Environmental Protection Agency guidelines to suggest that spending 2.5% of household income on drinking water is “affordable,” or 4.5% for water and wastewater spending combined. To illustrate this point, consider that in 2018 the median household income in the United States was $63,179 and average drinking water expenses, according to an annual survey of large systems, was $70.65 per month or $847.80 annually, assuming a family of four and 100 gallons of water used per person per day.⁴ For a household making the national median, drinking water costs represent approximately 1.3% of their income. Yet for the 38.1 million Americans that live below the poverty line—$25,701 for a family of four in 2018—drinking water costs alone jump to 3.3% of income.⁵

Though the national poverty rate in 2018 stood at 11.8%, American Indians and Alaskan Natives (25.4%), Blacks (20.8%), Hispanics (17.6%), residents of rural communities (14.7%), and people with disabilities (25.7%) were all more likely to live in poverty.⁶ As a consequence, the ongoing fight against COVID-19 has amplified the need for equitable access to safe, clean drinking water and wastewater services at affordable rates, especially while households spend more time at home and exercise CDC-recommended prevention activities like frequent handwashing. Access to water services at affordable rates also continues to be a key environmental justice priority.

When water bills become unmanageable for a low-income household, missed payments and delinquent accounts can lead to service disconnection or shut-offs from the system, an outcome with many negative impacts for both the customer and utility. Disconnection, which can legally make a home uninhabitable in some jurisdictions, can have the same effect
as eviction or lead to children being placed in protective care. As such, many utilities—when they have the requisite technical, managerial, and financial capacity—have revisited their rate structures with a focus on equity and affordability concerns and have implemented strategies to help low-income customers better manage their bills through customer assistance programs, or CAPs.

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<tr>
<th>Common Types of Customer Assistance Programs</th>
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<td><strong>Bill Discounts:</strong> Utilities reduce a customer’s bill.</td>
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<td><strong>Flexible Terms:</strong> Utilities adjust repayment to help customers afford services; for example, by forgiving arrearages, adjusting bill payment timing, or leveling billing to a more predictable amount.</td>
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<tr>
<td><strong>Lifeline Rates:</strong> Customers pay a subsidized rate for a fixed amount of water expected to cover basic needs.</td>
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<tr>
<td><strong>Emergency Assistance:</strong> Utilities provide short-term or one-time assistance to prevent disconnection or restore disconnection following an unexpected hardship (e.g. medical emergency, job loss, death, or divorce).</td>
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<td><strong>Conservation:</strong> Utilities subsidize or provide water efficiency measures aimed at reducing water use and therefore water costs; for example, by fixing leaks, offering rebates for efficient fixtures and appliances, or conducting in-home water audits.</td>
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To assist affordability-challenged communities and low-income consumers—particularly those served by small systems with high compliance costs—EPA’s National Drinking Water Advisory Council recommended in 2003 and reiterated in 2009 that a federal water bill
assistance program be adopted. Though NDWAC’s recommendation has surfaced in various pieces of federal legislation, a federal water bill assistance program has not been enacted.

Yet the COVID-19 crisis has resulted in a renewed focus on creating a federal water bill assistance program, given the public health imperative to maintain water and wastewater services, including two notable legislative efforts:

**H.R. 4832/S. 2687, the Low-Income Water Customer Assistance Programs Act:** Sponsored in the House by Reps. Marcia Fudge (D-OH) and John Katko (R-NY) and in the Senate by Sens. Ben Cardin (D-MD) and Roger Wicker (R-MS), this legislation would establish a pilot program to award grants to at least 32 drinking water system operators and 32 wastewater system operators to develop and implement programs that help low-income households afford services. Fudge introduced related legislation in the 114th Congress and 115th Congress. Cardin and Wicker bill was also introduced in 115th Congress. In the proposed legislation, grants could be used to pilot a range of water and wastewater system CAPs—including direct financial assistance, lifeline rates, bill discounts, household water conservation measures, and percentage-of-income payment plans. Importantly, grant applicants must provide information on their financial sustainability—for example, with an asset management plan, rate analyses, or fiscal management plan—to be eligible for the program.

**H.R. 6800, the HEROES Act:** Under the HEROES Act, Congress would appropriate $1.5 billion to help low-income individuals pay for water services and end water shutoffs. This new program would disperse formula grants to states and tribes, which would then directly pay water systems or treatment works on behalf of households. The bill requires water systems that receive HEROES funds to end shutoffs, safely restore service to customers who had been shut off, and forgive penalties. Senate Democrats introduced a companion bill, S. 4362, that mirrors the provisions in the House proposal.

**LIHEAP LESSONS LEARNED**

Reflecting NDWAC’s recommendation, many water stakeholders and policymakers have coalesced around establishing a low-income water assistance program modeled on LIHEAP—a federal grant program providing cooling and heating bill assistance. Since the onset of the COVID-19 pandemic, with the financial hardships that followed and the public health imperative to maintain drinking water and wastewater services, this idea of creating a LIHEAP-type program for water bills and related proposals have attracted renewed interest. As such, lessons learned
in administering LIHEAP over the program’s nearly 40-year history should be instructive to policymakers interested in advancing a water-related effort.

Administered by the Department of Health and Human Services since 1981, LIHEAP authorizes two types of funding. The first and most well-known is a block grant program with funding allocated annually to states, tribes, and territories to operate home energy assistance programs. The second is emergency contingency funding that can be flexibly allocated to one or more states in cases of emergency, as defined by the LIHEAP statute. The program was authorized out of concern for families unable to pay their energy bills and facing utility service disconnection. In freezing temperatures in the winter or excessive heat in the summer, utility service shut-offs threaten public health, justifying federal subsidies for the lowest income families to pay their bills. Publicly regulated, investor-owned utilities also dominate the energy sector, in contrast to the water sector, encouraging lawmakers to subsidize the most unprofitable households to promote more equitable access.

The program has garnered broad, bipartisan support for years—with the backing of a diverse coalition in Congress of Members representing both cold- and warm-climate states. While previous administrations have frequently included cuts to LIHEAP in proposed budgets to Congress, the program has maintained steady appropriations due to this broad and bipartisan base of support. In fiscal year 2020, Congress appropriated $3.74 billion for LIHEAP block grants and an additional $900 million in the CARES Act.

Each year, the federal government distributes the LIHEAP funds to states and territories that typically suballocate funds to local community action agencies or counties, which then work directly with individual LIHEAP recipients. To receive funding, states must agree to comply with the 16 assurances mandated by the LIHEAP statute, including submitting an annual plan to HHS detailing their programs’ operations, eligibility requirements, outreach efforts, types of assistance offered, and estimates on the percentage of funds used by each program component it operates.

Ultimately, funds can be used to provide payment assistance for household heating and cooling expenses, weatherization assistance, crisis assistance, and services such as counseling. Historically, 50% of LIHEAP allocations are used to help cover home heating costs. Households are eligible for LIHEAP if they sit below 150% of the federal poverty income guidelines or, if greater, 60% of the state median income. Grantees can decide the specific means of payment assistance. For example, some states cover the leftover expenses after a household pays a certain percentage of their income towards energy costs. States must prioritize assistance for the lowest income households and reach out to vulnerable populations—such as households with older
adults, children, and people with disabilities.

Recipients apply for the state program through their local government office or a contracted agency. Once an application is reviewed and accepted, the local LIHEAP administrator manages the flow of payments. Usually a utility company will directly bill the local program administrator for the benefit, leaving the recipient to pay off the remaining amount of their bill. However, in cases where heating costs are included in a recipient’s rent, the recipient can receive direct benefit payments.

Annual federal grants are provided to all 50 states, the District of Columbia, five U.S. territories, and 153 tribes or tribal organizations. LIHEAP is a well-established and understood federal program, providing many lessons on utility assistance from which policymakers can draw. To guide the creation of a comparable water and wastewater assistance initiative, we recommend that policymakers recognize five key LIHEAP lessons learned:

1. **Avoid duplication.** Having multiple programs with similar missions and aims can confuse and impede households looking for help and increase the collective administrative burden on capacity-strained public agencies. For example, Michigan provides energy payment assistance through the Michigan Energy Assistance Program and State Emergency Relief. Consequently, to get the help they need, would-be participants must submit multiple applications and communicate with different agencies in addition to their utility service provider. Policymakers should be mindful of how federal water bill subsidies would dovetail with other federal low-income assistance and welfare programs—including LIHEAP, SNAP, TANF, housing assistance, SSI, and Medicaid—in addition to existing state-, local-, and utility-run bill assistance programs. Policymakers should consider using these existing programs’ infrastructure, including eligibility verification and assistance disbursement, to maximize access and reduce a new water assistance program’s administrative cost.

2. **Target those with the greatest needs.** LIHEAP assistance must target those with a high “energy burden,” defined as energy costs divided by household income and also those with the most “energy needs,” including households with children, older adults, and individuals with disabilities. The use of these two metrics allows the program to prioritize those who are especially vulnerable to energy shortages, particularly from a public health perspective. The LIHEAP statute does not impose an asset test in establishing eligibility, but states may elect to do so to ensure the most drastically burdened and highest health risk populations are prioritized and served. States often exclude federal assistance programs such as housing subsidies, nutrition programs, or Social Security disability benefits from what is considered income to
target highly vulnerable households. While similar targeting efforts should be included in any water bill assistance program, effective targeting will be a challenge—as it has been for LIHEAP. For example, only 6.8 million out of 35 million households eligible for LIHEAP received assistance in 2019. And historically, LIHEAP has served about 20% of eligible households. Despite this imbalance between resources available and outstanding need, LIHEAP administrators have consistently indicated that outreach and targeting efforts have proven insufficient due to cultural and language barriers, challenges communicating across generations, social barriers to seeking help, geographic limitations, and budget constraints. These challenges will likely be amplified when implementing a water bill assistance program, given our country’s extraordinarily fragmented delivery of water services.

3. **Balance flexibility and performance.** The LIHEAP statute leaves considerable room for grantees to determine how funds will be used. Since local environmental factors can greatly impact the energy needs of a community, this flexibility allows grantees to address unique local energy challenges accurately. Some states, like Kentucky, dedicate more funding to crisis assistance, while others, like Oklahoma, focus primarily on cooling costs. This flexibility also allows grantees to choose the best administrative avenues to reach participants. However, despite the many benefits of LIHEAP’s flexibility, funding decisions can be driven by politics instead of quantitative forecasts of need or performance-based measures that advance concrete policy goals. Plans to evaluate the program’s effectiveness at achieving long-term outcomes, using evidence and data, should be embedded in any equivalent program for water bill assistance.

4. **Recognize key differences between the energy and water sectors.** The energy sector is often seen as relatively comparable to the water sector, in that both provide vital services that may merit subsidies for low-income households to preserve and promote equitable access. However, utilities in these sectors starkly differ in terms of ownership and governance, fragmentation, size, and regulatory environment. In particular, about 80% of water systems are government-run, whereas about 70% of electric utilities are investor-owned and privately operated. There are almost 50,000 community water systems in the United States, an order of magnitude more than the number of electric and gas utilities combined. The distribution of populations served by water systems is also highly skewed, with a majority of water systems serving fewer than 500 households. Any effort to create a water bill assistance program modeled on LIHEAP must be cognizant of the political and administrative challenges wholly unique to water and wastewater systems.
5. Understand federal fiscal constraints. According to the Congressional Budget Office, the federal budget deficit was $2.8 trillion just in the first 10 months of FY2020, tripling from the same time period the previous year, in response to the COVID-19 crisis. This brings the gross federal debt to over $26 trillion. While it may be wise to deficit-spend on necessary COVID-19 response priorities, building political consensus, finding the money to create a new low-income assistance program, and sustaining it into the future will be exceedingly difficult in this strained budget environment. The fiscal outlook makes finding ways to effectively target and administer such a program even more critical to building bipartisan support.

**OPTIONS FOR PROVIDING FEDERAL WATER BILL ASSISTANCE**

As Members of Congress consider advancing legislative proposals to provide water bill assistance, with the lessons learned from LIHEAP outlined above, there are four primary options they can pursue:

1) **Create a LIHEAP for Water**

In the 1994 reauthorization of LIHEAP, policymakers emphasized the defining purpose of the program is to “provide assistance to low-income households in meeting their home energy costs, particularly those with the lowest incomes that pay a high proportion of household income for home energy.” This reauthorization was the first time Congress had defined “energy burden” versus “energy need” and began requiring states to develop targeted approaches based on income, energy cost, and economic burden in order to receive federal funding. A LIHEAP for Water program could serve as similar catalyst, incentivizing and then supporting efforts to address affordability and assistance based on household burden and utility financial health.

For utilities to be best positioned to support low-income households and ensure they can meet their operation costs and services, the structure of a LIHEAP for Water program must be flexible and appropriately targeted. The potential model would work best if administered by the EPA’s Office of Water where all aspects of water protection, regulation, research, and funding support are overseen. The program would develop statutory procedures, like LIHEAP’s assurances, states must abide by in order to receive funding. States would develop and submit program operation plans each year that encompass their methods for public participation in the state’s plan development, coordination with other relevant low-income
programs, fiscal monitoring procedures, and routine evaluations to ensure effectiveness and efficiency. If the plans are approved by EPA, funding should go to state water agencies that distribute the funding to utilities, non-profits, or local water boards deemed the most equipped for targeting and delivering assistance to vulnerable households.

Like LIHEAP, a LIHEAP for Water program should encompass two types of funding: annual block grants and emergency contingency grants. To determine annual block grant funding, policymakers would need to create a formula that accounts for the total amount of eligible low-income households in each state. In addition, the formula could include but not be limited to: how much low-income households spend on water utilities in each state, variations in operation costs and needs of utilities, types of water delivery systems, total water consumption between low-income and non-low-income households for each state, and other geographic variations.

For many utilities, creating CAPs and reevaluating rate structures have been met with challenges due to various legal limitations, financial constraints, and politics. The most common limitation for the program creation and design of CAPs relates to state prohibitions on charging variable rates to different segments of their populations or limits on “cross subsidization,” wherein some customers pay more to help lower rates for lower-income customers. A LIHEAP for Water program could ease these challenges in some jurisdictions by providing some base-level funding for customer assistance without conflicting with state restrictions.

**2) Turn LIHEAP Into a Utility Assistance Program**

Another option is to pilot delivering water assistance through LIHEAP itself, which would help to overcome any political concerns over creating and funding a new program. Instead of creating a separate program that specifically targets water utilities, this option would merge the original LIHEAP program with additional utility assistance measures for water. New York City’s Home Water Assistance Program is one example of a water ratepayer assistance program that has made use of existing LIHEAP processes. Eligible homeowners who have already received LIHEAP benefits automatically receive a credit of $115 on their Department of Environmental Protection water and sewer account.

An overarching utility assistance program could help streamline assistance and ensure all households, regardless of their utility needs, get the help they need most. Procedurally, this might look like a single form an applicant submits to the local LIHEAP administrator. Their application would be reviewed and eligibilities checked. The program administrator could then flexibly provide the most effective policy intervention. One advantage of this option is that overlapping needs for water and energy can be compared concurrently, reducing the risk of offering too much or too little assistance and minimizing wasteful spending. A more general low-income utility
assistance program could also eventually cover other essential services, such as broadband internet.

Adding water rate assistance into LIHEAP comes with its own set of challenges. As noted above, there are significantly more water and wastewater utilities than energy utilities. As a result, the current LIHEAP process, with local agencies paying utility providers directly, may not translate well to the water sector. Local LIHEAP administrators will face a higher administrative burden, and the 27,000 small water systems serving under 500 people may not have the capacity to manage year-to-year contracts with these administrators. Further, in many states, heating and cooling assistance applications are reviewed separately at different points throughout the program year. Water payment assistance, through current customer assistance programs, is usually approved on an annual basis. Therefore, the timing of grant payments will have to be reconsidered.

A combined energy and water utility payment assistance program would require thoughtful coordination between HHS and EPA. States must also be flexible and take extra care in contracting with local providers to ensure all eligible households receive assistance. Nonetheless, this option allows legislators to avoid many of the political and administrative challenges of creating an entirely new ratepayer assistance program and therefore, should be carefully considered.

3) Establish a Water Loss Prevention Program

Water loss, whether a result of physical deterioration or metering inaccuracies, threatens the long-term sustainability, affordability, and safety of our drinking water infrastructure. EPA has found that water systems lose 16% of their treated water on average throughout the transmission and distribution process—directly translating into lost revenue.17 Water loss prevention programs allow water suppliers to identify and resolve key areas of inefficiency within their network before those issues turn into more expensive capital investments and needless capacity expansions.

Water loss prevention programs implemented on a state and local scale are typically carried out in a three-step process. First, the water system administrator performs a water audit by collecting and analyzing data on water usage and losses. Interventions are then taken to identify the key sources of water loss and make the necessary pipe repairs and meter replacements. Lastly, in the evaluation phase, goals are assessed and compared to past reviews using performance indicators. Although many states have individual laws mandating water audits for public water systems, there are currently no federal requirements for public water systems to audit and report water losses. A single federal program could streamline the water auditing process and provide a centralized location for states, tribes, and territories to access water loss prevention resources.
EPA manages the Drinking Water State Revolving Fund and Clean Water State Revolving Fund, which both provide low-interest loans for water infrastructure projects. Many cities have used these programs to finance the installation of digital meter reading systems, leak detection equipment, and other water loss prevention measures. While these provide a strong financing framework, EPA should also offer guidelines for water loss prevention activities. In the long run, this will protect customers from rising rates and water providers from costly repairs.

For individual households, water loss prevention means detecting and fixing leaks and installing water efficient fixtures and appliances. At this level, a water loss prevention program could look like the Department of Energy’s Weatherization Assistance Program, or WAP. Low income households with significant water usage could get direct assistance to install water efficient fixtures and audit their homes for any leaks. For example, under Detroit’s Water Residential Assistance Program, residents with water usage exceeding 20% of average household consumption can receive a home water audit and up to $1,000 for conservation measures. A federal grant program to support water conservation through home improvements could easily be offered alongside WAP.

Currently, LIHEAP grantees also have the flexibility to use up to 15% of their LIHEAP funds—and up to 25% under certain circumstances—for state weatherization programs that provide funds to improve home energy efficiency, typically by upgrading insulation and heating and cooling equipment.

A national water loss prevention program that addresses both utility-level and household needs will help water systems provide their services at an affordable cost to all Americans. Without preemptive repairs and water audits, water providers will struggle to meet surging demand, and water rates will continue to rise.

4) Establish a Task Force to Study Water Access Gaps and Affordability

To assist utilities in developing affordable rates and providing affordable services, EPA could create federal affordability metrics and guidelines that address a broader range of household and community economic burdens. As even EPA noted in its recently proposed Financial Capacity Assessment Guidance, solely relying on median household income is not a sufficient approach to measure affordability, particularly for low-income households.

The last time the federal government collected data on water affordability was in the 1980s. Water access questions were on most census surveys but abruptly stopped as the federal government began to shift water infrastructure responsibility to states and localities. As of 2020, there is no
federal entity that consistently collects data on all aspects of water access and poverty. The United States is the only developed country without a federal regulatory system that monitors rates and utility performance.

The lack of comprehensive data has always been a problem, but it is especially problematic now as most researchers and policymakers rely on anecdotal or outdated data to grasp how state, localities, and utilities are responding to the pandemic. Recognizing how crucial it is right now for federal dollars to be allocated for immediate relief and recovery efforts, policymakers could create a task force that conducts a comprehensive study on access to water and various measurements of water affordability in communities across the country.

In FY2016, the Senate Appropriations Committee directed EPA to produce a report on water affordability. EPA contracted the National Academy of Public Administration to conduct an independent evaluation on the agency’s methods of measuring water affordability. In October 2017, the Academy’s report included many recommendations for how EPA could update its policies and guidance. Specifically, five foundational recommendations were made with the first being the need to improve the 1997 Residential Indicator component. Water industry stakeholders and advocates continue to support improving the Residential Indicator by:

1. Including all water costs—all drinking water and clean water costs as well as planned water infrastructure investments and any deferred costs of system operations and maintenance in the burden assessment

2. Focusing on the incomes of low-income users most vulnerable to rate increases, rather than median household income

3. Identifying the size of the vulnerable users relative to the utility’s total ratepayer base

4. Avoiding arbitrary normative thresholds to determine relative burdens

A task force could oversee a pilot study that implements various methods of measurement which could then lead to creating affordability benchmarks and gathering necessary data. Without comprehensive data, policymakers will continue to overlook vulnerable households and lack the perspective needed to develop effective solutions. Some issues will be easier to tackle, such as having the U.S. Census Bureau reinstate survey questions on water access compared to addressing affordable and equitable access to water for the lowest-income households. With the right amount of support, a task force could lead to new discoveries in developing strategies and solutions that benefit the most vulnerable communities and utilities.
CONCLUSION

The necessary long-term policy solutions for unaffordability are making infrastructure investments and establishing better metrics to develop affordable rates. The long-standing water sector challenges have become more difficult as states and localities face plummeting tax revenues and widening budget gaps; these systems are fundamentally ill-equipped to maintain operations and address affordability concerns. These challenges and hardships for utilities and low-income households are far from new but have been amplified by COVID-19. While there is little political consensus as to the solution, there are a wide range of potential solutions for policymakers to consider. Each of the options, including a LIHEAP for Water program, have benefits and challenges. Policymakers should now start having thoughtful, bipartisan discussions on how to address a need that is only going to grow as water systems continue to age and costs continue to rise.
Endnotes

1 Stratton, Fuchs, Chen, Dunham, and Williams, “Water and Wastewater Rate Hikes Outpace CPI,” May 2016. Available at: https://www.osti.gov/servlets/purl/1377851.


3 Ibid.


5 Ibid.

6 Ibid.


10 Edison Electric Institute, “LIHEAP Funding.” Available at: https://www.eei.org/issuesandpolicy/Pages/liheap.aspx.


13 Ibid.

14 Ibid.


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