

ONE
WATER
**BIG
IDEA**

5.

Redefine affordability for the
21st century.

This is one in a series of policy briefs that comprise the One Water for America Policy Framework.

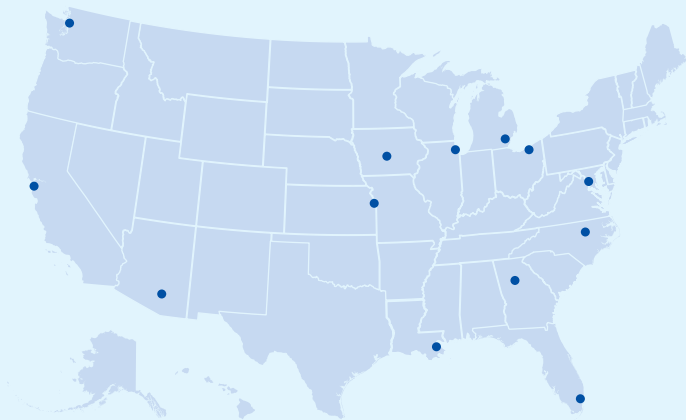
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America's water supplies and services are at risk. Climate change, growing income disparities, and the threats posed by our aging water infrastructure call into question the continued availability of safe water supplies and reliable, affordable water service. In light of these challenges, we must come together and create a new era of water management in America—one that secures economic, environmental, and community wellbeing.

To that end, the US Water Alliance worked with more than 40 partner organizations to host 15 One Water for America Listening Sessions across the country. These discussions engaged more than 500 leaders, including water utility managers, public officials, business executives, farmers, environmental and watershed advocates, community leaders, philanthropic organizations, planners, and researchers.



One Water for America
Listening Sessions



What we heard from these stakeholders was truly inspiring. Across the nation, people from all walks of life are collaborating and innovating to advance sustainable water management solutions. Now is the time to spread and scale up these successes to benefit more communities across the country. In these seven policy briefs, we have compiled the strongest, most consistent themes from the One Water for America Listening Sessions into **seven big ideas for the sustainable management of water in the United States**:

- 1. Advance regional collaboration on water management**
- 2. Accelerate agriculture-utility partnerships to improve water quality**
- 3. Sustain adequate funding for water infrastructure**
- 4. Blend public and private expertise and investment to address water infrastructure needs**
- 5. Redefine affordability for the 21st century**
- 6. Reduce lead risks, and embrace the mission of protecting public health**
- 7. Accelerate technology adoption to build efficiency and improve water service**

Each of these policy briefs digs further into one of these big ideas—exploring the key issues behind it; presenting policy solutions that are working at the local, regional, state, and national levels; and providing real world examples of how these solutions *are* being implemented and *do* produce positive results.

The One Water for America Policy Framework is a clarion call to action to accelerate solutions for the water management problems of our age. In doing so, we secure a brighter future for all.

Redefine affordability for the 21st century.

Context

In every one of our Listening Sessions, water affordability was cited as a growing concern. Affordability problems take different forms from place to place. But in every location, the heart of the issue is this: how to ensure that everyone has access to affordable water and sewer service, while also ensuring that water utilities have adequate revenues to cover rising operating costs and meet the need to invest in aging infrastructure.

Water service generally is affordable for most Americans, but rates do impose burdens on lower-income people: in some communities, the lowest 20 percent of earners pay from 4 to 19 percent of their monthly household income for water and sanitation services.¹ Utilities in lower-income cities, rural areas, and jurisdictions with declining populations struggle to keep water affordable while funding infrastructure needs to protect public health and comply with regulations. Yet affordability is not just a challenge in poor cities; in virtually every US community, there are some vulnerable populations—including elderly, disabled, and low-income residents—who struggle to pay their water bills.

In this policy brief we review key issues influencing water affordability, followed by recommended policy solutions and case studies at the local, regional, state, and national levels.

Key Issue:

Safe and affordable water service for vulnerable populations

In thinking about cost and affordability, it is useful to revisit the definition of water service. We tend to think of it as delivering a quantity of drinking water through a meter and collecting it for treatment. But drinking water and wastewater management are basic human needs, and providing these services is fundamentally about protecting public health. Still, utilities must operate in a way that generates revenues to provide this essential water service. When billings go unpaid, a utility must enforce payment or find another way to make up the difference. Shutting off water service is a commonly used mechanism for enforcing payment, and some jurisdictions can also place liens on ratepayers' houses for failure to pay. But shutoffs and liens have detrimental effects on people who are already in vulnerable positions, and they do little to address the systemic issues that often lead to non-payment.

If we consider the protection of public health as essential to sustainable water service, as a nation we can work together to ensure the availability of affordable water and wastewater service, and to reduce the use of shutoffs as an enforcement mechanism. Aside from protecting public health, there is a strong business case for affordability. Comprehensive, community-specific affordability solutions can help customers get back on track with regular bill payment, which can greatly increase collection rates and improve utilities' revenue streams.

Key Issue:

The need for comprehensive, not piecemeal, approaches

The most effective affordability programs are multifaceted: they are woven into a utility's rate design and financial strategies, they include specific measures for bill payment assistance, and they include measures for enhancing water conservation and repairing leaks at the household level to reduce individual customers' water use and billings. Optimally, utilities partner with other social service agencies as well, helping to ensure that wrap-around services are available to residents who need financial support in multiple areas.

Affordability can be built into the water rate-setting process. While "inclinining block" rate structures initially were developed to encourage water conservation, they can also help with affordability. For example, a base level of water use can be priced at a very low rate that is affordable for all, and then higher rates per gallon can be charged for usage over that amount. Income-based, or income-qualified, rates are another option. Each approach has trade-offs; for example, income-based rate programs have high administrative requirements and attendant costs, and some states have legal barriers to implementing inclinining block or income-based rates.²

Key Issue:

Accurate data on community-specific affordability needs

Affordability programs should be tailored to each community's specific circumstances and the characteristics of their lower-income populations. Key considerations may include the distribution of poverty, home ownership rates, age distribution of housing stock, and the community's existing social service network. Yet the lack of accurate data is a major challenge to the widespread use and effectiveness of affordability programs. Many communities do not have a detailed understanding of who is served by existing assistance or affordability programs, how many people in need are not covered, and how affordability is measured. In some cases, the communities affected by affordability issues are not always those one might expect. A clearer understanding of the demographics would help communities target assistance to those most in need.

Key Issue:

The costs of compliance

Complying with the Clean Water Act can mean that a community must make major infrastructure investments to upgrade or enhance their existing systems—for example, expanding collection systems and wastewater treatment capacity to deal with sewer overflows on a specified timeframe. The Environmental Protection Agency (EPA) uses a measure of a community's financial capability to assess what a community can afford to invest in regulatory compliance. This measure affects the timeline for implementing compliance solutions. Since compliance costs can run into hundreds of millions or even billions of dollars, they can result in substantial rate increases that worsen affordability problems. The method EPA currently uses to assess a community's financial capability is based on a snapshot of financial conditions, but this approach has been criticized for obscuring nuances about affected populations, economic trends, and appropriate measures of burden. Using an incomplete measure of financial capability can result in communities being over-burdened with compliance costs, particularly when those costs are viewed in the context of other high-priority needs (including other environmental compliance requirements).

Policy Solutions

Local Level	Regional & State Level	National Level
<ul style="list-style-type: none">• Implement a comprehensive approach to affordability• Negotiate affordable compliance solutions, and advocate for policy change	<ul style="list-style-type: none">• Implement policy solutions to support affordability at the community level	<ul style="list-style-type: none">• Establish a federal low-income assistance program for water and wastewater• Change Clean Water Act enforcement to make compliance less burdensome• Fund EPA's WaterSense® program

Solutions: Local Level

Solution:

Implement a comprehensive approach to affordability

We often think of affordability programs in terms of bill payment assistance. While assistance is an important component, the most effective affordability programs go further. They are woven into a utility's rate structure, through strategies such as inclining block or income-based rates. They are reflected in utilities' financial plans, through measures that control borrowing costs and spread the cost of improvements across generations. And, they are addressed through programs that improve in-home conservation and repair water leaks for low-income residents. In designing affordability approaches, utilities can partner with local social service agencies and community-based organizations to better understand the nature, extent, and locations of a community's affordability problems. Community groups can also be helpful with outreach and education for vulnerable communities like the disabled, the elderly, and non-native speakers. Many utilities offer information and customer service in multiple languages to better serve local populations. In addition, by collaborating among city departments (and utility organizations), communities can make it easier for residents to enroll in assistance programs by aligning eligibility criteria, combining application processes, and even consolidating multiple programs into one. Finally, a long-term commitment to operational efficiency and conservation can help utilities improve affordability by lowering their costs and mitigating rate increases.

In Action:

• Detroit Water and Sewerage Department (DWSD).

In the wake of increasing attention to water shutoffs and community calls for an income-based rate program that likely would be subject to challenge, new leadership at DWSD convened local and national experts in a blue-ribbon panel to identify water affordability solutions that would work in Michigan's legal framework. Using the panel's recommendations, DWSD began addressing affordability challenges through a new assistance program, designed in partnership with a local social service organization. The program provides each eligible customer with a monthly bill assistance of \$25. Arrearages are frozen for 12 months (with the possibility of renewal for another 12 months), and customers who successfully make their reduced monthly payments for one year are rewarded with an additional credit toward arrears. The program also offers water conservation audits and plumbing repairs for households with higher-than-average water usage. In addition to these affordability measures, DWSD enhanced accessibility and outreach by redesigning its business practices around customers. The utility redesigned its bills so customers can more easily understand their water use and bill calculation; entered into a public-private partnership to place 32 payment kiosks in locations across the city, making it easier to pay bills; and revamped its self-service portal to be mobile and user-friendly. The utility has seen improvements as a result of these changes—including a decline in water shutoffs and an increase in the bill collection rate from 77 percent to 91 percent, with each percentage point representing a \$4 million increase in annual revenues.

- **Philadelphia Water Department.** Philadelphia recently launched an innovative, income-based water rate model to enhance water affordability. Under the Tiered Assistance Program, residents receive a consistent monthly water bill based on their household income, rather than their water usage. Monthly payments range from two to four percent of qualifying residents' household income. The program is available to residents whose household income falls below 150 percent of the federal poverty level and to residents with higher incomes who are experiencing hardships (such as job loss or serious illness). Across the city, nearly 60,000 households are expected to be eligible for the Tiered Assistance Program. To enroll, customers must complete an application and provide proof of household income and documentation of hardships that may qualify them for assistance. Customers with unusually high water use (which might indicate a leaky pipe or running toilet) will be required to meet with a conservation specialist. Once enrolled, customers will have any existing debt suspended, and related penalties and interest will be forgiven after two years of on-time payments. The cost of the program is estimated at \$18 million per year. While this unprecedented program is still new, it is expected to result in affordability relief, fewer delinquent payments, and more consistent year-over-year funding for water utility operations.

- **Seattle Public Utilities.** Seattle Public Utilities collaborated with Seattle City Light to offer a consolidated Utility Discount Program to income-qualified residential households. The program offers a 60 percent discount on electricity bills and a 50 percent discount on water, sewer, drainage, and garbage collection charges. To boost participation in the discount program, the city began auto-enrolling all income-eligible households of the Seattle Housing Authority in the program and giving them an opportunity to opt out if they prefer.

Solution:

Negotiate affordable compliance solutions, and advocate for policy change

Affordability considerations can sometimes be used to better manage or reduce compliance burdens. Utilities should explore strategies to ensure a reasonable burden that is responsive to community realities. Communities also can advocate for regulatory or policy change to remove barriers to affordability approaches. If the right affordability approach for a community is prevented by state or federal law or policy, community representatives can advocate with policymakers for new or revised laws to remove those barriers.

In Action:

- **Atlanta and Honolulu.** The cities of Atlanta and Honolulu worked with EPA to negotiate longer timeframes for their wastewater consent decree compliance programs, spreading the costs over more years to reduce the short-term burden on ratepayers. In Atlanta, negotiations extended a 14-year sanitary sewer overflow compliance schedule to a total of 27 years, and Honolulu's negotiated wastewater compliance schedule also exceeds 25 years.

Solutions: Regional & State Level

Solution:

Implement policy solutions to support affordability at the community level

States can assist communities with water affordability through a variety of policy solutions. To begin, states can offer matching funds to supplement local water affordability programs, or establish statewide affordability programs to support individual communities. States also can work to recognize and remove legal barriers to affordability solutions—for example, in some states there are legal prohibitions on rate structures that cross-subsidize certain classes of customers, which limits the rate structure solutions that are available to communities. Finally, as recommended for the national level, states should define acceptable approaches for assessing community affordability that rely on more comprehensive and accurate criteria than EPA’s financial capability guidance.

In Action:

- **California State Water Resources Control Board.**

As directed by the California Low-Income Water Rate Assistance Act of 2015, the California water board is developing a plan for a statewide Low-Income Water Rate Assistance (LIRA) Program. Under this plan, households with incomes under 200 percent of the federal poverty line would be eligible for assistance. Methods for providing funding assistance could include bill credits, tax credits, or use of existing assistance programs like the Supplemental Nutrition Assistance Program (SNAP). The California water board is submitting its recommendations for establishing the LIRA program to the state legislature in 2018. These recommendations build on a suite of actions already undertaken to help disadvantaged communities with their water needs, including technical assistance, SRF loan forgiveness, state bond fund capital grants, and consolidation with larger utilities as part of the state’s implementation of its 2012 Human Right to Water legislation.³

- **North Carolina Department of Environmental Quality.** This agency sought ways to help target its limited grant funds to some of the most distressed communities in the state. Their approach is intended to better distinguish between utilities that can least afford a critical infrastructure project, and those that can afford to incur some amount of debt or obligate some amount of funding toward it. The agency developed an approach to prioritize communities that: 1) have smaller populations; 2) are comparatively worse than state benchmarks for five key economic indicators: population change, poverty rate, median household income (MHI), unemployment, and property valuation per capita; 3) have higher current monthly utility rates (independent of MHI); and 4) have higher debt service per connection. This restructured approach stretches state funding resources to benefit more communities by combining loans and grants based on affordability while acknowledging that full grant funding of projects is still the most appropriate approach when rates are the most extreme in the state.

Solutions: National Level

- **Establish a federal low-income assistance program for water and wastewater.** While there is much utilities can do to improve the affordability of water service, they will be challenged to meet the needs of the most vulnerable residents as costs continue to rise. At the national level, the US provides low-income citizens assistance with the costs of food, electricity, and shelter through federal programs like SNAP, the Low Income Home Energy Assistance Program (LIHEAP), and housing initiatives. As water utility service costs continue to rise, these same protections should be extended to water. At the national level, we should establish a federal water assistance program that could be administered by EPA, or in conjunction with LIHEAP by the Department of Health and Human Services.⁴ Such a program should support lower-income households in urban and suburban areas to pay their utilities bill and provide assistance for rural areas where households are responsible for building their own septic systems. This program should also incorporate water efficiency upgrades, similar to LIHEAP’s weatherization component.

- **Change Clean Water Act enforcement to make compliance less burdensome.** First, the EPA should change its methodology for assessing a community's financial capability—incorporating more socioeconomic factors like household income by quintile—so that it does not place untenable compliance burdens on already stressed communities. Second, EPA should provide communities greater flexibility to prioritize their investments in Clean Water Act compliance and to balance the cost of compliance with other water-related laws and regulations, such as the Safe Drinking Water Act, that affect the same ratepayer base. EPA should also continue supporting green infrastructure approaches for managing compliance challenges.⁵
- **Fund EPA's WaterSense® program.** This voluntary partnership program is designed to make it easier for people to save water by choosing water-efficient products and services. Products that meet WaterSense specifications must be independently tested and/or certified to carry the WaterSense label and must achieve a 20 percent reduction in water use over the existing federal standard. However, this program still lacks the federal funding and authorization to fully achieve its potential. Since this program is effective for new or renovated housing stock, different approaches are needed for partnering with low-income residents (including renters and property owners) who need assistance assessing and upgrading in-home plumbing systems.

Conclusion

All Americans should have access to safe, reliable, and affordable water and sewer service. Across the nation, as infrastructure spending needs increase and income disparity grows ever wider, the challenge of water affordability comes more sharply into focus. While at times affordability may seem to be an intractable problem, the fact is that we can solve it—and we must. As the examples in this policy brief illustrate, solutions exist to balance rising infrastructure needs with the imperative of providing basic service to all citizens, including those most vulnerable. While solving water affordability is the right thing to do from a social perspective, it also makes economic sense. Communities that take care of their water affordability problems will have more stable, consistent funding for their water needs now and in the future.

Endnotes

- 1 Patricia A. Jones and Amber Moulton, “The Invisible Crisis: Water Unaffordability in the United States” (Unitarian Universalist Service Committee, May 2016), 6
- 2 “Navigating Legal Pathways to Rate-Funded Customer Assistance Programs,” *University of North Carolina Environment Finance Center*, 2017, <https://efc.sog.unc.edu/project/navigating-legal-pathways-rate-funded-customer-assistance-programs>
- 3 “Assembly Bill No. 685: Chapter 524,” *State of California*, 2012, http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf
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Thank you to the One Water for America Collaborating Partners

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