

Affordability and Assistance Programs

Relatively few water or sewer utilities offer bill affordability or assistance programs to help households afford their monthly water bills. If adequately funded and thoughtfully designed, however, such programs can play a critical role enabling low-income households to pay their bills and stay connected to essential water service.

This module addresses affordability and assistance programs that directly reduce the size of the monthly water bill on an ongoing basis, typically through a discount or bill credit.

For purposes of this module, the term “affordability and assistance programs” refers only to programs that are targeted to a discrete subset of households, such as low-income households. Changes to underlying rates that affect the bills of *all* water users are discussed separately in the Equitable Rates module.

Other utility programs and policies may also be considered types of assistance but are covered elsewhere in this toolkit. Programs aimed at eliminating accumulated water debt are addressed in the Water Debt module, while water conservation and plumbing repair programs are addressed in the Water Efficiency and Plumbing Repair Assistance module. Additionally, “lifeline rates,” which are covered in the Equitable Water Rates module, can function similarly to a bill assistance program when they are offered only to low-income customers.¹ Although these topics are addressed separately in this toolkit, in practice they are closely interrelated. Affordability and assistance programs that directly reduce monthly bills are most effective when they are paired with debt relief, water efficiency and plumbing repair assistance, and equitable rate structures as part of a comprehensive approach to water affordability.

This module begins by highlighting a distinction that many utility affordability advocates draw between income-qualified “affordability programs” and “assistance programs.” Unlike traditional assistance programs, true water affordability programs cap participating households’ monthly bills at a level deemed to be affordable based on the individual household’s income.

Next, the module briefly describes the existing landscape of water affordability and assistance programs, which are relatively rare and often under-enrolled and underfunded. It then explores affordability and assistance programs

in detail, including key program design considerations and examples of existing programs. A checklist of best practices that apply to both types of programs is offered in Appendix A.

This module then explores the potential for state-level water affordability or assistance programs, as distinct from utility-level programs. There are currently no permanent state-level programs in operation. Therefore, this discussion draws on experience from the energy sector and also discusses state-level water programs that have been proposed or, in certain cases, that have been enacted in legislation but are not currently operational. A brief discussion of federal-level assistance is also included.

Finally, this module explores how to fund water affordability and assistance programs. Existing programs are rarely funded sufficiently to meet the needs of all eligible customers. We describe funding models that can be used at the local, state, and federal levels. The discussion includes a focus on how to overcome legal barriers to funding local programs.

SOLUTIONS AND TOOLS EXPLORED IN THIS MODULE:

- Distinguishing affordability programs from assistance programs
 - Using percentage-of-income payment plans (PIPPs) and traditional water assistance programs to help households struggling with their water bills through discounts or bill credits
 - Incorporating best practices to improve participation rates and make affordability and assistance programs more impactful and equitable
 - Using state and federal strategies to overcome barriers to local program implementation
 - Funding affordability and assistance programs at the local, state, and federal levels
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AFFORDABILITY PROGRAMS VERSUS ASSISTANCE PROGRAMS: KNOWING THE DIFFERENCE

The terms “affordability program” and “assistance program” are often used interchangeably. For many water advocates, however, they mean quite different things.

As noted in the Background module, this toolkit approaches water affordability mainly from the point of view of individual residential households—in particular, low-income households. From this perspective, an affordable water bill is one that the household can regularly and successfully pay on time without compromising its ability to meet other essential needs. In keeping with that definition, this module uses “affordability program” to refer to programs that limit each participating household’s water bill to a predetermined percentage of household income deemed to be affordable.

Among utility affordability advocates, such affordability programs are commonly known as percentage-of-income payment plans, or PIPPs. These plans can be designed in various ways, as discussed further below. Philadelphia and Baltimore are currently the only cities with PIPPs for water; more PIPPs exist in the energy sector. The Philadelphia and Baltimore programs are discussed at length in this module.

By contrast, more traditional assistance programs include a range of approaches, none of which is designed to achieve an affordable bill for each participating household. These include programs that offer a flat dollar-amount discount or a percentage discount on all or part of the water bill. Unlike with PIPPs, the size of the benefit in a traditional assistance program is determined without regard to how large the individual household’s remaining bill will be, and without regard to whether the household can afford that amount based on its income. As a result, households participating in ongoing assistance programs may or may not end up with a water bill they can afford, depending on the amount of assistance offered, the size of the bill, and the household’s monthly income. In practice, existing water assistance programs tend to offer far less support than would be necessary to make bills affordable for many, and perhaps most, participating households.

Because PIPPs directly consider a household’s ability to pay when determining the amount of the benefit, they have clear advantages over traditional assistance programs from an affordability perspective. However, there is no one-size-fits-all solution. A utility’s ability to successfully implement any particular program can be affected by many factors, such as the size of the utility; its financial and administrative capacity; its legal authority (and the capacity of its customer base) to fund a program with rate revenues; the availability of outside funding; political will and leadership; and the willingness of utility officials to try out new program designs and strategies.

Some sections of this module discuss ways to overcome barriers to implementing PIPPs—for example, through best practices in program design that can ease administrative challenges, state-level approaches to program administration, or alternative funding options that can help surmount financial barriers.

Advocates should also be aware that the terms “PIPP,” “affordability program,” and “assistance program” are sometimes used to describe programs that don’t match the definitions that this toolkit and many water advocates use. No matter what a program is called, understanding precisely how it works is important to assessing its potential benefits for affordability.

AFFORDABILITY AND ASSISTANCE PROGRAMS ARE RARE IN THE WATER SECTOR—AND OFTEN UNDER-ENROLLED AND UNDERFUNDED

True affordability programs—that is, PIPPs—are rare in the water sector. Only two water PIPPs exist anywhere in the United States, and both are relatively new. Philadelphia launched a PIPP in 2017 and Baltimore launched one in 2022. PIPPs have a longer history in the energy sector, dating back at least to 1983.²

Although some water utilities offer assistance programs, most still do not. A nationwide survey of 745 large and medium-size water and wastewater utilities, in 2016, found that under 30 percent offered any kind of assistance program.³ Moreover, only about half of those programs

Affordability programs limit household bills to a pre-determined percentage of household income.

Assistance programs provide a set amount of assistance regardless of the resulting bill size.

were designed to provide ongoing bill reductions.⁴ It is very likely that, among small water and wastewater utilities, assistance programs are even less common. Apart from utility-level programs, 49 states currently administer a temporary federal water assistance program, the Low Income Household Water Assistance Program (LIHWAP), which was established in 2021 as a COVID-19 relief measure.⁵

In the energy sector, low-income assistance programs have been available nationwide for at least 40 years via the federally funded Low Income Home Energy Assistance Program (LIHEAP). In most states, complementary state-funded or utility-funded energy assistance programs are also available.⁶

For those utilities that offer water affordability or assistance programs, enrollment is often a significant challenge. According to one estimate, most existing utility-level water assistance programs reach only around 10–15 percent of potentially eligible households.⁷ This is a major

concern since, by their nature, targeted affordability and assistance programs benefit only those households that successfully enroll.

One notable exception is in California, where at least some investor-owned water utility assistance programs have achieved enrollment rates of around 50–60 percent. This is due in part to state-mandated data sharing between investor-owned water and energy utilities regarding their low-income customers.⁸ However, even that participation rate falls far short of the state’s assistance program for investor-owned energy utilities, California Alternate Rates for Energy (CARE), which has a participation rate of over 90 percent of eligible households for most energy utility companies.⁹

Many existing assistance programs are also insufficiently funded to reach all households in need. We discuss this in the “Funding Affordability and Assistance Programs” section toward the end of this module.

Need assistance with your water and/or wastewater bill?

You may be eligible for the Low Income Household Water Assistance Program

What is LIHWAP?
The Low Income Household Water Assistance Program (LIHWAP) is available statewide and provides Maryland households with financial relief toward water and/or wastewater bills. Eligible households may receive up to \$2,000. LIHWAP funding is limited and applications will be accepted on a first come, first served basis.

Who is Eligible?
To be eligible for LIHWAP, an applicant must meet the following criteria:

- The applicant (or a member of the household) must be a U.S. citizen or qualified non-citizen.
- The applicant must be a Maryland resident who is responsible for a water and/or wastewater bill issued by a public water system or treatment works and must live at the property for which assistance is being provided.
- The applicant must submit a current water and/or wastewater bill showing accrued arrearages of at least \$100.
- The total household income (previous 30 days) may not exceed the gross income threshold which is 60% of the State Median Income.
- An applicant may be categorically eligible if they (or someone in their household) are receiving one of the following benefits at the time of application:
 - Low Income Household Energy Assistance (MEAP)
 - Supplemental Nutrition Assistance (SNAP)
 - Temporary Cash Assistance (TCA)
 - Temporary Disability Assistance (TDAP)
 - Supplemental Security Income (SSI)
 - Emergency Rental Assistance (ERAP)
 - Means Tested Veterans Benefits

Maximum Monthly Gross (before taxes) Income Standards for Households
(Effective July 1, 2021 to June 30, 2022 based on 60% of the State Median Income)

1	\$3,121 / mo
2	\$4,081 / mo
3	\$5,041 / mo
4	\$6,002 / mo
5	\$6,962 / mo
6	\$7,922 / mo
7	\$8,102 / mo
8	\$8,282 / mo

For each additional household member add: \$180 / mo

How Do I Apply?
You can apply for LIHWAP assistance safely and conveniently online using our consumer portal at mythink.maryland.gov. If you are unable to apply online, you may request an application be mailed to you through our service hotline at 1-800-332-6347 or by calling your local Department of Social Services or OHEP office. A printable paper application can be found at dhs.maryland.gov/office-of-home-energy-programs/low-income-household-water-assistance-program.

Questions?
You can contact us Monday through Friday, 8:30am to 5:00 pm by calling our customer service hotline at 1-800-332-6347 or by calling your local Department of Social Services or Office of Home Energy Programs Office.

Funding is Limited
Funding is limited and applications will be accepted on a first come, first served basis. In order for an applicant to receive LIHWAP assistance, the water/wastewater supplier has to agree to accept payment from the Department of Human Services on behalf of the customer.

DHS MARYLAND Water Assistance

© Maryland Department of Human Services

An informational flyer promoting the Maryland Department of Human Services’ Low Income Household Water Assistance Program (LIHWAP).

QUESTIONS TO CONSIDER:

As you develop an advocacy plan, the following questions may help you identify needs and opportunities concerning affordability and assistance programs:

- What programs, if any, are currently offered by your water provider to help low-income customers reduce their monthly water bills?
- If a local program exists:
 - Who administers the program?
 - What are the eligibility requirements, and how much is the monthly benefit? How does that compare to a typical monthly bill? Is the discounted bill affordable, even for a very low income household?
 - What is the process to apply? Where can consumers find the application? Is it easy to understand and complete?
 - How does the utility advertise the program to its customers?
 - Is the program funded through rates, donations, or some other source? Are there sufficient funds for all households that are eligible?
 - How well is the program working? Are there data available to demonstrate participation levels and the impact on affordability? For instance, has the program helped to reduce shutoffs or outstanding debt?
- What programs, protections, and/or funding do nearby water and energy utilities have to address utility bill affordability? Are there good models from other utilities, municipalities, or states that could be persuasive to the decision makers you need to win over to create a local program?
- What real or perceived legal barriers exist to creating an effective program in your area?
- Do you want to focus on creating or improving a utility-level program, a state-level program, or both?

DESIGNING AFFORDABILITY AND ASSISTANCE PROGRAMS

This section of the module explores the landscape of existing affordability and assistance programs, highlighting key considerations for advocates, utilities, and regulators interested in developing or improving local programs. First it explores the design of affordability programs and assistance programs, including examples of existing utility-level programs within the water sector. It then discusses best practice recommendations to improve the effectiveness and accessibility of both affordability and assistance programs. (A longer list of best practices is also provided in Appendix A.)

Designing affordability programs (percentage-of-income payment plans)

Water affordability programs (i.e., percentage-of-income payment plans or PIPPs) aim to ensure that participating households can pay their bills by capping the monthly bill at a predetermined percentage of the household's income deemed to be affordable.

PIPPs have been used for years in the electric and gas sectors.¹⁰ They are relatively new in the water context. However, the idea of using PIPPs to ensure water affordability has been around for a long time. In the early aughts, water advocates in Detroit worked with utility affordability specialist Roger Colton to develop a proposal for a local water affordability program based on percentage of income.¹¹ Although that proposal was not implemented, it laid the groundwork for the water PIPPs that have been created elsewhere.¹²

In designing a PIPP, a key choice is what percentage of income the bills should be capped at. There is no consensus on what percentage constitutes an “affordable” amount to spend on water costs.¹³ The two existing examples of PIPPs in the water sector—Philadelphia’s Tiered Assistance Program and Baltimore’s Water4All program—use caps of 1–4 percent of household income.¹⁴ (See below for more on these programs.) What counts as an affordable bill will also depend on whether the bill also includes wastewater, stormwater, and any non-water fees.

The simplest approach is to use a single percentage-of-income cap for all households. Some programs in the energy sector use this method.¹⁵ However, the two existing PIPPs in the water sector both use a tiered approach to setting the maximum bill. In those programs, the cap varies according to household income, with lower-income households’ bills capped at a smaller percentage. This approach is more equitable than a single cap, since it recognizes that the lowest-income households have tighter budgets and can afford to spend a smaller percentage of their income on water.

There are also several possible ways to calculate the monthly bill. The most straightforward application of the PIPP concept is to simply multiply the household’s monthly income by the percentage-of-income cap and set the monthly bill at that amount. Philadelphia’s water affordability program takes this approach. Other programs, including Baltimore’s, use a different approach whereby a single fixed credit is calculated for the entire

year and apportioned across the household’s monthly bills. The differences between these methods, including the advantages and disadvantages of each approach, are discussed further in Appendix B.

PIPPs can and should incorporate the best practices in program design described below and in Appendix A. Coupling the PIPP with debt relief and conservation assistance is especially important to holistically addressing affordability needs.

PIPPs in practice: The Philadelphia and Baltimore programs

As mentioned above, there are currently two water PIPPs, both administered by municipal utilities: Philadelphia’s Tiered Assistance Program (TAP) and Baltimore’s Water4All program. These programs are described below, and a chart comparing them is provided in Appendix C.

Philadelphia’s Tiered Assistance Program

Following years of advocacy by legal advocates and community activists, the Philadelphia City Council unanimously passed an ordinance in 2015 requiring the city to establish an income-based water affordability program for water and wastewater services.¹⁶ The resulting Tiered Assistance Program was launched in 2017, at which time it marked the first percentage-of-income payment plan

for water services in the country.¹⁷ (Note: although TAP’s name includes the words “assistance program,” it is in fact a PIPP, which qualifies as an affordability program by the definition used in this module.)

TAP aims to ensure a stable and affordable bill for qualifying households through a tiered, income-based billing structure.¹⁸ Customers who meet certain household income thresholds may apply to receive a water, wastewater, and stormwater bill that is capped at a percentage of their monthly household income, with a minimum bill of \$12. In addition, customers whose household income exceeds the maximum threshold may participate in the program if they experience “special hardship,” such as a loss of employment or serious illness.¹⁹

The percentage-of-income cap for participating households varies depending on their income level, as shown in the following chart.

Household income threshold (percentage of federal poverty level)	Maximum bill amount (percentage of monthly household income)
0–50%	2%
51–100%	2.5%
101–150%	3%
>150% in cases of special hardship	4%

REBUTTING UTILITY OBJECTIONS TO PIPPS

Advocates interested in getting their water utility to adopt a PIPP often encounter resistance from utilities. There is no one-size-fits-all solution for every community, and variables such as the size of a utility can affect whether a PIPP is feasible. But in the face of utility objections, persistence pays. The two existing PIPPs in the water sector were the result of years-long advocacy campaigns and extensive, sometimes adversarial negotiations with the utilities and key decision makers. And advocates are still fighting to improve those programs.

One common objection is that operating a PIPP is not administratively feasible. When weighing alternative approaches, a utility may argue that a traditional assistance program—using a uniform dollar amount or percentage discount on bills for all participants—is simpler and easier to implement than a PIPP. Claims such as these should be greeted with skepticism. Advocates should push the utility to articulate precisely what is more challenging about administering a PIPP, work on joint problem-solving, and bring in outside technical expertise.

Moreover, concerns about administrative challenges sidestep the question of whether any alternative approach under consideration will actually be effective. Utilities must do the work, in consultation with community representatives, to evaluate which approaches are likely to achieve affordable access to essential water services for all of its customers. For the reasons explained earlier in this module, traditional assistance programs may help move the needle but are unlikely to achieve the goal.

Utilities may also object to PIPPs on the basis of cost. The utility may claim that the program’s costs would burden nonparticipating customers, but this concern may rest on unfounded assumptions. One critical point, often overlooked, is that costs can be spread not only across residential customers but across all customers. For example, in Philadelphia, where the water utility’s PIPP takes this approach, the extra charge to fund the program as of September 2021 was a modest \$0.00009 per gallon for water and \$0.0001 for sewer service.²⁰ For the average residential household in Philadelphia using 500 cubic feet (3,740 gallons) of water each month, the charge amounts to around \$0.89 per month, or \$10.68 per year.²¹

Moreover, an effective affordability program can actually benefit a utility financially, since households receiving affordable bills are far more likely to pay those bills consistently and on time. Utilities also save on the cost of collecting unpaid bills and disconnecting/reconnecting households that are unable to pay. This argument is discussed later in this module, in the text box “The ‘Business Case’ for Water Affordability Programs: Financial Benefits to the Utility.”

Participation in TAP is limited to households that maintain an account with the Water Department and are billed directly. Renters who do not have an account can apply to receive water service in their own name, but this is subject to the landlord's consent.

Once a household has submitted a TAP application, shutoffs to the property due to nonpayment of the water bill are automatically suspended for 14 days. If water service has already been shut off for nonpayment, it must be restored.

Importantly, TAP also incorporates a pathway to debt relief for participating households.²² The debt relief component of TAP is discussed in the Water Debt module.

Evidence suggests that TAP has improved water affordability in Philadelphia. Enrollment for TAP significantly exceeds that of the city's previous Water Repayment Assistance Program (17,148 households as of 2022 versus around 10,000 for WRAP).²³ Importantly, enrolled households receive a bill that is genuinely affordable in that it is limited to a percentage of monthly income. However, enrollment still lags far below the estimated number of eligible households (around 60,000).²⁴ The Water Department and advocates are engaged in ongoing efforts to improve outreach and recruitment.²⁵

TAP will continue to evolve as advocates continue to push for improvements. A key focus in coming years will likely be expanding enrollment, especially of renter households, which are currently underrepresented in the program.²⁶

Baltimore's Water4All Program

Like Philadelphia's program, Baltimore's water affordability program was the result of years of advocacy by local water advocates, including the Baltimore Right to Water Coalition and its allies.²⁷ After a protracted legislative process, the Baltimore City Council enacted the Water Accountability and Equity Act in November 2019.²⁸ Among other reforms, the law directed the city's Department of Public Works to develop an income-based water affordability program. Water4All was launched in February 2022 after repeated delays.²⁹

Water4All was directly modeled after Philadelphia's Tiered Assistance Program. Like Philadelphia's program, Water4All aims to ensure a stable and affordable bill for income-qualified households through a tiered, income-based billing structure. The income tiers and accompanying bill caps are provided below:

Household income threshold (percentage of federal poverty level)	Maximum bill amount (percentage of monthly household income)
0-50%	1%
51-100%	2%
101-200%	3%

Water4All also incorporates a debt relief component, discussed in the Water Debt module.

Unlike the Philadelphia program, Water4All is open not only to account-holding customers but also to renters who reimburse their landlord for water service in a payment separate from the rent.³⁰ The law that created the program required the city to provide direct payments to renters in this situation, currently offered via prepaid debit cards. Though important to allow renters to participate, this provision has proved controversial. Under the current approach, recipients may be required to report the payments as taxable income, which could potentially affect their eligibility for other government programs such as the Supplemental Nutrition Assistance Program (SNAP) or rental assistance.³¹ As a temporary solution, advocates have urged the city to use flexible federal funds from the American Rescue Plan Act to supply the renter payments, which would not count as taxable income under Internal Revenue Service guidance.³²

Water4All will undoubtedly continue to evolve in the coming years as administrators and advocates continue to troubleshoot and improve the program.

© Philadelphia Water Department

Get help with water bills.

Unpaid Bills?
Grants and Debt Forgiveness could help reduce your debt.

Special Hardships
Qualify after illness, job loss and much more!

Don't Wait!
Shutoffs for unpaid bills will resume!

Customers in the **Tiered Assistance Program (TAP)** or receiving a **Senior Citizen Discount** are protected from enforcement and penalties.

water.phila.gov/care Scan to visit:
Or call (215) 685-6300

PHILADELPHIA WATER DEPARTMENT
CITY OF PHILADELPHIA DEPARTMENT OF REVENUE WATER REVENUE BUREAU

10/29/21

An informational flyer promoting the Philadelphia Water Department's (PWD) Tiered Assistance Program (TAP).

Designing assistance programs

Water utilities offer a variety of monthly bill assistance programs that do not qualify as true affordability programs by the definition used in this toolkit. Many are targeted to low-income households, such as households with income under a certain percentage of the federal poverty level or area median income. Other programs are more narrowly targeted, for example to low-income seniors, people with disabilities, or veterans.

Most existing water assistance programs limit participation to households that are billed directly by the water utility, with some available only to owner-occupants of single-family homes. This approach excludes renters who pay for water and sewer service indirectly, either through their rent or through a separate payment to their landlord. Options to include renters (and, in some cases, their landlords) in assistance programs are discussed in the Protections and Support for Renters module.

Assistance programs can be designed in various ways, depending on how the water provider structures its rates and charges. For example, the discount may be calculated as a flat dollar amount or a percentage discount. It may be applied to a volumetric charge, a fixed charge, or the total bill. (A volumetric charge is a per-gallon charge for water usage. A fixed charge is a portion of the bill that is the same regardless of volume. Many water utilities use a rate structure that includes both variable charges and fixed charges.)

Sometimes a combination of discounts is used. For example, the Pittsburgh Water and Sewer Authority's Bill Discount Program offers a reduction on several fixed charges and, for very low income customers, a percentage discount on the volumetric charge.³³

From an affordability perspective, the important question is whether the discount is large enough to reduce the final bill to an affordable level. A recent report examining ongoing assistance programs at 20 large U.S. drinking water utilities found that monthly discounts for typical households varied widely. The amount of the discount was

not correlated with the cost of water in a city, suggesting that assistance programs are often not designed to ensure affordability.³⁴ Another recent paper examined the assistance programs offered by 59 water and sewer utilities in California and Texas. It found that, for many low-income households served by those utilities, the available discounts were likely too small to make water bills affordable.³⁵

Even where assistance programs provide a deep enough discount to reduce typical bills to an affordable level, they may not result in affordable bills for households with especially low incomes or especially high water usage. This is a fundamental challenge with assistance programs, as compared with PIPPs, which provide a customized maximum bill based on the household's individual financial situation.

One way an assistance program could better tailor benefit levels to household circumstances— though still falling short of a PIPP—is by offering different levels of assistance depending on which of several income brackets the household falls into. Income brackets could be, for example, based on percentage of the federal poverty level (0–50 percent of the federal poverty level, 50–100 percent of the federal poverty level, etc.). Compared with a flat discount, this approach can more effectively prioritize the use of program funds.

Some water assistance programs use this design. For example, DC Water provides three different levels of assistance, depending on whether a household qualifies as very low, low, or moderate income.³⁶

A common barrier for assistance programs of all kinds is inadequate funding. Many assistance programs are supported solely through voluntary donations by the utility, its employees, or other customers and are chronically underfunded. The topic of funding is addressed further in the final section of this module, “Funding Affordability and Assistance Programs.”

Like PIPPs, assistance programs should consider the best practices described below and in Appendix A.

A tiered approach to providing water assistance can better tailor benefit levels to household income, improving affordability.

A HYBRID MODEL? CALIFORNIA'S ENERGY PIPP PILOT PROGRAM³⁷

In 2021 the California Public Utilities Commission ordered the state's four largest energy utilities to implement a limited-enrollment "PIPP pilot program." Actually, the program design could more accurately be described as an assistance program that borrows a central element of a PIPP—namely, an income-based cap on bills for participating households.

Under the California pilot, participating households will receive a maximum monthly energy bill that varies according to which of two income brackets the household falls into. Those with incomes between 0 and 100 percent of the federal poverty level will have their combined gas and electric bills capped at an amount equal to 4 percent of income for a household at 50 percent of the federal poverty level. Those with incomes of 101 to 200 percent of the federal poverty level will have their bills capped at amount equal to 4 percent of income for a household at 150 percent of the federal poverty level.

This program design is similar to a true PIPP in that it caps the monthly water bill using an affordability benchmark that considers utility costs as a percentage of income. However, rather than setting a customized maximum bill for each participating household based on its specific monthly income, the California program sets the maximum bill amount using a proxy household at the middle of the household's income bracket. Administering the program in this way is simpler than calculating a customized benefit for each household, but it forgoes the individualized approach that enables a PIPP to ensure affordable bills for each participating household. Within either income bracket, many households will have their bills capped at a level that exceeds, potentially by a large amount, 4 percent of their household income; conversely, many other households will end up with a bill that falls below 4 percent of their income.

Best practices for effective and equitable programs

Experiences from both the water and the energy sectors point to numerous best practices that should be considered when designing and implementing both PIPPs and traditional assistance programs. Many of these considerations were noted by advocates interviewed for this toolkit. Some of the most important considerations are described briefly below. Appendix A provides more detail, along with additional best practices and illustrative examples.

The most fundamental considerations will be eligibility requirements and benefit levels. Both income eligibility thresholds and benefit levels should be set taking into account local factors including cost of living. Income eligibility thresholds should be set high enough to reach all water-burdened households.³⁸ Benefits should be sufficient to reduce bills to an affordable level for as many participants as possible. In addition, care should be taken not to exclude those households likely to be most in need of support, such as those without immigration documentation or lower-income renters who pay for water through their rent.

Program administration should be designed to maximize enrollment of eligible households. Effective approaches include streamlining the application process; providing multiple ways to apply (e.g., online, by mail, and in person); proactively marketing the program to the eligible population, especially to households with current water debt or a history of missed payments or shutoffs; and partnering with local organizations that are trusted in the community to do effective outreach. One of the most effective ways to increase enrollment is through "categorical eligibility," whereby proof that a household is

already receiving another income-qualified benefit (such as energy assistance or SNAP benefits) prequalifies it for water assistance.

It is critical for communities that are most severely impacted by water affordability-related issues to be meaningfully involved in the development and implementation of any new or improved program. People and communities that have faced unaffordable bills, lived with the threat or reality of water shutoffs, and struggled with mounting water debt have deep, firsthand knowledge of the problems with the current system—problems that utilities and other decision makers may poorly understand or be completely unaware of. Utilities must often be reminded that the perspectives of impacted individuals and grassroots, community-based organizations are essential to designing a successful program.

Utilities need to be accountable, too, for successful implementation of a program. Regular public reporting and independent program evaluation are important accountability measures.

Finally, programs that directly reduce monthly bills for low-income households must function as part of a holistic strategy that encompasses debt relief, improved water efficiency, and more equitable rate structures. For example, many households enter an assistance or affordability program carrying water debt from overdue bills as well as interest and penalties that may have accrued over time. A utility must offer an affordable way to eliminate that debt, in order to ensure that total monthly payments (for current usage plus any repayment of overdue bills) do not become unmanageable. (For more on these complementary strategies, see the Water Debt, Water Efficiency and Plumbing Repair Assistance, and Equitable Water Rates modules.)

STATE AND FEDERAL APPROACHES TO DELIVERING AFFORDABILITY/ASSISTANCE PROGRAMS

With the exception of LIHWAP, the temporary federal program created as a COVID-19 relief measure, all currently operating affordability and assistance programs in the water sector are administered at the municipal or individual utility level. There are significant drawbacks to a purely local approach. Administering programs locally often results in a patchwork of programs across a state, with the ability to access assistance varying widely from place to place. In addition, small water utilities, which are the majority of water systems in the United States, may find it difficult to fund and operate robust affordability or assistance programs due to limited budgets and administrative capacities.

In theory, programs administered and funded at the state or federal level could help overcome some of these obstacles. A state-level approach, for example, can ensure that all households in a state have access to a water affordability or assistance program, providing a uniform, baseline level of assistance to customers throughout the state. A state-level approach can also help overcome the financial or political obstacles faced by struggling water and wastewater systems in establishing a program. There are also potential administrative advantages, since a state-level program can leverage existing administrative infrastructure (for example, a state agency that administers food assistance or heating assistance) to handle intake and enrollment.

This section provides a survey of recent efforts to create state- or federal-level water affordability or assistance programs and highlights examples from the energy sector that advocates can draw from. Issues related to funding, arguably the biggest challenge for any program, are dealt with separately in the final section of this module, “Funding Affordability and Assistance Programs.”

State-level programs

No state currently operates a permanent, state-level, funded water affordability or assistance program.³⁹ In 2021 Illinois enacted a law that creates a state-level water assistance program, but it is not yet operational, and participation by utilities is voluntary.⁴⁰ This program is discussed further in the “Funding Affordability and Assistance Programs” section, below. A separate Illinois law, also enacted in 2021, creates a statewide assistance program applicable to customers of all utilities, but it becomes effective only when and if the legislature appropriates funds.⁴¹

On a temporary basis, almost every state and territory is operating an emergency water assistance program using federal funds provided under LIHWAP.⁴² This program is a federal block grant for states to create a water affordability program per federal rules regarding design, administration, and implementation. In some states, this might provide

a logical starting point to build out a state-level water affordability or assistance program.

In several states, legislation has been introduced to create a permanent, statewide water affordability or assistance program. One of those, California, first passed legislation directing the state’s Water Resources Control Board to develop a plan for a statewide water assistance program. The plan, delivered in early 2020, discusses at length the various considerations involved in such an undertaking.⁴³ Legislation is now pending to authorize a statewide program based on the plan.⁴⁴ Bills to create state-level programs are also pending in New Jersey and Michigan.⁴⁵

Short of a true statewide program, states can require water and wastewater utilities to implement affordability or assistance programs and establish minimum standards for those programs, or otherwise facilitate (without mandating) creation of local programs. For example, the California Public Utility Commission has encouraged the state’s nine largest investor-owned water utilities to develop low-income assistance programs. The commission has updated its expectations for those programs over the years to improve uniformity and respond to changing conditions.⁴⁶ In Ohio, legislation was introduced to require all water utilities, both investor-owned and publicly owned, to establish affordability programs.⁴⁷ States could offer planning grants to water and wastewater utilities to support the development of local affordability or assistance programs, as Michigan has done.⁴⁸ States could also attach strings to water or wastewater infrastructure funds they provide to utilities, requiring utilities receiving those funds to, for example, develop and/or implement local assistance or affordability programs.⁴⁹

In contrast to the water sector, there are many state-level programs in the energy sector. These could provide inspiration for water programs. Several states operate state-level affordability programs (i.e., PIPPs) for electric and gas service. For example, Illinois has a state-level PIPP that caps combined electric and gas service bills at 6 percent of household income, with a minimum bill of \$10.⁵⁰ (If a household doesn’t pay for heat, then the bill is set at 2.4 percent of income, with a \$5 minimum bill.) Other states with state-level electric and gas PIPPs include Colorado,⁵¹ New Jersey,⁵² and Ohio.⁵³

Some states have likewise taken a state-level approach to delivering electric and gas assistance (i.e., non-PIPP) programs.⁵⁴

In some cases, state-level energy assistance programs have been established through laws passed by the state legislature. This was the case for the Illinois energy PIPP, for example.⁵⁵ By contrast, the Colorado, New Jersey, and Ohio energy PIPPs were established by state utility regulators. Even in the latter case, however, a legislative statement of policy can provide an impetus for a state agency to act. For example, New Jersey’s program relies on

a state law declaring “that it is the policy of this State to ... ensure universal access to affordable and reliable electric power and natural gas service.”⁵⁶

Advocates looking to advance water affordability goals in the legislature or governor’s office should consider whether energy affordability or assistance programs in their state can offer good models to emulate. Advocates may want to consult with community-based organizations, agencies that administer those energy programs, and energy affordability advocates familiar with the strengths and weaknesses of those programs for insight into how they work.

State-level legislation can also be used to strengthen existing assistance programs. In Massachusetts, state utility commission–regulated electric and gas utilities have for decades had discount programs negotiated in rate case proceedings. A state electric restructuring law essentially locked in the electric discounts into law, and subsequent 2005 legislation expanded eligibility for the program.⁵⁷

Sometimes the political dynamics in a state are not conducive to pressing for a full-blown assistance or affordability program. It may be strategic in those circumstances to see if there is a way to build a foundation for a future program. For example, state lawmakers could pass legislation or a resolution that recognizes a human right to safe, affordable water as a foundation to frame additional legislation, programs, and policy.⁵⁸ Advocates in California have achieved many successes over the last decade using this approach.⁵⁹ State legislatures could also require an agency to develop a plan for funding and implementing a statewide water affordability program, as in California.⁶⁰

Federal programs

The only time Congress has ever funded low-income water assistance was during the COVID-19 pandemic. A total of \$1.1 billion was distributed to states (and Tribes) to run the temporary Low Income Household Water Assistance Program (LIHWAP), similar to the long-standing Low Income Home Energy Assistance Program (LIHEAP).⁶¹ States have until September 30, 2023 to spend these funds.⁶² As of March 30, 2022, over 150,000 households had received LIHWAP assistance, including over 91,000 households for whom LIHWAP benefits enabled restoration of water service or prevented a water shutoff.⁶³ The U.S. Department of Health and Human Services maintains a “data dashboard” showing progress in each state, which is updated quarterly.⁶⁴

Congress has also recently considered providing grants for local water affordability or assistance programs. (See the discussion below under “Funding Affordability and Assistance Programs.”) However, there is no pending legislation to create a permanent low-income water assistance program with nationwide reach. A proposed amendment to the 2021 Bipartisan Infrastructure Bill, which was not included in the final, enacted law, offers one possible template for such a program.⁶⁵

In certain circumstances, federal guidelines under the Clean Water Act can be used to drive wastewater utilities to consider and adopt local affordability programs. Advocates should take full advantage of this when the opportunity arises—for example, when the utility is negotiating a state or federal consent decree or permit to reduce sewage overflows.⁶⁶

KEY CONSIDERATIONS FOR STATE-LEVEL AFFORDABILITY OR ASSISTANCE PROGRAMS⁶⁷

- Determine which state agency should run the program.
- Make sure to provide funding to the responsible state agency for administrative costs, but consider placing a cap on those costs.
- Consider providing some funding to individual utilities (perhaps just small utilities) to help defray the startup costs of participating (e.g., modifying billing systems to be able to apply credits to customer accounts).
- Consider what types of assistance should (or must) be included in the program, such as bill discounts, debt relief, crisis assistance, or water efficiency assistance.
- Include water and wastewater (and ideally stormwater) assistance in the same program.
- Require the responsible state agency to develop annual program plans for how to spend funds, incorporating public input.
- Consider creating a stakeholder advisory committee.
- Consider how the program can coordinate with other state-run utility assistance programs (and other state-run social service programs for low-income households).
- Collect data on affordability metrics and consider a third-party independent evaluation

FUNDING AFFORDABILITY AND ASSISTANCE PROGRAMS

Affordability and assistance programs—whether run at the local, state, or federal level—can be funded from local, state, or federal sources or a combination of these. Currently, apart from temporary COVID-related funds, there are no federal or state funding sources for program implementation.

Absent new federal or state funding, to offer a robust affordability or assistance program, a utility typically must use rate revenues to pay for it. Other local funding sources are inherently limited.⁶⁸ Or they are likely to be limited by competition with other essential city services for general local tax revenue.⁶⁹ Of course, relying on local ratepayer revenue also has its limitations, especially in a smaller system serving an area with high levels of poverty and a limited customer base. (Some utilities may also face real or perceived legal constraints on the use of ratepayer funds, as discussed below.)

When using rate revenues to fund a program, the best way to limit the cost to nonparticipating customers is to spread the cost across all residential *and* nonresidential customers. Philadelphia’s percentage-of-income program, for example, is funded in this way.⁷⁰ In the Detroit area, multiple communities spread out the costs of a modest assistance program among all retail customers by jointly funding a program through their regional, wholesale water and wastewater utility.⁷¹

Critically, program costs can be offset substantially by financial benefits that accrue to the utility. This can be described as the “business case” for low-income affordability or assistance programs. (See text box below.) Advocates should ensure that utilities account for these benefits in any financial assessment of a potential ratepayer-funded water assistance or affordability program.

More options become available when considering state-level funding sources. For many utilities—especially the small ones that make up the vast majority of water and sewer systems nationwide—it may be impractical to self-fund a program at the necessary scale. State-level sources can remove some or all of the funding burden from individual utilities.

States can rely on general annual appropriations to fund a statewide program or to provide grants to locally run programs. As noted above, no state currently does so. In Michigan, although the state does not fund local affordability or assistance programs, it has offered “planning grants” for the development of such programs.⁷⁶

States could also use flexible federal dollars to support water assistance, where the rules permit. For example, states may use federal money from the Clean Water State Revolving Fund (which subsidizes local wastewater infrastructure projects) to support local low-income assistance programs, under certain limited circumstances.⁷⁷ In past years, Delaware offered communities participating in the revolving fund program the chance to apply for grants to support low-income customer assistance.⁷⁸ More recently, on a temporary basis, some cities elected to use a portion of funds provided by the federal American Rescue Plan Act to support emergency water debt relief programs. (A few examples are discussed in the Water Debt module.) A proposed bill in New Jersey would use \$75 million in American Rescue Plan Act funds as seed money for a permanent, state-wide water assistance program.⁷⁹ However, this is a one-time source of federal funding.

To sustain a statewide program, an alternative to general annual appropriations is to establish a dedicated source of funding. The California Water Resources Control Board, in its report to the state legislature proposing a statewide low-income assistance program, discussed

THE “BUSINESS CASE” FOR WATER AFFORDABILITY PROGRAMS: FINANCIAL BENEFITS TO THE UTILITY

When low-income utility customers are billed an amount they can afford, they are much more likely to pay those bills voluntarily and on time, providing a more stable, predictable revenue stream for the utility.⁷² This can also reduce the utility’s costs of collecting unpaid debts, disconnecting customers who fall behind on their payments, and reconnecting them when they have caught up.

As a result, in the energy sector, studies have shown that affordable bill programs help energy utilities improve their bottom lines, through increased customer revenues and/or increased “net back” (i.e., customer revenue minus the costs of collecting unpaid bills).⁷³

It is not a novel idea to apply this business case to the water sector. Indeed, some national leaders in the water utility sector have come to embrace this concept.⁷⁴ It is even reflected, to some degree, in the water utility sector’s industry-standard rate-setting manual.⁷⁵ Yet it remains underappreciated by most water and wastewater utilities, which tend to view the financial implications solely in terms of the face value of discounts provided to participating customers.

Natural Resources Defense Council anticipates releasing, later in 2022, a spreadsheet-based tool for utilities to evaluate, based on utility-specific data, the business case for adopting water affordability or assistance programs. Look for that resource to be added to the same webpage that houses this Toolkit.

several possible funding sources.⁸⁰ These include dedicated revenues from specific taxes (on high personal income earners or businesses, bottled water taxes, or a soda tax) or surcharges on non-eligible households' water bills. A detailed appendix explored strengths and weaknesses of each approach.⁸¹ Although the report did not recommend a specific funding source, it did recommend that revenue sources “be progressive . . . to avoid imposing additional financial burdens on low-income households,” and “have a nexus to water use and support consumption of tap water.”

The approach of including a small surcharge on noneligible households' water bills is used to fund state-level PIPPs in the energy sector. In those electric and gas PIPPs, the state uses the revenue from the surcharge to administer the program, with the same benefits available to all eligible households. In some states, the energy bill surcharges collected via each utility are used only to support households within the same utility's service area. (In effect, although these are state-run programs, they are still funded at the individual utility level.) Elsewhere, such as in Illinois, revenue from an energy bill surcharge is pooled statewide, to spread program costs more widely and to ensure that assistance reaches the locations most in need. In the water sector—where states often have hundreds of individual water and sewer systems, mostly with small service areas—pooling funds in this way would be very valuable.

Illinois recently authorized the only state water assistance program funded by bill surcharges, but it is not yet operational. The state's Water and Sewer Financial Assistance Act, enacted in 2021, offers a less robust variation on the above approaches. First, it creates a water assistance program, not a PIPP. Second, it makes utility participation optional. This means that the program likely will not be available statewide, even though it is state-run. Third, the statute fixes the amount of the surcharge at a level that is insufficient to deliver assistance statewide. Fourth, the state will use the proceeds from each utility to provide assistance only to low-income households served by that same utility, without pooling resources across the state.⁸² As noted above, the law has not been implemented yet, so this approach is untested.

In several states, legislation introduced to create statewide water assistance programs does not specify any permanent, dedicated funding source.⁸³

Finally, at the federal level, annual appropriations (from general tax revenues) would be the most likely funding source if Congress were to establish a permanent, nationwide program.⁸⁴ The federal government could also provide grants for local water affordability and assistance programs, again funded through general appropriations. Congress recently moved slightly in this direction. In the Bipartisan Infrastructure Law (formally known as the Infrastructure Investment and Jobs Act), Congress authorized but did not fund a small pilot grant program

at the U.S. Environmental Protection Agency.⁸⁵ An earlier version of the bill, which was not enacted, had included the grant program without limiting it to a pilot.⁸⁶

Legal issues with funding local programs

Although many local affordability or assistance programs are funded through rates, the law in many states is unclear as to water and wastewater utilities' authority to use rate revenue for this purpose. A 50-state study by the University of North Carolina (UNC), published in 2017, found that very few states either explicitly authorize utilities to do this or explicitly prohibit them from doing so. In most states the law is ambiguous. Further, in a particular state, the answer may differ for systems that are regulated by a state utility commission (typically investor-owned) and those that are not (typically publicly owned). Among publicly owned utilities, the answer may also differ depending on whether the utility is run by the local municipal government or by an independent entity such as a water authority or water district.⁸⁷

Local utilities, particularly publicly owned systems, will often point to legal ambiguity as a reason not to adopt a rate-funded program.⁸⁸ Absent an express prohibition in state law, local advocates should not accept that as an answer. Some advocates have done (or commissioned) their own detailed legal analysis to build the case in favor of the utility's legal authority.⁸⁹

Even where the law is ambiguous, when a utility has the *will* to create a rate-funded program, it can move forward and make the strongest legal case to support it. Atlanta took this approach, for example.⁹⁰ In most cases a lawsuit will never come. Moreover, if a utility is sued on this issue, state courts are typically very deferential to a local, publicly owned utility's decisions concerning rates.

Typically, the legal concern is that lower rates or discounts for low-income households amount to unlawful “cross-subsidization” of one set of customers by another, unlawful “discrimination” against some customers in favor of others, or an unlawful “tax” on customers whose rates will marginally increase to pay for the program. Therefore, the UNC report suggests one way to bolster legal arguments in support of ratepayer-funded programs: “Rather than framing [an assistance program] as a subsidized rate class, present it as an essential cost of running a utility that provides financial benefits to all customers.”⁹¹ A utility-specific analysis of the business case for affordable bills, described above, can help support this legal argument.

Another legal argument can be based on the recognition that a utility's core functions include protecting a community's public health by providing essential water and sanitation services. Utilities can frame a legal argument that affordability programs are an essential cost of running the utility that provides health benefits to all customers—not only to participating customers—by enabling low-

income households to maintain service. (In the Equitable Water Rates module, see text box “A More Progressive View of Cost Allocation Can Support More Equitable Rates.”)

When a local government is unsure of its authority under state law, it may be able to ask the state’s attorney general to provide a formal legal opinion.⁹² Before encouraging a local utility to do so, advocates should assess whether the state’s current attorney general is likely to opine in favor of the utility’s authority. It may even be possible to discuss the issue directly with the attorney general’s office before deciding whether to pursue this route.

Advocates can also seek new state legislation to explicitly authorize ratepayer-funded affordability or assistance programs. For example, as described above, Illinois enacted legislation providing each water or sewer utility the option to collect a surcharge on customer bills, with the state using the funds to run a program on the utility’s behalf.⁹³ As another example, legislation currently pending in New Jersey would authorize publicly owned water, wastewater, and stormwater utilities to offer their own low-income discounts.⁹⁴

KEY RESOURCES:

City of Philadelphia, “Water Bill Customer Assistance,” <https://water.phila.gov/cap/>.

City of Baltimore, “Water4All,” <https://cityservices.baltimorecity.gov/Water4All>.

Philadelphia’s Tiered Assistance Program and Baltimore’s Water4All program are leading examples of water affordability programs. They are the only two percentage-of-income payment plans currently offered by water or wastewater utilities anywhere in the United States.

Environmental Protection Agency, *Drinking Water and Wastewater Utility Customer Assistance Programs*, April 2016, 6, https://www.epa.gov/sites/default/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf.

EPA’s 2016 report provides a high-level overview of the types of water assistance programs and catalogs examples from water utilities across the country. (Note: some terminology may differ slightly from this Toolkit.)

Sridhar Vedachalam and Randall Dobkin, *H Affordability: How Water Bill Assistance Programs Miss the Mark*, Environmental Policy Innovation Center, May 2021, 19, <https://static1.squarespace.com/static/611cc20b78b5f677dad664ab/t/614ceba138df2542c1af1d70/1632431025551/Cap+Report-Final-May.20.2021.pdf>.

This 2021 report takes a critical look at water affordability/assistance programs around the country, highlighting common shortcomings and best practice examples.

California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program*, 2020, https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/ab401_report.pdf. (The report’s appendices are available at https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/ab401_appendices.pdf.)

This 2020 report by California’s state water agency, with accompanying appendices, highlights key considerations for designing and implementing a statewide water assistance program. The report provides the agency’s recommendations to the state legislature and explains pros and cons for various alternatives. It was developed with extensive feedback from stakeholders. Public comments on the agency’s draft report are available here: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/ab401_public_comments_20190201.html.

UNC Environmental Finance Center, *Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities*, 2017, <https://efc.sog.unc.edu/resource/navigating-legal-pathways-rate-funded-customer-assistance-programs-guide-water-and/>.

This University of North Carolina report summarizes legal authorities and barriers for funding water affordability/assistance programs with ratepayer dollars in each of the 50 states, plus the District of Columbia, Puerto Rico, and other territories.

Appendix A: Best Practices for Affordability and Assistance Programs

Our research and interviews for this toolkit surfaced numerous best practices for program design and implementation that apply equally to water affordability programs (PIPPs) and more traditional assistance programs. We have compiled these below as a resource for advocates and decision makers developing new programs or seeking to improve existing ones.

PROGRAM RULES

- **Set income eligibility thresholds high enough to reach all water-burdened households.** Ideally, the income threshold should be set at or above the local cost of meeting basic household needs, including housing, food, utilities, health care, and transportation.⁹⁵
- **Consider locally relevant factors when setting benefit levels.** The size of the bill discount or percentage-of-income cap should take into account the local cost of living, how utility rates are structured (e.g., whether a bill includes stormwater fees or any non-water services), and how water debt may inflate monthly bills, among other locally specific factors. For assistance programs, the size of the discount should also consider the size of typical water bills, particularly for lower-income households.
- **Allow renters who lack a utility account to participate.** Renters and others who do not personally hold a water account are often excluded from affordability and assistance programs, even though they may pay for water through their rent or a separate payment to their landlord. (Options to include renters are discussed in the Protections and Support for Renters module.)
- **Don't limit participation on the basis of immigration status.** People lacking legal immigration status or documentation are among the most vulnerable water users and should be encouraged to participate in affordability and assistance programs.
- **Suspend disconnections and other collection actions while a program application is pending, and retroactively apply bill discounts or credits.** Submitting an application should automatically suspend all shutoffs, late fees, and further collection actions while the application is pending. The suspension should not be conditioned on the utility assessing the application as “complete.”⁹⁶ Once an application is approved, benefits should be retroactively applied to bills received while the application was pending.
- **Include costs necessary to ensure safe restoration of service following shutoff.** Especially after an extended period of disconnection, plumbing repairs may be necessary to safely restore service, and flushing of lines (using a significant amount of water) may be necessary to ensure safe water flows from the tap. When a program provides assistance to reconnect customers following a shutoff, it should include these costs as eligible expenses or enroll the customer in complementary programs that can cover these costs.

ADMINISTRATION

- **Ensure that the best program “wins” for any individual household.** Where households are eligible for two benefits that cannot be combined, the best program for the household should be applied. For example, in Philadelphia, program administrators must consider whether applicants for the city’s water PIPP are eligible for any other discount programs and apply the “most affordable alternative” for the household. In certain circumstances, for example, the city’s senior discount results in a lower bill for a household than the PIPP; in those cases, the city enrolls the household in the senior discount.
- **Adequately staff programs to ensure rapid processing.** Long wait times for application processing can cause significant stress and exacerbate financial hardship, especially if regular rates continue to apply and late fees are not suspended.
- **Consider partnering with social service agencies on administration.** Water utilities that lack capacity to administer a program themselves should consider partnering with an established social service agency to administer the program. This can improve efficiency and allow utilities to access existing networks and resources. However, it can also distance the utility from program administration and participating households.⁹⁷

APPLICATION PROCESS

- **Streamline the application process.** For every additional step that applicants must take to enroll, more households in need will fail to complete the process. Application forms should be short and should require the fewest supplemental documents possible.⁹⁸ Households should have multiple ways to apply to the program, including online, by mail, and in person. Online applications should be designed for use on a mobile phone, and web information and design should be accessible for people with disabilities.⁹⁹
- **Eliminate exclusionary application requirements.** Requiring certain information on the application form, such as a Social Security number, can present a barrier to households who lack legal status or who lack easy access to the relevant documents (such as people who have been forced from their homes due to domestic violence). Utilities should accept a broad range of documentation. For renters, rules that require landlord consent before they can open a water account can be a barrier to obtaining customer status, which is often a prerequisite for enrollment. (Barriers for renters are discussed further in the Protections and Support for Renters module.)
- **Allow categorical eligibility.** Proof that a household is already receiving some other income-qualified benefit (such as energy utility assistance or SNAP support) should be accepted as proof of income for purposes of applying for a water affordability or assistance program. Several leading affordability and assistance programs take this approach.¹⁰⁰
- **Allow self-certification of eligibility.** Allowing households to self-certify as to their income status or other eligibility criteria (such as disability), subject to a later audit or request for documentation, can significantly reduce barriers to enrollment. This approach has been successfully used in the energy sector and to administer emergency relief during the COVID-19 pandemic.¹⁰¹ Alternatively, households could be allowed to enroll immediately and submit documentation within a specified period. Seattle Public Utilities takes this approach.¹⁰²
- **Enable and encourage data sharing with other utilities and social service agencies.** When a household applies for government benefits, the water utility should be notified so that the household can be informed of available assistance programs and encouraged to apply (or even automatically enrolled; see below). Utilities and government agencies administering other benefit programs should establish secure data-sharing protocols that allow disclosure of eligibility information without risk to the household.¹⁰³ Where legal barriers prevent data sharing, they should be revised.
- **Consider automatic enrollment wherever feasible.** Automatically enrolling households that are known to meet eligibility requirements (e.g., those that are already receiving other income-qualified benefits) can significantly boost enrollment. Concerns around privacy and consent can be addressed by providing notice and allowing households to opt out.
- **“Stack” or “braid” assistance program applications.** Low-income households may be eligible for more than one form of assistance. To the greatest extent possible, multiple assistance programs should share one application, and intake agencies should process a range of programs; this is often called braiding or stacking.¹⁰⁴ For example, in Chicago, households can apply for water assistance and federal energy assistance at the same time, and current recipients of federal energy assistance can apply for water assistance using only their utility account number.¹⁰⁵ The use of categorical eligibility and standardized eligibility criteria can facilitate this practice.
- **Remove unnecessary reapplication requirements.** People living on fixed incomes, such as the elderly and people with permanent disabilities, are not likely to experience a significant change in income and should not be required to reapply or recertify their income to maintain enrollment.¹⁰⁶ For all households, less frequent recertification requirements—ideally with certifications lasting longer than a single year—can decrease drop-offs in participation.

OUTREACH AND RECRUITMENT

- **Ensure that clear, complete, up-to-date, accessible program information is available online and by phone.** Providing clear, complete, and current information about available programs and how to apply, both online and via an adequately staffed phone line, is important to ensure that interested households can readily access programs.¹⁰⁷ Program information and application forms should also be available in multiple languages, determined by the language needs of the population within the utility’s service area. Online materials should be accessible for people with disabilities and designed to be readable on a mobile phone.
- **Use modern methods to proactively advertise programs.** Utilities should proactively and consistently provide detailed information to the households they serve about available assistance programs, including on all monthly bills. Communication is more effective when utilities use methods such as phone, text, email, social media, and local media (such as radio or television) in appropriate languages, together with traditional methods such as bill inserts or door hangers.¹⁰⁸

- **Focus outreach on households with arrearages or troubled payment histories.** Utilities should leverage customer databases to market programs to households with arrearages or histories of missed payments or previous disconnections. Target-marketing programs to neighborhoods with high numbers of arrearages or disconnections can also be effective.
- **Partner with trusted community-based organizations on outreach.** Many water utilities have low levels of public approval and trust, especially within communities impacted by unaffordable rates and shutoffs. Partnering with established community-based organizations can help overcome mistrust and allow utilities to leverage existing social connections and networks. Community partnerships can be especially effective in reaching otherwise hard-to-reach households, such as low-income renters and people lacking legal documentation.¹⁰⁹

COMMUNITY ENGAGEMENT

- **Engage the most impacted communities in the development and implementation of a program.** Communities that have faced unaffordable bills, lived with the threat or reality of water shutoffs, and struggled with mounting water debt have deep, firsthand knowledge of the problems with the current system—problems that utilities and other decision makers may poorly understand. Utilities must often be reminded that the perspective of impacted individuals and grassroots, community-based organizations is essential for a successful program. Ideally, utilities and/or regulators should provide compensation to under-resourced community-based groups for participating in program development and implementation processes.

PROGRAM EVALUATION

- **Report regularly on program implementation.** Utilities need to be accountable for successful implementation of a program. In Philadelphia, for example, the local ordinance that created the Tiered Assistance Program requires annual reporting on program implementation to the City Council.¹¹⁰ The city's formal rate-setting process also requires the utility to provide detailed data and has provided advocates with opportunities to push for improvements to the city's programs over time.¹¹¹ (For more on the importance of and best practices for data reporting, see the Data Collection and Transparency module.)
- **Commission independent evaluations.** Especially in the early years of a program, and periodically thereafter, independent evaluations have proved valuable to identifying program successes and challenges and making recommendations for improvement.¹¹²

Appendix B: PIPP Design Issue: Fixed Versus Variable Credit

PIPPs aim to ensure affordability by limiting water bills to a fixed percentage of household income. Administratively there are several ways to achieve this goal. Two approaches are discussed below: the variable credit method and the fixed credit method. Both are already in use in the water sector: Philadelphia’s PIPP uses the variable method, while Baltimore’s uses the fixed. (For more on these programs, see the “PIPPs in Practice” section of this module.)

The variable credit method represents the most straightforward application of the PIPP concept. Under this approach, a participating household’s monthly bill is determined by multiplying its monthly income by the targeted percentage of income (e.g., 3 percent). Unless the household’s income changes, it will receive the same bill each month.

This approach is called the variable credit method because, although the *household’s* bill remains the same, from the *utility’s* perspective the credit provided to the household changes each month, depending on the household’s actual water usage.¹¹³ The amount of this credit is the difference between the household’s nondiscounted bill and the bill under the PIPP program. This can be expressed in the following formula:

$$\text{Monthly Credit} = \text{Total Monthly Bill} - (\text{Monthly Household Income} \times \text{Percentage-of-Income Cap})$$

The variable credit method has the substantial benefit of ensuring that households will receive a stable monthly bill that does not exceed the affordability threshold. However, it also removes any incentive for conservation, since changes in consumption do not change the household’s final bill. Variable credits can also be more difficult for the utility to manage financially, since the amount the utility must “spend” on credits changes every month.

For this reason, some advocates prefer the fixed credit approach. With this method, the utility calculates a fixed credit for the entire year, based on the household’s annual income and estimated annual usage. This fixed annual credit is apportioned across the household’s monthly bills so that the household receives a portion of the annual credit each month.¹¹⁴ The method of calculating the annual credit can be expressed in the following formula:

$$\text{Annual Credit} = \text{Estimated Annual Bill} - (\text{Annual Household Income} \times \text{Percentage-of-Income Cap})$$

Because the fixed credit approach provides the same credit each month regardless of the household’s actual usage, it preserves an economic incentive for households to conserve water. Reductions in water usage will result in a smaller monthly bill, while increases will result in a larger one. For the same reason, however, it is possible for bills to exceed the percentage-of-income cap during periods of high usage. This can be true on a monthly or even an annual basis if usage consistently exceeds the amount predicted when calculating the annual credit. Nevertheless, some advocates believe that the benefits of conservation outweigh the drawbacks.

* Instead of using actual monthly household income, utilities estimate monthly household income, for example by estimating annual income and dividing by 12. This approach is easier administratively for both the utility and the household. However, it may result in monthly bills that exceed the affordability threshold if a household’s actual income in a given month is lower than the estimated monthly amount.

Appendix C: PIPP Comparison Chart: Philadelphia Versus Baltimore¹¹⁵

	Philadelphia – Tiered Assistance Program	Baltimore – Water4All
Income eligibility threshold/ affordability threshold (i.e., percentage-of-income bill cap)	<p>Income threshold:</p> <p>0–50% of federal poverty level (FPL)</p> <p>51–100% FPL</p> <p>101–150% FPL</p> <p>>150% FPL & special hardship*</p> <p>Bill cap:</p> <p>2% of household income (HHI)</p> <p>2.5% HHI</p> <p>3% HHI</p> <p>4% HHI</p> <p>*Special hardship includes any “hardship condition” that threatens the ability to access basic necessities, including but not limited to an increase in household size, serious illness, death of the primary wage earner, domestic violence, age, disability, or veteran status.</p>	<p>Income threshold:</p> <p>0–50% of federal poverty level (FPL)</p> <p>51–100% FPL</p> <p>>100–200% FPL</p> <p>Bill cap:</p> <p>1% of household income (HHI)</p> <p>2% HHI</p> <p>3% HHI</p>
Monthly credit calculation method (see Appendix B for an explanation of the variable credit and fixed credit approaches)	<p>Variable credit</p> $C_m = B_m - (I_m \times P)$ <p>C_m = monthly credit B_m = monthly bill I_m = estimated monthly household income P = Percentage-of-income bill cap</p>	<p>Fixed credit</p> $C_m = C_a / 12$ $C_a = B_a - (I_a \times P)$ <p>C_m = monthly credit C_a = annual credit B_a = estimated annual bill I_a = estimated annual household income (for current calendar year) P = Percentage-of-income bill cap</p>
Minimum bill amount	\$12/month	N/A
Renter eligibility	Open only to renter households that are direct customers of the Water Department (i.e., have a water account).	Open to noncustomer renter households who pay their landlord for water service through a payment separate from the rent.
Method of application	Application allowed online, in person, or by mail. Applicants must use unique application form prefilled with their account information. ¹¹⁶	Application allowed online, in person, or by mail.

	Philadelphia – Tiered Assistance Program	Baltimore – Water4All
Application requirements	<p>Application must include:</p> <ul style="list-style-type: none"> ■ Name, birth date, and monthly income amount for each household member (SSN or tax ID number are optional) ■ Two proofs of residence, separate from income documentation ■ Income documentation for each household member and source of income 	<p>Complete application must include:</p> <ul style="list-style-type: none"> ■ Name and age of each household member ■ Income and identity documentation for each household member ■ Certification statement(s) signed by applicant and all income-earning household members ■ For non-account-holding tenants, a separate certification statement, name and address of landlord, and proof that the tenant pays the landlord for water service in a payment separately from rent (e.g., reimbursement)
Income verification requirements	Proof of income (e.g., tax return, pay stubs) OR benefit award letter from another income-qualified program. ¹¹⁷	Proof of income (e.g., tax return, pay stubs) OR proof of participation in any state program requiring income up to 200% of the federal poverty level.
Recertification requirements	Recertification of income, special hardship, or other eligibility required upon written request of the Water Department and no more than once per year.	Households must reapply at the end of each calendar year.
Debt relief component	<p>An enrolled household's water debt is eliminated after paying 24 TAP bills in full. If household's enrollment lapses prior to 24 months because it is no longer income-eligible, the amount of debt eliminated is prorated to the number of complete bill payments made while enrolled.</p> <p>Pending changes to the program as of spring 2022 would instead eliminate 1/24 of the household's debt each time it paid a TAP bill. (In other words, the debt would be forgiven incrementally each month, rather than all at once after 24 months.)¹¹⁸</p> <p>Note: Under a separate Philadelphia law, all water arrears older than 15 years are automatically forgiven.</p>	For each on-time payment made by a household enrolled in the program, an equivalent amount is credited toward existing debt. For example, if a household's Water4All bill is \$30 and the household pays that amount, then \$30 of pre-existing debt is eliminated.
Conservation component	Households enrolled in TAP must agree to accept and maintain any free conservation measures offered by the Water Department.	Fixed credit approach to calculating bill credit preserves conservation incentive for participating households (see Appendix B).
Cost recovery mechanism	TAP program costs are recovered through a "rate rider" (surcharge) for non-TAP customers. The surcharge is volumetric (i.e., per gallon). Separate surcharges are calculated for water and sewer rates.	Program costs are recovered in general rates (exact mechanism TBD).

ENDNOTES

- 1 Additional approaches, which are also sometimes labeled “assistance” programs, are designed to make it easier for households to pay regular utility bills on time without reducing the total amount billed to the household. For example, flexible billing policies allow households to change the timing and frequency of their bill, which can help some customers better match their expenses to their regular payday, avoiding potential cash flow problems. Levelized billing options allow households to elect to receive a consistent water bill every month, based on average monthly usage, which can also benefit lower-income customers by increasing predictability and eliminating “bill shock.” This toolkit does not offer a detailed discussion of these approaches, though they can be a useful complement to other types of assistance. See U.S. Environmental Protection Agency (hereinafter EPA), *Drinking Water and Wastewater Utility Customer Assistance Programs*, April 2016, https://www.epa.gov/sites/default/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf; National Consumer Law Center (hereinafter NCLC), *Surviving Debt: Expert Advice for Getting Out of Financial Trouble* (Boston: NCLC, 2021), <https://library.nclc.org/surviving-debt-links> (paywalled) (see the discussion in chapter 15, “Level Payment Plans, Dealing With Quarterly and Bi-Monthly Bills, Changing Your Due Dates”).
- 2 The Public Utility Commission of Ohio opened a proceeding in 1983 that began as a proceeding to address reconnecting customers for the winter heating season who had been disconnected for nonpayment. Interestingly, the PIPP was considered in response to a utility’s objection that the commission had failed to take into consideration a customer’s ability to pay before the commission imposed a shutoff moratorium. See In re Investigation Into Long-Term Solutions Concerning Disconnection of Gas & Elec. Serv. in Winter (Phase I) Emergencies, No. 83-303-GE-COI (Ohio Pub. Util. Comm’n Nov. 23, 1983); NCLC, “7.2.3.2.2: The Ohio PIPP” in *Access to Utility Service: Disconnections, Metering, Payments, Telecommunications, and Assistance Programs* (Boston: NCLC, 2018), <https://library.nclc.org/aus>.
- 3 EPA, *Drinking Water and Wastewater Utility Customer Assistance Programs*, 6.
- 4 About half focused on assisting households already in arrears or in imminent danger of falling into arrears by offering temporary assistance and flexible payment plans. The other half provided ongoing bill reductions, primarily through bill discounts and, much less frequently, through water efficiency assistance or lifeline rates. See EPA, *Drinking Water and Wastewater Utility Customer Assistance Programs*, 6.
- 5 U.S. Department of Health and Human Services (hereinafter HHS) Office of Community Services, “Low Income Household Water Assistance Program (LIHWAP),” accessed May 11, 2022, <https://www.acf.hhs.gov/ocs/programs/lihwap>.
- 6 LIHEAP Clearinghouse, “Energy Ratepayer Funded Programs,” accessed May 11, 2022, <https://liheapch.acf.hhs.gov/dereg.htm>. See also NCLC, “Utility Affordability Programs,” chapter 7 in *Access to Utility Service*, 149–226.
- 7 Sridhar Vedachalam and Randall Dobkin, *H₂O Affordability: How Water Bill Assistance Programs Miss the Mark*, Environmental Policy Innovation Center, May 2021, 19, <https://static1.squarespace.com/static/611cc20b78b5f677dad664ab/t/614ceba138df2542c1afld70/1632431025551/Cap+Report-Final-May.20.2021.pdf>.
- 8 Laura Feinstein, “Keeping the Water On: Addressing rising water-bill debt during the COVID-19 economic crisis,” *SPUR*, January 2021, 4, https://www.spur.org/sites/default/files/2021-03/spur_keeping_the_water_on.pdf.
- 9 Low Income Oversight Board et al., “Joint IOU Report of the CARE and ESA Programs,” Low Income Oversight Board Meeting, Compton, California, June 24, 2019, <https://liob.epuc.ca.gov/wp-content/uploads/sites/14/2020/12/Item-8.-Joint-IOUs-Report-of-CARE-and-ESA.pdf>.
- 10 Illinois, Colorado, New Jersey, and Ohio have PIPPs for electric and gas customers. See Illinois Department of Commerce, “PIPP: Percentage of Income Payment Plan and Budget Billing,” accessed May 11, 2022, <https://www2.illinois.gov/dceo/CommunityServices/UtilityBillAssistance/Documents/PIPP%20brochure-2019.pdf>; John Howat, Karen Lussion, and Olivia Wein, *Utility Bill Affordability in Colorado: Reforms to Protect Low-Income Consumers from Increasing Rates*, NCLC, October 2020, <https://www2.ed.gov/policy/highered/reg/hearulemaking/2021/codoloraholdharmreportfin.pdf>; State of New Jersey Board of Public Utilities, “Universal Service Fund,” accessed May 11, 2022, <https://www.state.nj.us/bpu/residential/assistance/usf.html>; Ohio Department of Development, “Percentage of Income Payment Plan Plus (PIPP),” accessed May 11, 2022, <https://development.ohio.gov/individual/energy-assistance/2-percentage-of-income-payment-plan-plus>.
- 11 See Roger Colton, *2005 Water Affordability Program*, Fisher Sheehan & Colton, January 2005, <http://www.fsconline.com/downloads/Papers/2005%2001%20Detroit%20Water.pdf>.
- 12 Colton also played a significant role in developing the Philadelphia and Baltimore PIPPs described in this module. He served as a consultant and expert witness to advocates in Philadelphia and as a consultant to advocates in Baltimore.
- 13 Although there is no *national* consensus on a water affordability standard, some states or localities may be closer to alignment. In Pennsylvania, for example, there is no official statutory or regulatory standard for water/wastewater affordability, but there is an emerging consensus that the combined cost for water and wastewater service should not exceed 2.5–4 percent of household income, according to local utility advocates.
- 14 Philadelphia’s program includes water, wastewater, and stormwater costs, while Baltimore’s covers water and wastewater only.
- 15 305 Ill. Comp. Stat. 20/18 (Illinois electric and gas PIPP); Ohio Admin. Code 122:5-3 (Ohio electric PIPP). See also Ohio Public Utilities Commission, *Energy Assistance Resource Guide 2020–2021*, accessed May 11, 2022, <https://ocean.ohio.gov/OCEAN/Help/EA%20Guide%20Final.pdf>.
- 16 Phila. Bill No. 140607-AA (2015), <https://phila.legistar.com/LegislationDetail.aspx?ID=1821444&GUID=EE8B7A07-A75F-4EBD-A0BF-4D71FEB5919B&FullText=1>.
- 17 For an overview of advocacy efforts leading to the enactment of the ordinance and program launch, see Robert W. Ballenger and Thu B. Tran, “Uncharted Waters: The Emergence of Low-Income Water Affordability in Philadelphia,” *Clearinghouse Review*, February 16, 2016, <https://www.nrdc.org/sites/default/files/uncharted-waters-affordability-philadelphia-20160216.pdf>. See also Elizabeth A. Mack et al., “An Experiment in Making Water Affordable: Philadelphia’s Tiered Assistance Program (TAP),” *Journal of the American Water Resources Association* 56, no. 3 (June 2020): 431–49, <https://par.nsf.gov/servlets/purl/10219789>.
- 18 For the regulations establishing the TAP program, see Water Dep’t Regs. ch. 2, <https://water.phila.gov/pool/files/pwd-regulations-chapter-2.pdf>. For key program documents, see City of Philadelphia, “Water Bill Customer Assistance Application and Documents,” accessed May 11, 2022, <https://www.phila.gov/documents/water-bill-customer-assistance-application-and-documents/>.
- 19 The city’s regulations define a “special hardship” as a “hardship condition that *may include, but is not limited to*, the following: (i) an increase in the Customer’s number of dependents in the household; (ii) a seriously ill household member; or (iii) circumstances that threaten the household’s access to the necessities of life if payment of a delinquent bill is required.” Phila. Water Dep’t Regs. ch. 2, § 206.1(k), <https://water.phila.gov/pool/files/pwd-regulations-2021-08-27.pdf>. The regulations also specify that the following will be accepted as evidence of special hardship: proof of a job loss extending more than four months; proof of a serious illness extending more than nine months; proof of death of the primary wage earner; domestic abuse order or program enrollment determination; and proof of additional dependent children, elderly persons, disabled persons, or returning veterans in the household. A customer may also request an individual financial assessment to determine eligibility. Phila. Water Dep’t Regs. ch. 2, § 206.2(2), <https://water.phila.gov/pool/files/pwd-regulations-2021-08-27.pdf>.
- 20 See Phila. Water Dep’t Rates and Charges (eff. Sept. 1, 2021), <https://water.phila.gov/pool/files/rates-and-charges-2021-09-01.pdf>.

- 21 These figures reflect the current per-Mcf (thousand cubic feet) charges of \$0.69/Mcf for water and \$1.09/Mcf for sewer, multiplied by average residential monthly usage of 0.5 Mcf. (Note: This differs from the result of multiplying the per-gallon rates cited previously by the average usage of 3,740 gallons, due to additional decimal values cut off in the per-gallon rates.) A proposed settlement agreement between the Philadelphia Water Department and the designated public advocate for water consumers in Philadelphia would update the surcharge to \$1.03/Mcf for water and \$1.63/Mcf for sewer. The updated surcharge reflects the estimated cost of enrolling approximately 7,000 additional households in the program in 2022–23 (from 17,148 to 24,199 households out of an estimated total eligible population of around 60,000). See Philadelphia Water Department, Re: Philadelphia Water Department Proposed Charges in Rates and Charges, 2022 TAP-R Adjustment Proceeding, Joint Petition for Settlement of TAP-R Proceeding, <https://www.phila.gov/media/20220425205927/PWD-2022-TAP-joint-settlement-final-Combined.pdf>. If approved by the city’s Water, Sewer, and Storm Water Rate Board, the new surcharge would result in an estimated charge for the typical residential household of \$1.33 per month or \$15.96 per year.
- 22 See Water Revenue Bureau, “Tiered Assistance Program (TAP) Debt Forgiveness Flyer,” City of Philadelphia Department of Revenue, May 12, 2021, <https://www.phila.gov/media/20210514135633/What-is-TAP-debt-forgiveness-flyer.pdf>.
- 23 Mack et al., “An Experiment in Making Water Affordable,” 439; Robert Ballenger, Director, Energy Unit, Community Legal Services, personal communication, April 27, 2022.
- 24 Mack et al., “An Experiment in Making Water Affordable,” 439.
- 25 See, e.g., Phila. Water Dep’t, 2021 Gen. Rate Proceeding, Settlement Term Sheet, <https://www.phila.gov/media/20210430162106/Settlement-Term-Sheet.pdf>.
- 26 See Re. Application of the Philadelphia Water Department Proposed Change in Water, Wastewater and Stormwater Rates and Related Charges, Fiscal Years 2022–2023, Direct Testimony of Roger D. Colton on Behalf of the Public Advocate, March 22, 2021, 64–70, <https://www.phila.gov/media/20210324163618/PA-St-3-Colton.pdf>.
- 27 Baltimore Right to Water Coalition page, “Baltimore Right to Water Coalition,” Facebook, accessed May 11, 2022, <https://www.facebook.com/BaltimoreRightToWaterCoalition>.
- 28 Balt. Bill No. 18-0307 (2019), <https://baltimore.legistar.com/LegislationDetail.aspx?ID=3769175&GUID=4A3F24AF-7CC7-442B-86C5-B01AF0A148F7>. The ordinance was modified in 2020 to clarify tenant protections and the role of the Office of Water-Customer Advocacy. Balt. Bill 20-0626 (2020), <https://baltimore.legistar.com/LegislationDetail.aspx?ID=4659246&GUID=092BF89E-736E-40A9-9849-8C2D84E44852&Options=&Search=>.
- 29 See City of Baltimore, “Water4All Discount Program,” accessed May 11, 2022, <https://cityservices.baltimorecity.gov/Water4All>.
- 30 The ordinance that created the program also required landlords whose residential tenants reimburse them for water service to include a provision in the lease stating the calculation method and the average monthly cost of water. This allows the tenant to more easily establish proof of eligibility for Water4All. See Balt. City Code art. 13, § 7-3(a-1), [https://legislative.baltimorecity.gov/sites/default/files/Art%2013%20-%20Housing_\(rev%2004-08-22\).pdf](https://legislative.baltimorecity.gov/sites/default/files/Art%2013%20-%20Housing_(rev%2004-08-22).pdf).
- 31 Households with incomes up to 150 percent of the federal poverty level are eligible for a 100 percent reduction in the fixed monthly water and wastewater charges and an 85 percent reduction in the fixed monthly stormwater charge. Households with incomes up to 50 percent of the federal poverty level also receive 20 percent off the volumetric charges. See Emily Sullivan, “Activists, Tax Experts Say Water Affordability Program Meant to Help City Residents May Burden Them Instead,” WYPR News Baltimore, August 2, 2021, <https://www.wypr.org/wypr-news/2021-08-02/activists-tax-experts-say-water-affordability-program-meant-to-help-city-residents-may-burden-them-instead>.
- 32 See Rianna Eckel, Amy Hennen and Jaime Lee, “Use ARPA funding to ensure water affordability in Baltimore,” *Baltimore Sun*, March 18, 2022, <https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-0321-water-affordability-baltimore-20220318-krkiem5su5b7hjpt764g65ymu4-story.html>; Internal Revenue Service, “Frequently asked questions for states and local governments on taxability and reporting of payments from Coronavirus State and Local Fiscal Recovery Funds,” accessed June 8, 2022, <https://www.irs.gov/newsroom/frequently-asked-questions-for-states-and-local-governments-on-taxability-and-reporting-of-payments-from-coronavirus-state-and-local-fiscal-recovery-funds>. For more on options for delivering assistance payments to renters, see the Protections and Support for Renters module.
- 33 Pittsburgh Water and Sewer Authority, “Customer Assistance Programs,” accessed May 11, 2022, <https://www.pgh2o.com/residential-commercial-customers/customer-assistance-programs>.
- 34 Vedachalam and Dobkin, *H₂O Affordability*, 26.
- 35 Lauren A. Patterson, et al., “Customer Assistance Programs and Water Affordability,” *Journal AWWA* 114, no. 5 (June 2022): 46-57, <https://awwa.onlinelibrary.wiley.com/doi/10.1002/awwa.1921>.
- 36 DC Water’s Customer Assistance Program, open to very low income households, provides a discount on the first 400 cubic feet (3,000 gallons) of water and sewer services used each month, plus discounts on several fixed fees and charges. The utility estimates that the combined discount amounts to around \$80 per month. The Customer Assistance Program II is open to slightly higher income customers and provides a discount on the first 300 cubic feet (2,250 gallons) of water and sewer service used per month, plus a discount on one monthly charge. The combined benefit is estimated at around \$52. The Customer Assistance Program III is open to moderate-income customers and offers a discount on one monthly charge, for a benefit of around \$14. See District of Columbia Department of Energy & Environment, “Water Affordability Programs,” accessed May 11, 2022, <https://doee.dc.gov/service/wateraffordability>.
- 37 See California Public Utilities Commission, “CPUC Acts to Ensure Essential Utility Services for Consumers at Risk of Disconnections,” press release, October 7, 2021, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-acts-to-ensure-essential-utility-services-for-consumers-at-risk-of-disconnections>; Decision Authorizing Percentage of Income Payment Plan Pilot Programs, Cal. PUC Decision 21-10-012 (Oct. 7, 2021) in Rulemaking 18-07-005, Order Instituting Rulemaking to Consider New Approaches to Disconnections and Reconnections to Improve Energy Access and Contain Costs, Attachment A, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M413/K823/413823568.PDF>.
- 38 Some assistance programs are specifically for seniors or people with disabilities, without regard to income. This module does not address unique issues that may arise with such programs.
- 39 Massachusetts previously operated a Low-Income Water and Sewer Assistance Program. However, this program has not been funded since 2003. When it was running, it was implemented in coordination with the Low Income Home Energy Assistance Program and offered a maximum discount of 25 percent on water and sewer bills. See Ma. Gen. Laws ch. 23B, § 24B; Massachusetts Advisory Committee to the U.S. Commission on Civil Rights, *Turning Off the Tap: Massachusetts’ Looming Water Affordability Crisis*, December 2020, 10, <https://www.usccr.gov/files/2021-01-27-MA-SAC-Water-Affordability-Report.pdf>. See also California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program: Appendices*, February 25, 2020, 7, https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/ab401_appendices.pdf.
- 40 Water and Sewer Financial Assistance Act, Ill. Pub. Act 102-262 (2021), codified at 305 Ill. Comp. Stat. 21/51 through 21/99, <https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=102-0262>. For an in-depth profile of this legislation, see River Network Deep Dive, “Lessons From Illinois,” River Network, accessed May 11, 2022, <https://www.rivernetwork.org/state-policy-hub/water-affordability/deep-dive-water-affordability/#lessons-from-il>.

- 41 This was included in a 2021 law requiring utilities to remove all lead service lines. Lead Service Line Replacement and Notification Act, Ill. HB3739 § 5, codified at 20 Ill. Comp. Stat. 605/605-870, <https://www.ilga.gov/legislation/fulltext.asp?DocName=10200HB3739enr&GA=102&SessionId=110&DocTypeId=HB&LegID=132788&DocNum=3739&GAID=16&SpecSess=&Session=>. River Network has published a helpful profile of this legislation. As it notes, it is unclear how this program would interact with the program created under the Water and Sewer Financial Assistance Act. River Network Deep Dive, “Lessons From Illinois.”
- 42 HHS Office of Community Services, “Low Income Household Water Assistance Program”; HHS Office of Community Services, “LIHWAP Map Tribal Contact Listing” accessed May 11, 2022, <https://www.acf.hhs.gov/ocs/map/lihwap-map-tribal-contact-listing>.
- 43 California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program*, February 2020, https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/ab401_report.pdf.
- 44 Cal. SB 222 (2021–2022), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=20210220SB222.
- 45 N.J. S.291 (2022), <https://www.njleg.state.nj.us/bill-search/2022/S291> (proposed bill requiring the New Jersey Department of Community Affairs to establish a low-income water, sewer, and stormwater assistance program, with consideration of a percentage-of-income approach, and appropriating \$75 million to fund the program); Mich. SB 344 (2021), [http://www.legislature.mi.gov/\(S\(1deqimh1uaude3n4mhtgl4vz\)\)/mileg.aspx?page=GetObject&objectname=2021-SB-0344](http://www.legislature.mi.gov/(S(1deqimh1uaude3n4mhtgl4vz))/mileg.aspx?page=GetObject&objectname=2021-SB-0344) (proposed bill requiring Mich. Dep’t of Health and Human Sers. to establish income-based water affordability program).
- 46 In 2005 the California Public Utilities Commission adopted a Water Action Plan that included the development of low-income rate assistance programs as one of its policy objectives for Class A water utilities (utilities with more than 100,000 customers). This plan was updated in 2010 to respond to severe drought conditions and standardize the eligibility criteria for the programs. In 2017 the commission looked at further standardizing the low-income rate assistance programs and explored the possibility of pooling the programs for a more comprehensive approach. The Class A low-income water assistance programs now have a common name, Customer Assistance Program (CAP). However, the commission is leaving broader changes to the funding or structure of the CAP to an ongoing statewide process related to implementation of a state law that required the California State Water Resources Control Board to develop a plan for a statewide low-income rate assistance program. For now, modification to the Class A CAP occurs in each water utility’s general rate case. See Cal. PUC Decision 20-08-047 (Aug. 27, 2020) in Rulemaking 17-06-024, Order Instituting Rulemaking Evaluating the Commission’s 2010 Water Action Plan Objective of Achieving Consistency Between Class A Water Utilities’ Low-Income Rate Assistance Programs, Providing Rate Assistance to All Low-Income Customers of Investor-Owned Water Utilities and Affordability, 3–4, <https://docs.epuc.ca.gov/PublishedDocs/Published/G000/M346/K225/346225800.PDF>.
- 47 Ohio HB 639 (2020), <https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA133-HB-639> (proposed bill requiring each water system to establish an income-based water affordability program that “prevents the violation of the human right to water”).
- 48 According to the state’s 2020 “Michigan Clean Water Plan,” these “affordability and planning grants,” using \$7.5 million appropriated by the state legislature, “support communities in developing sustainable water rate plans and implementing affordability pilots. Grants will be capped at \$500,000 for water supplies applying individually. Multiple supplies partnering to develop a regional plan can receive up to \$2 million.” See Michigan Department of Environment, Great Lakes, and Energy, “MI Clean Water Plan Fact Sheet,” September 30, 2020, <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Funding/WIFS/Michigan-Clean-Water-Plan-Fact-Sheet.pdf?rev=80459f476b71427984969a960f711c21&hash=3C51BC22785473A1F5DBBE0198E3FEFD>. For an overview of one grant recipient’s efforts to develop an affordability plan, see Water Resources Commissioner Jim Nash, “Affordability and Planning Grant Overview and Objectives Narrative,” February 22, 2022, <https://www.oakgov.com/water/water/Documents/2022-02-22%20Affordability%20and%20Planning%20Grant%20Overview%20and%20Objectives%20Narrative.pdf>.
- 49 Such requirements would have an ample connection to the underlying purpose of the funds. When investing in local water infrastructure improvements, the federal government and states have an interest in ensuring that the utility provides affordable access to essential water services to everyone in its service area.
- 50 305 Ill. Comp. Stat. 20/18; Illinois Department of Commerce, “PIPP: Percentage of Income Payment Plan and Budget Billing.” The Illinois program applies only to utilities with more than 100,000 customers, however.
- 51 Colorado has an affordable percentage-of-income payment plan for electric customers with payments set at 3–6 percent of income if electricity is the primary heating fuel, and 2–3 percent if it is not. Minimum payments range from \$10 to \$20 per month. See 4 Colo. Code Regs. § 723–3.3412. Colorado also has an affordable percentage-of-income payment plan for natural gas customers with payments set at 2–3 percent of income if natural gas is the primary heating fuel; the minimum payment is capped at \$10/month. See 4 Colo. Code Regs. § 723-4.4412. A 2020 report by the NCLC highlighted some of the strengths and weaknesses of the Colorado PIPP. See Howat, Lusson, and Wein, *Utility Bill Affordability in Colorado*.
- 52 New Jersey’s Universal Service Fund (USF) program is designed so that households at or below 185 percent of the federal poverty level pay no more than 6 percent of their annual income on electric and natural gas service combined (3 percent electric and 3 percent natural gas). USF households that have at least \$60 in arrears are also automatically enrolled in Fresh Start, an arrearage management plan that forgives one-twelfth of the customer’s debt for each on-time payment of their monthly bills going forward. See State of New Jersey Board of Public Utilities, “Universal Service Fund,” accessed May 11, 2022, <https://www.state.nj.us/bpu/residential/assistance/usf.html>; Kevin Randolph, “NJ Board of Public Utilities Expands Access to Low-Income Energy Assistance,” *Daily Energy Insider*, August 12, 2019, <https://dailyenergyinsider.com/news/21082-nj-board-of-public-utilities-expands-access-to-low-income-energy-assistance/>; State of New Jersey Board of Public Utilities, “NJBPUE Expands Utility Assistance Programs to Help Residents Financially Impacted by Pandemic,” press release, June 24, 2021, <https://www.nj.gov/bpu/newsroom/2021/approved/20210624.html>.
- 53 The Ohio Public Utilities Commission created a natural gas and electric PIPP for customers of commission-regulated, investor-owned utilities. Ohio PIPP customers pay natural gas bills set at 5 percent of the household’s income and electric bills also set at 5 percent (unless the house heats with electricity, in which case the bills are set at 10 percent of household income). The minimum bill is \$10. See Ohio Department of Development, “Percentage of Income Payment Plan Plus (PIPP),” accessed May 11, 2022, <https://development.ohio.gov/individual/energy-assistance/2-percentage-of-income-payment-plan-plus>; Ohio Admin. Code 122:5-3-01 through 122:5-3-10.
- 54 For example, New Hampshire passed legislation that directed the state utility commission to design low-income electric assistance programs that are efficient and targeted to low-income households. N.H. Rev. Stat. Ann. § 369-B:1. A working group process led to a report to the commission on the structure of an Electric Assistance Program. The working group recommended a PIPP, but that design was modified to a sliding-scale bill discount due to concerns about administrative efficiency. The discounts range from 8 percent to 76 percent of the electric bill. See NCLC, “7.2.2.2.3: Straight Discount Programs in Other States” in *Access to Utility Service*. See also New Hampshire Department of Energy, “Electric Assistance Program,” accessed May 11, 2022, <https://www.energy.nh.gov/consumers/help-energy-and-utility-bills/electric-assistance-program>. In 1999 Wisconsin passed a law establishing an energy assistance program and created a public benefits fund (funded through a system benefits charge, fees on electric bills, funds from participating munis and coops, LIHEAP, weatherization assistance, and voluntary contributions). See 1999 Assembly Bill 133, 199 Wis. Act 9, § 109 (Wis. eff. Oct 29, 1999). See also NCLC, “7.2.7.3: Wisconsin’s System Benefits Charge Program” in *Access to Utility Service*.
- 55 See 305 Ill. Comp. Stat. 20/18. See also New Hampshire Department of Energy, “Electric Assistance Program.”
- 56 New Jersey Electric Discount and Energy Competition Act, Pub. L. 1999, ch. 23, §§ 2, 12, codified at N.J. Stat. Ann. 48:3-50, 48:3-60 (West), http://www.njcleanenergy.com/files/file/23_.pdf.
- 57 Mass. Gen. Laws ch. 164, § 1F(4). See NCLC, “7.2.2.2.3: Straight Discount Programs in Other States” in *Access to Utility Service*.

- 58 California's 2012 "right to water" law is the most prominent example of this approach. More recently, in 2021, Virginia's legislature adopted a similar resolution. See International Human Rights Law Clinic, *The Human Right to Water Bill in California: An Implementation Framework for State Agencies*, University of California, Berkeley, School of Law, May 2013, [https://www.law.berkeley.edu/files/Water_Report_2013_Interactive_FINAL\(1\).pdf](https://www.law.berkeley.edu/files/Water_Report_2013_Interactive_FINAL(1).pdf); Va. HJR No. 538 (Spec. Sess. 2021) (2021), <https://lis.virginia.gov/cgi-bin/legp604.exe?212+ful+HJ538ER+pdf> (recognizing that access to clean, potable, and affordable water is a human right).
- 59 In 2012 California water affordability advocates secured the passage of a law recognizing "that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Cal. AB 685 (2011-2012), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB685. The law required state agencies to "consider" the human right to water when making policy decisions but did not provide any mechanism for enforcement. In the years that have followed, the law has had a significant impact, including by bolstering the case for further legislation to address the issue. For example, since 2012 California has passed laws to require the development of a low-income affordability plan for the state, to strengthen shutoff protections for water users, and to create a Safe and Affordable Drinking Water Fund with dedicated annual funding for water systems. See Cal. AB 401 (2015-2016), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB401; Cal. SB 998 (2018-2019), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB998; Cal. SB 200 (2019-2020), https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB200. The "right to water" law has provided a legal justification for state agencies to consider affordability in their decision making and has encouraged agencies to take a more coordinated and ambitious approach to tackling water affordability issues. See, e.g., Cal. PUC Decision 20-08-047 (Aug. 27, 2020) in Rulemaking 17-06-024. California Public Utilities Commission, *Environmental & Social Justice Action Plan Version 2.0*, April 7, 2022, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>.
- 60 Cal. AB 401 (2015-2016), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB401; California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program*.
- 61 HHS Office of Community Services, "Low Income Household Water Assistance Program." For the legislative language establishing and funding this emergency COVID-19 relief program, see HHS Office of Community Services, LIHWAP Laws and Regulations, <https://www.acf.hhs.gov/ocs/law-regulation/lihwap-laws-and-regulations>.
- 62 HHS Office of Community Services, "Low Income Household Water Assistance Program (LIHWAP)," accessed June 8, 2022, https://www.acf.hhs.gov/sites/default/files/documents/ocs/COMM_OCS_LIHWAP%20FactSheet_FY2022.pdf.
- 63 Ibid.
- 64 HHS Office of Community Services, "The Low Income Household Water Assistance Program Data Dashboard," accessed June 8, 2022, <https://lihwap-hhs-acf.opendata.arcgis.com>.
- 65 Amendment to Rules Committee Print I17-9 (offered by Tlaib of Mich), https://amendments-rules.house.gov/amendments/TLAIB_035_LIDWAP210628110017323.pdf.
- 66 Becky Hammer and Larry Levine, "EPA Rethinks Water Affordability, Reverses Trump Approach," NRDC *Expert* blog, February 17, 2022, <https://www.nrdc.org/experts/becky-hammer/epa-re-thinks-water-affordability-reverses-trump-approach>. When a municipality is required to upgrade its wastewater system to meet clean water requirements, the utility will often argue that the effects of rate increases on low-income customers limit how much they can invest and how fast they can do it. When these concerns arise, the EPA's "Financial Capability Assessment Guidance" provides guidelines for determining a long-term compliance schedule or reconsidering underlying clean water goals. In February 2022, at the urging of environmental justice and clean water advocates, EPA proposed updates to the guidance, directing utilities in this situation to consider options to mitigate cost burdens on low-income households. In the proposed updates, Appendix C provides a long list of options to consider. Many of those options (such as percentage-of-income payment plans, bill discounts, equitable rate structures, and water efficiency assistance) are also explored in this toolkit. For EPA's 2022 draft guidance, see EPA, *Proposed 2022 Clean Water Act Financial Capability Assessment Guidance*, February 2022, https://www.epa.gov/system/files/documents/2022-02/2022-proposed-fca_feb-2022.pdf.
- 67 A proposed bill in California that would establish a statewide Water Rate Assistance Fund includes provisions addressing most or all of these elements. See Ca. SB 222 (2021-2022), https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB222.
- 68 For example, some utilities have funded modest assistance programs with revenues from leasing space for cellular equipment on utility property; voluntary contributions from customers (solicited by such means as giving customers the option to "round up" their bills); voluntary contributions through employee programs; or donations from external nonprofits.
- 69 For example, in Raleigh, North Carolina, the City Council in 2016 established a water customer assistance program using general municipal tax revenue. The program provides grants of \$240 to customers in financial distress, with no ongoing assistance to help people afford future bills. The program was initially funded at \$240,000 per year. Today, presumably because the City Council's funding does not meet the full need, the program's website invites charitable contributions to supplement its funding. See University of North Carolina Environmental Finance Center, *Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities*, 2017, 146-47, <https://efc.sog.unc.edu/wp-content/uploads/sites/1172/2021/06/Navigating-Pathways-to-Rate-Funded-CAPs.pdf>. See also City of Raleigh, "Assistance Program for Water and Sewer Utility Customers," accessed May 11, 2022, <https://raleighnc.gov/water-and-sewer/assistance-program-water-and-sewer-utility-customers>.
- 70 All customers not participating in the program pay a marginal per gallon surcharge to fund the program. As of September 2021, the charge was approximately \$0.00009 per gallon for water and \$0.0001 for sewer. See Phila. Water Dep't, Rates and Charges (eff. Sept. 1, 2021), <https://water.phila.gov/pool/files/rates-and-charges-2021-09-01.pdf>.
- 71 The Great Lakes Water Authority (GLWA), a wholesale water and sewer utility, uses a portion of its revenues to fund a Water Rate Assistance Program for communities in its service area. GLWA itself is funded by contractual payments from the communities it serves. Those communities generate revenue to cover their expenses, including their contract payments to GLWA, through rates they charge to their own retail water and sewer customers. See University of North Carolina Environmental Finance Center, *Navigating Legal Pathways*, 132-33.
- 72 A high rate of customer nonpayment due to unaffordable bills—even after all attempts at bill collection have been exhausted—means either that the costs of filling budget gaps will be reallocated to paying customers or that the system will not generate sufficient revenues to provide clean, safe water and sewer services. It can also increase the utility's cost of borrowing, as credit rating agencies take into account a utility's collection rates. S&P Global Ratings, "Affordable for Now: Water and Sewer Rates at U.S. Municipal Utilities," October 24, 2018, <https://www.spglobal.com/ratings/en/research/articles/181024-affordable-for-now-water-and-sewer-rates-at-u-s-municipal-utilities-10740499>.
- 73 Studies from Indiana, Colorado, and New Jersey are cited in the following reports: Roger D. Colton, *Water Bill Affordability for the City of Philadelphia*, April 9, 2015, https://www.michigan.gov/-/media/Project/Websites/mpsc/workgroups/eaac/Colton_City_Council_comments--April_8_2015--Final.pdf?rev=33f7913f3d2248ccab30993f3c1b8cdf; Roger D. Colton, *Baltimore's Conundrum: Charging for Water/Wastewater Services That Community Residents Cannot Afford to Pay*, Food & Water Watch, November 2018 (Revised), <https://www.foodandwaterwatch.org/wp-content/uploads/2022/02/BaltimoreWater-RogerColton.pdf>.

- 74 A 2010 report by the Water Research Foundation and the EPA stated that “customer assistance programs have been shown to be capable of producing more total revenue for the dollars expended.” See John Cromwell et al., *Best Practices in Customer Payment Assistance Programs*, Water Research Foundation, January 2010, 91, https://aquadoc.typepad.com/files/water_affordability_4004.pdf. Similarly, in 2017 the American Water Works Association’s executive director for government affairs noted that “frequent service shutoffs and resolving bad debt from customers who cannot afford their rates can be more expensive for a utility than instituting a [customer assistance program] and assisting customers in paying their bills . . . The benefit to the utility of having discounts or lower rates for low-income customers is the increased likelihood of collecting payment from these customers.” G. Tracy Mehan and Ian D. Gansler, “Addressing Affordability as a Necessary Element of Full-Cost Pricing,” *Journal AWWA* 109, no. 10 (October 2017): 46-50 (internal citation omitted), http://aquadoc.typepad.com/files/affordability_full-cost_pricing_jawwa20o2017.pdf. The U.S. Environmental Protection Agency’s Environmental Financial Advisory Board has urged solutions to household-level affordability problems because these problems “often result in increased costs and decreased revenues for water and wastewater utilities, impacting all customers, rich and poor alike.” Environmental Financial Advisory Board letter to U.S. Environmental Protection Agency Administrator, “Affordability Rate Design for Households,” February 22, 2006, <https://nepis.epa.gov/Exe/ZyPDF.cgi/90060J00.PDF?Dockey=90060J00.PDF>.
- 75 The American Water Works Association’s “MI Manual,” the industry standard for water rate setting, outlines the ways that *not* having affordability programs can hurt a utility’s bottom line. University of North Carolina Environmental Finance Center, *Navigating Legal Pathways*, 18.
- 76 See note 48.
- 77 The Clean Water State Revolving Fund is the main source of federal funds for wastewater and stormwater infrastructure projects. Most project funding is provided as loans. States can offer grants (known as “additional subsidization”) for infrastructure projects to communities that, according to affordability criteria set by the state, would struggle to pay back a loan. For communities eligible only for loans for infrastructure projects, states can offer grants to support discounts to low-income customers, if those customers would be burdened by rate increases needed to pay back a loan. 33 U.S.C. § 1383(i)(1)(A). The EPA recently called attention to this provision in a memorandum concerning implementation of the 2021 Bipartisan Infrastructure Law, noting that “EPA expects states to work with EPA and stakeholders to identify how this provision can be implemented.” See Radhika Fox, “Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law,” memorandum to EPA Regional Water Division Directors and State SRF Program Managers, March 8, 2022, 26, https://www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf. Federal law does not authorize states to do this for drinking water projects under the Drinking Water State Revolving Fund.
- 78 Delaware Department of Natural Resources and Environmental Control, “DNREC Environmental Finance, DPH Office of Drinking Water, Water Infrastructure Advisory Council Announce Additional Subsidization Assistance Program for Low-Income Subgroups,” press release, June 15, 2016, <https://news.delaware.gov/2016/06/15/dnrec-dph-announce-additional-subsidization-assistance-program/>. These grants were also available in connection with the Drinking Water State Revolving Fund program.
- 79 N.J. S.291 (2022), <https://www.njleg.state.nj.us/bill-search/2022/S291>.
- 80 California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program*, chapter 5, 46–48; California State Water Resources Control Board, *Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program Appendices*, Appendix G, 73–80.
- 81 Political feasibility is likely the biggest constraint on funding sources. This will, of course, vary from state to state.
- 82 Water and Sewer Financial Assistance Act, Ill. Pub. Act 102-262 (2021), codified at 305 Ill. Comp. Stat. 21/51 through 21/99. For an in-depth profile of this legislation, see River Network Deep Dive, “Lessons From Illinois.”
- 83 In California, legislation introduced to authorize a statewide program based on the State Water Board’s report does not provide any funding or specify a future source of funding. Cal. SB 222 (2021-2022), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=20210220SB222. Legislation pending in New Jersey to create a water assistance program would provide \$75 million in seed money from the state’s American Rescue Plan Act funds, though it does not provide an ongoing funding source. N.J. S.291 (2022), <https://www.njleg.state.nj.us/bill-search/2022/S291>. Illinois has actually enacted a law to create a statewide water assistance program—separate from the Water and Sewer Financial Assistance Act—though it becomes effective only when and if the legislature appropriates funds. This was included in a 2021 law requiring utilities to remove all lead service lines. Lead Service Line Replacement and Notification Act, Ill. HB3739 § 5, codified at 20 Ill. Comp. Stat. 605/605-870.
- 84 LIHEAP, for example, is funded through annual appropriations. Historical funding levels give an idea of the order of magnitude at which Congress has funded utility assistance. The highest annual LIHEAP appropriations occurred during the national financial crisis in 2009–11, peaking at \$5 billion in 2010. From 2017 to 2021, the average annual appropriation was about \$3.6 billion (including a spike in 2020 due to the COVID-19 pandemic). At the program’s peak, it served 22 percent of eligible households; from the late 2000s to the present, it has served approximately 15 percent of eligible households each year. See Scott Bechler, “How a Decades-Old Federal Energy Assistance Program Functions in Practice: A Deep Dive Into LIHEAP,” Duke University Nicholas Institute for Environmental Policy Solutions, April 2021, <https://nicholasinstitute.duke.edu/sites/default/files/publications/How-a-Decades-Old-Federal-Energy-Assistance-Program-Functions-in-Practice-A-Deep-Dive-into-LIHEAP.pdf>.
- 85 Public Law 117-58, § 50109, 135 Stat. 1148 (2021), <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>.
- 86 H.R. 3684, 117th Congress, §§ 13302–13303, as passed by the House on July 1, 2021, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text/eh?r=1>.
- 87 UNC Environmental Finance Center, *Navigating Legal Pathways*.
- 88 *Ibid.* State law on this question often differs depending on whether a utility is regulated by the state’s utility commission. Where the law is ambiguous, a commission-regulated utility can resolve the question by seeking permission in a rate case and getting a ruling from the commission.
- 89 Nick Leonard, Erin Mette, and Oday Salim, *Legal Pathways to Income-Based Drinking Water Rates in Michigan*, Great Lakes Environmental Law Center & National Wildlife Federation, April 2020, <http://nwf.org/-/media/Documents/PDFs/NWF-Reports/2020/Legal-Pathways-to-Income-Based-Drinking-Water-Rates-in-Michigan.ashx?hash=5EC45917D701F8A1EE7052BD2CFC552FCC5F7B1&la=en>. Over the years, the Detroit Water and Sewer Department has often raised this objection. In years past, advocates worked with pro bono counsel and with the City Council to develop legal memos countering the utility’s position.
- 90 Before launching its program, to help avoid legal challenges, Atlanta adopted an ordinance with findings that describe “how assisting low-income customers provides a ‘direct and substantial benefit to the drinking water and wastewater system’ by retaining customers, reducing bad debt, and so forth. [The ordinance] states that this low-income [assistance program] enhances the city’s ability to operate utilities in ‘an economical manner and on a revenue producing basis.’” See University of North Carolina Environmental Finance Center, *Navigating Legal Pathways*, 123–24.
- 91 University of North Carolina Environmental Finance Center, *Navigating Legal Pathways*, 9, 17–18.
- 92 While such attorney general opinions do not have a binding legal effect, they can help allay a utility’s concerns about legal challenges.
- 93 Water and Sewer Financial Assistance Act, Ill. Pub. Act 102-262 (2021), codified at 305 Ill. Comp. Stat. 21/51 through 21/99. For an in-depth profile of this legislation, see River Network Deep Dive, “Lessons From Illinois.”
- 94 N.J. Bill A.1961 (Session 2022–2023), <https://www.njleg.state.nj.us/bill-search/2022/A1961>.

- 95 One nonprofit research organization’s report on water affordability suggests the Economic Policy Institute’s Family Budget Calculator and the Department of Housing and Urban Development’s list of Fair Market Rents as starting points for understanding the local cost of living. See Feinstein, “Keeping the Water On,” 9. One national water affordability study, which evaluated water bills as a share of household disposable income, proposes another approach to determining the cost of living. Manuel P. Teodoro, “Water and Sewer Affordability in the United States,” *AWWA Water Science* 1, no. 2 (March 2019): 1–10, <https://doi.org/10.1002/aws2.1129>.
- 96 For example, in New Jersey, as a water shutoff moratorium was about to expire in March 2022, the state legislature provided continued shutoff protections for any residential customer who initiates an application for the Low Income Household Water Assistance Program by June 15, 2022. The law provides the same protection to energy utility customers applying for assistance. N.J. Pub. L. 2022, ch. 4, https://pub.njleg.state.nj.us/Bills/2022/AL22/4_.PDF. A state agency notice to municipalities further explains the law’s provisions. N.J. Dept. of Community Affairs, Division of Local Government Services, “Treatment of Residential Water, Sewer & Electric Arrearages; Residential Ratepayer Assistance,” Local Finance Notice 2022-11, April 29, 2022, <https://www.nj.gov/dca/divisions/dlgs/lfns/22/2022-11.pdf>.
- 97 Vedachalam and Dobkin, *H₂O Affordability*, 7.
- 98 A report by SPUR compared bill discount programs operated by four major California water utilities and found that the most highly enrolled programs had “simple applications that require no additional documentation.” See Feinstein, “Keeping the Water On,” 5.
- 99 A 2021 survey of 20 large utility programs by the Environmental Policy Innovation Center found that “easy-to-access [assistance programs] are an anomaly among water utilities.” Most programs required applicants to submit multiple documents, and only 6 of 20 programs allowed online submissions. See Vedachalam and Dobkin, *H₂O Affordability*, 15.
- 100 Phila. Water Dep’t Regs. ch. 2, § 206.2(e), <https://water.phila.gov/pool/files/pwd-regulations-2021-08-27.pdf>.
- 101 The California energy discount program, CARE, allows self-certification, subject to audit. This approach has resulted in participation rates that average 90 percent for investor-owned energy companies. Self-certification was also used by several utilities to administer relief during the COVID-19 pandemic, with excellent results. See, e.g., Water Equity Network and US Water Alliance, “Modern, Effective, and Compassionate Billing: How Louisville Made an Overdue Upgrade to Assistance Programs and Improved the Utility Customer Relationship,” 2021, 4, <http://uswateralliance.org/sites/uswateralliance.org/files/FINAL%20Louisville%20case%20study.pdf>.
- 102 Seattle Public Utilities customers have up to six months to submit their proof of income and state-issued ID after applying. See Vedachalam and Dobkin, *H₂O Affordability*, 35.
- 103 California’s large water utilities maintain a data exchange with the energy utilities for the purpose of enrolling households in their low-income water assistance programs. The exchange, which includes privacy protocols, occurs four times a year, and capability has been expanded to allow municipal water utilities to participate. This is possible in part because state law allows public utilities to share certain customer information with local governments (name, address, telephone, and email). See Cal. Gov’t Code § 8593.4 (West). Customers authorize the sharing of their data, including information about their participation in assistance programs, when applying for energy or water assistance. See Cal. PUC Decision 21-07-029 (Jul 20, 2021) in Rulemaking 17-06-024.
- 104 A recent report found that only 4 of 20 large utility assistance programs surveyed linked the water assistance application with another utility or social assistance program. Vedachalam and Dobkin, *H₂O Affordability*, 17.
- 105 Ibid.
- 106 Feinstein, “Keeping the Water On,” 8.
- 107 Vedachalam and Dobkin, *H₂O Affordability*, 19.
- 108 A case study of Louisville’s COVID-19 relief program by the US Water Alliance provides an example of an effective, modern approach to customer outreach. See Water Equity Network and US Water Alliance, “Modern, Effective, and Compassionate Billing.” For an example of social media promotional materials, see HHS Office of Community Services, Director of the Division of Energy Assistance, “Low Income Household Water Assistance Program,” letter to LIHWAP grant recipients, May 9, 2022, <https://www.acf.hhs.gov/ocs/policy-guidance/lihwap-social-media-and-renters-toolkit-fy2022>.
- 109 Janet Clements et al., *Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers*, Water Research Foundation, 2017, 73–78, https://www.waterrf.org/system/files/resource/2019-07/4557_1.pdf.
- 110 City of Philadelphia Department of Revenue, *Annual Report to the Mayor on the Tiered Assistance Program (TAP)*, March 31, 2021, <https://www.phila.gov/media/20210412104452/Tiered-Assistance-Program-TAP-2020-annual-report.pdf>.
- 111 Conor Morris, “What Can Cleveland Learn From Philadelphia’s Ambitious Experiment in Water Billing?” *The Land*, May 2, 2022, <https://www.thelandcle.org/stories/water-has-increasingly-become-more-expensive-for-the-people-struggling-to-make-ends-meet>. For more on Philadelphia’s formal rate-setting process, see this toolkit’s module on Accountability and Public Participation in Decision Making.
- 112 For a library of reports from one firm that has done many evaluations of energy affordability and assistance programs, see Applied Public Policy Research Institute for Study and Evaluation, “Resource Library,” accessed May 12, 2022, <http://www.appriseinc.org/resource-library/selected-reports/bill-payment-assistance/>.
- 113 Sometimes the utility may calculate the credit every month and apply it to the customer’s bill so that it shows up on the bill. Other times, it may be calculated only later, for the purpose of cost accounting.
- 114 Under a fixed credit approach, the annual credit may be apportioned evenly across the household’s monthly bills, so that the households receives one-twelfth of the annual credit each month. Alternatively, it may be apportioned unevenly, for example to correspond to fluctuations in seasonal usage.
- 115 Phila. Water Dep’t Regs. ch. 2, §§ 206.0–206.10, <https://water.phila.gov/pool/files/pwd-regulations-2021-08-27.pdf>; Balt. City Code art. 24, §§ 2-6 to 2-15, [https://legislative.reference.baltimorecity.gov/sites/default/files/Art%2024%20-%20Water_\(rev%2004-11-22\).pdf](https://legislative.reference.baltimorecity.gov/sites/default/files/Art%2024%20-%20Water_(rev%2004-11-22).pdf). See also City of Baltimore, “Water4All Discount Program.”
- 116 This requirement creates some challenges around outreach. For example, the Philadelphia Water Department cannot simply hand out generic forms to community organizations, since each applicant must use a unique form. However, this does enable the Water Department to automatically suspend shutoff activities while the household completes the application.
- 117 The application website includes the following examples of proof of income: unemployment compensation printout, workers’ compensation award, Social Security letter, pension letter, or welfare benefits statement. See City of Philadelphia, “Water Customer Assistance,” accessed May 12, 2022, <https://water.phila.gov/cap/>.
- 118 Robert Ballenger, Director, Energy Unit, Community Legal Services, personal communication, April 27, 2022. Once finalized, the new rules will be available at Philadelphia Water Department, “Regulations,” accessed May 19, 2022, <https://water.phila.gov/regulations/>.