

# Best Practices for Water Assistance Programs and Water Access in Pittsburgh



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## *Executive Summary*

COVID-19 highlighted many social issues, the importance of water affordability among them. The economic impact of the pandemic affected many people's ability to pay bills for fundamental needs like water. However, the United States has long been facing a water affordability crisis, the causes of which began decades ago. This report looks at customer assistance programs, their shortcomings, the Philadelphia Tiered Assistance Program (TAP) as an example of good practices, and affordability issues in the city of Pittsburgh.

Customer assistance programs often have trouble reaching customers in need because utilities struggle to identify and communicate programs and benefits to their customers. There can also be a lack of trust between customers and the utility, or customers may feel the programs do not do enough to meaningfully help their situation. Additionally, renters frequently miss out on assistance programs because their bills go through a landlord.

The Philadelphia TAP addresses many of these issues with robust public outreach, water debt forgiveness, and capping water bills at a percentage of monthly household income. The program has proven very effective since its inception in 2018 with 20,000 households actively enrolled.

Pittsburghers struggle with water affordability, both for the reasons mentioned above with customer affordability programs and for a decades long policy requiring the main public utility in the city to essentially subsidize the largest private utility. The main public utility has taken steps to improve water affordability with increased customer outreach and payment plans. It also had the most robust assistance response to the pandemic in the region.

In light of all of this, this report recommends that affordability be at the heart of water utilities going forward. Federal

intervention to increase funding and customer support is unlikely at this time. Public utilities must strengthen their customer engagement, their assistance programs, and cooperate with activists and NGOs to push for support, funding, and interventions from the state and federal levels to ensure their citizens' rights to water are respected and upheld.

## *Background*

Federal divestment from the water and sanitation sectors has been going on for nearly fifty years, declining continuously from \$76.27 per person in 1977 to \$13.68 per person in 2014. This has led to higher costs for utilities to deliver service, maintain infrastructure, and modernize lines and facilities. These costs are passed on to customers through rate increases, and old lines often remain anyway. Between 2010 and 2018, water bill costs in 12 major cities increased an average of 80% (Lakhani, 2019). The EPA recommends investing \$35 billion every year for 20 years for the country's water infrastructure to reach federal safety and efficiency guidelines (Lakhani, 2019). Additionally, The United States is the only industrialized country on earth with no water regulatory system (Lakhani, 2019). There are also no federal assistance programs for water, unlike the energy sector.

In 1981, the Low Income Home Energy Assistance Program (LIHEAP) was established at the federal level. It offers bill assistance, grants, and weatherization assistance for people living near the federal poverty line. State LIHEAP programs can expand eligibility based on people's relationship to the state median poverty line. However, water assistance programs are generally left to the individual utility to determine.

Pittsburgh has five water utilities within its boundaries. The two largest are the public Pittsburgh Water and Sewer Authority (PWSA) and the private Pennsylvania

American Water Company (PAWC), and as such they will be the main focus of the discussion of Pittsburgh's water utilities in this paper.

### *Customer Assistance Programs*

When customers have difficulty paying their water bills, they become vulnerable to water shutoffs by the utility company. Households that are disconnected from water services face health risks, as losing running water means they cannot properly wash their hands, clean, cook, or bathe (Feinstein, 2021). As an alternative, many utilities offer customer assistance programs that relieve some of the financial burden on their customers. These programs range from water service shutoff moratoria in the winter, which was expanded nationwide during the COVID-19 pandemic, to discounts on water bills, grants, payment plans, debt forgiveness, etc.

Enrolling customers in bill discount programs will help slow the rate at which they accrue debt, and will make water more affordable for them (Feinstein, 2021). These programs, while well-intentioned, are often under-utilized. There are many reasons for this, including issues in reaching the customers in need of assistance, promoting awareness about the programs, and educating the target audience (Epa.gov, 2016).

As noted by the University of Illinois's National Review of Water Affordability Programs and Policies, an important factor in the creation of water affordability programs is the utility's understanding of their customers in need (Schneemann and Tello, 2019). Implementing a successful affordability program will require that the utility understand who is struggling, and why they are not paying. The utility should consider that it is frequently low-income, seniors, disabled residents, and those living in homes facing crisis (addiction, job loss, illness, etc.) who are most likely to

be in need of assistance. As the utility gains a better idea of why customers are having trouble paying, they will be better able to match customers with the appropriate program (Schneemann and Tello, 2019).

Additionally, there are factors that affect participation on the customers' side. These include customers being unaware of the programs, not knowing how to apply to them, or feelings of mistrust or stigma associated with the inability to pay for the service. If customers do not have reliable access to phone, internet services, or transportation, this also makes it more difficult for them to enroll or apply (Epa.gov, 2016).

Another issue comes with renters, who are part of a master meter and do not receive a direct bill from the utility company. Thus, those who live in apartments, condos, or subsidized housing may not be aware that there are affordability programs available to them, resulting in lowered participation (Epa.gov, 2016). These customers are often the most vulnerable and most likely to fall through the cracks, as they do not pay the utility company directly. Because these customers are not being tracked in the utility's billing systems, the company will lack the information necessary to identify and contact them about affordability programs (Berahzer, 2019).

Moreover, utility companies may face difficulty on their end identifying and contacting their general customers who are struggling to afford their water bills (Berahzer, 2019). Customer information tracking presents a challenge to those utility companies who lack complete and up-to-date data on their customers. For example, if a utility collects only a physical address as contact information for a customer, any paper notices sent in the mail risk not reaching the prospective CAP customer. This is especially true in the case of short-term renters or

students, who change addresses frequently (Berahzer, 2019).

However, even for utilities that do have detailed information about their customers, it may be that identifying the customers who are eligible for affordability programs is still a difficult task (Berahzer, 2019). Often utilities do not keep track of certain factors affecting their customer's ability to pay their water bills, like their income status (low-income or fixed-income). This may force the utility to rely on historical data about previous shut-offs or nonpayment, which does not give any insight about which customers are struggling with their bills now or will be in the future (Berahzer, 2019).

Additionally, utilities may find difficulty communicating with their customers about affordability programs due to language barriers, trust issues between the utility and the community, or cultural barriers (Berahzer, 2019). Partnering with established community organizations can help build trust between the utility and the community. This can also aid in overcoming cultural or language barriers in the spread of information (Schneemann and Tello, 2019).

### *Best Practices in Water Affordability*

In 2017, Philadelphia introduced the Tiered Assistance Program for its public water utility, the Philadelphia Water Department (PWD). It was the first program of its kind in the United States and remains an example of best practices for water affordability, streamlining enrollment for assistance programs, and customer input.

To apply for water assistance in Philadelphia, a customer of PWD can apply in person, by mail, or online. Customers do not have to be delinquent to be accepted into TAP, an improvement over past assistance programs that only got help to people after they were in debt. Paper applications are available in 10 languages, and PWD contracts with a translation service if another language

is requested. The applications ask for the applicant's social security number, proof of residence, and proof of household income totaled from everyone aged 18 and older. The applications have individual barcodes that are scanned and the applications are digitized into PDFs viewable throughout the PWD to track how long they take to be approved or denied and who handles it. Applicants are placed in whichever assistance program gives them the most help and for which they are eligible, and the PWD runs recertification processes every one to two years to keep data up to date.

Once accepted into TAP, customers have their monthly water bills capped at a percentage of their monthly household income based on their income relative to the Federal Poverty Line (FPL). If a household makes less than 50% of the FPL, their bill is capped at 2% of monthly income. A household making between 50% and 100% of the FPL has bills capped at 2.5% of monthly income. A household making between 100% and 150% of the FPL has its bills capped at 3% of monthly income. If a household makes more than 150% of the FPL, they can still be eligible for TAP in a special hardship case that caps water bills at 4% of monthly household income. Special hardships include the death of a primary income earner, a serious illness or injury in the household, a family member moving in during the last twelve months, and a new birth, among others. This keeps all tiers of TAP compliant with the recommendation from the United Nations to hold water bill costs under 5% of monthly household income (United Nations, 2015).

Table 1: Breakdown of TAP tiers and Prices

Income Relative to FPL	Water Bill as % of Household Income
<50%	2%
50% – 100%	2.5%
100% –150%	3%
>150% with special hardship	4%

Source: TAP information webpage from PWD

Additionally, TAP customers do not have to make payments on outstanding water debt while they are in the program. Thanks to pressure from activists and Community Legal Services, debts older than 15 years are eliminated, and paying 24 months of TAP bills in full erases the customer’s water debt. Totally eliminating water debt occurs in 2 stages for some customers. Forgiveness of penalty debt, the penalty charges accrued for being in arrears on payments, was approved first, and customers who enrolled before September 2020 will earn penalty debt forgiveness first. Principle water debt, the actual amount of unpaid bills, became eligible for forgiveness in September 2020. Customers accepted into TAP after September 2020 can earn forgiveness concurrently on both types of debt.

TAP is funded by a small surcharge on the bills of PWD customers not in assistance programs. This surcharge is split between water and sanitation charges and comes out to around a dollar in total for most people (Merritt, 2018). If PWD wants to change the rates, they must get approval to do so from the Water Rate Board, an independent body established by city council to investigate and mediate water and sewage rate changes. The Public Advocate is also part of this process.

The Public Advocate is another independent entity established to represent the citizens and their interests and needs in the rate change process. Community Legal Services served as the Public Advocate for the recent rate change negotiations.

Table 2: Organizations involved in TAP

Organization	Role
<b>Philadelphia Water Department</b>	Administers and oversees the providing of water, sewage, and stormwater services for the city of Philadelphia and the infrastructure necessary to these services. Testifies to city council about its budget requests during budget proceedings.
<b>Water Revenue Bureau</b>	Division of Revenue Department that handles collection of funds from water bills for PWD. Handles all review and processing of TAP applications.
<b>Water Rate Board</b>	Independent organization that investigates and adjudicates all proposed water utility rate changes requested by PWD including TAP surcharges.
<b>Public Advocate</b>	Independent organization that represents the customers in any deliberation over proposed water utility rate changes. Negotiates with PWD on rates, programs, and services.
<b>City Council</b>	Approves budget for PWD and all city departments.

Source: Author's own analysis

The Water Rate Board can approve of any changes, for general customers and for surcharges that fund TAP, which will then go into effect and be charged and collected by the Department of Revenue to be passed onto PWD. The Philadelphia Water Department's large customer base allows for the surcharge to be so small, which could potentially make a similar program more challenging in smaller markets.

The Water Rate Board offers an added protection to consumers from undue price hikes, while the Public Advocate gives the community a voice during negotiations. Community Legal Services serving as the public advocate gives customers an independent group with a record of advocacy and expertise in the law and water sector to represent them. This structure that is in place to make sure people's voices are heard and quality and affordability of services are prioritized before city government makes policies is an example of good public utility governance and a major aspect of TAP's success.

Philadelphia estimated that there were 60,000 TAP eligible households in 2017 (PWD, 2016) and hoped to have 20,000 households enrolled in 2020 (Nonko, 2020). As of the beginning of August 2021, 16,824 customers are active in TAP and 23,900 have been approved in total in the last 4 years. The discrepancy between actively enrolled customers and the earlier projection is potentially due to the shutoff moratorium in Philadelphia during the COVID-19 pandemic. Most people do not take action to address water debt or apply to assistance programs until they receive a shutoff warning, so the moratorium has kept new approvals low.

These steps Philadelphia has taken to overcome enrollment barriers of course do not eliminate all of the issues. Lack of information still persists, issues reaching renters in many cases still remain, and signing people up still takes time and depends on

customers taking action to apply. However, these measures streamline a lot of the work and are aimed specifically at getting the necessary information to customers who need it. Additionally, the transparency and flexibility of the process and the real benefits people stand to reap help to combat a lack of trust between customers and the utility.

### *Pittsburgh*

While the publicly run Pittsburgh Water and Sewer Authority serves approximately two thirds of the city's population, there are three other water operators serving city residents (and other areas outside the city limits). These include the Pennsylvania American Water Company—a private firm with a large presence throughout the state serving around a third of the City's residents – and two smaller public water operators, West View Water Authority and William Penn Joint Water Authority, serving a small fraction of residents. Table 3 highlights their basic operational characteristics. Figure 1 shows the service area of the water operators, and Figure 2 shows the incidence of calls made for water assistance programs by zip code.



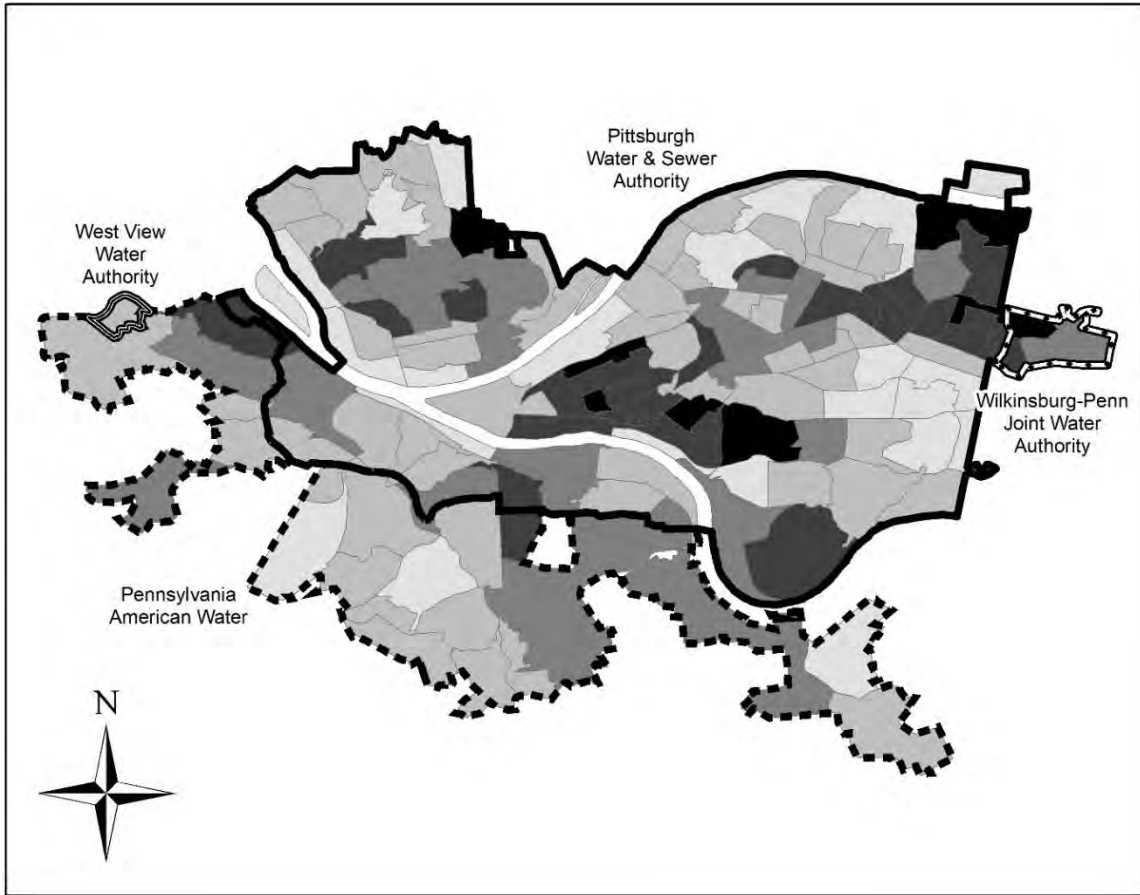
Table 3: Basic characteristics of water operators in Pittsburgh

Characteristics	PWSA	PAWC	WVWA	WPJWA
<b>City of Pittsburgh population served</b>	73,000 residential customers	27,000 residential customers	380 residential customers	1,566 residential customers
<b>Share of City total*</b>	53.60%	19.80%	0.30%	1.10%
<b>Public/Private</b>	Public, Municipal Authority	Private	Public, Municipal Authority	Public, Municipal Authority
<b>Received financial assistance from Federal or state for responding to COVID19 pandemic</b>	No, but are planning on requesting extra expenses reimbursement	No, but are planning on requesting extra expenses reimbursement	No	No
<b>Has there been a significant increase in delinquent bills during COVID19?</b>	8,873 residential accounts delinquent (previous year it was 4,289)	21% from previous year	Increased, not specifics	Increased, no specifics

Source: Marcela Gonzalez Rivas, using information provided by water systems representatives. \*The totals do not add up to 100% because many residential accounts include multi-family buildings, therefore one residential account might provide water service to multiple households. Source: <https://www.census.gov/quickfacts/pittsburghcitypennsylvania>



Figure 1: Poverty and water service operators in Pittsburgh



**Legend**






**Water Provider Boundaries**

**Provider**

-  Pittsburgh Water & Sewer Authority
-  Pennsylvania American Water
-  Wilkinsburg-Penn Joint Water Authority
-  West View Water Authority

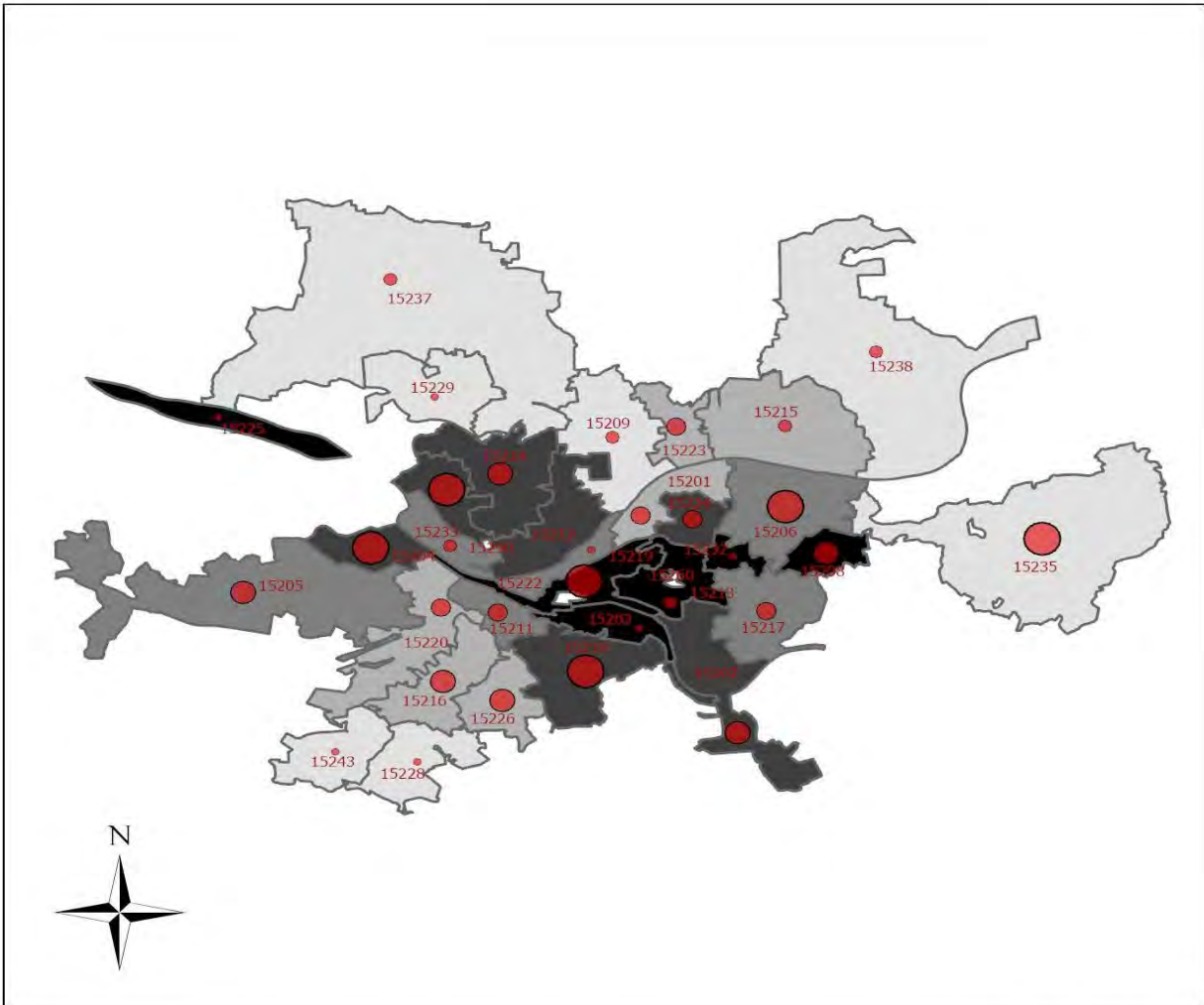
**Individuals Below 200% FPL**

**Portion of Population**

-  0% - 20%
-  21% - 40%
-  41% - 60%
-  61% - 80%
-  81% - 100%

Source: Map produced by Ben Saint-Onge using Western Pennsylvania Regional Data Center, 2010 Census Tracts, <https://data.wprdc.org/dataset/2010-census-tracts> for shape files; 2018 ACS (5-Year Estimates), Poverty Measures, [https://www.socialexplorer.com/tables/ACS2018\\_5yr/R12556485](https://www.socialexplorer.com/tables/ACS2018_5yr/R12556485); service areas boundaries from PWSA' interactive map and corresponding with the WVWA.

Figure 2: Poverty and Water Assistance Program Calls in Pittsburgh



Source: Map produced by Luciana Lemos using Western Pennsylvania Regional Data Center, 2010 Census Tracts/ 211 Service Requests, <https://wprd.org/dataset/211-requests>; 2018 ACS (5-Year Estimates), Poverty Measures, [https://www.socialexplorer.com/tables/ACS2018\\_5yr/R12556485](https://www.socialexplorer.com/tables/ACS2018_5yr/R12556485) for shape files.

Figure 2 shows a possible relationship between the number of calls and poverty rates in the city of Pittsburgh. It is clear that the largest number of calls requesting water service payment assistance was concentrated in zip codes with the highest percentage of people living in poverty, between 12% and 34.2% (which is the maximum poverty rate in the region). For example, in the zip code 15219, where the portion of the population living in poverty is between 14.1% and 34.2%, there were a total of 56 requests. Additionally, in the zip codes 15212 and 15210, where the poverty rate is between 12.5% and 14.1%, the total of calls were 134 and 176 respectively. On the other hand, in regions where poverty rates are lower, as in the zip codes 15243 and 15229, there were a total of only 4 and 9 calls respectively.

It should be noted, however, that this relationship was not proven in all the regions analyzed. In the zip codes 15232 and 15225, with a high portion of the population living in poverty, between 14.1% and 34.2%, the number of calls requesting water payment assistance was minimal, with a total of 1 and 3 calls respectively. Another exception was the zip code 15235, where the portion of the population living in poverty is less than or equal to 6.2%, and the number of calls requesting assistance was 206, the highest. It is possible that these exceptions may have occurred as a result of the pandemic pushing more people who had not previously needed assistance to now require it due to economic hardship. However, to understand the reasons for these exceptions, it would be necessary to carry out a more in-depth analysis or investigate other data related to these regions, such as unemployment rates or homeownership.

Something as fundamental as water should not exacerbate the already significant challenges of living in poverty, nor should it be a cause for remaining poor. However, old infrastructure in Pittsburgh combined with the

nearly fifty year trend of federal divestment from water has led to water bills totaling several hundred dollars per year. Table 4 compares the water service charges of Pittsburgh's utilities, showing that PWSA's rates are highest (and likely to increase for the next two years, depending on PUC approval), exacerbating the affordability problem.

Table 4: Comparison of monthly service charges by water operators in Pittsburgh

<b>Charges</b>	<b>PWSA</b>	<b>PAWC</b>	<b>WVWA</b>	<b>WPJWA*</b>
<b>Fixed rate</b>	\$27.27	\$16.5	\$10.43	NA
<b>Volume charge (for every 1000 gallons)</b>	\$11.04	\$12.2	\$6.98	\$8.42
<b>Typical household bill consuming up to 3000 gallons a month</b>	\$60.39	\$53.1	\$31.37	\$25.27

Source: Marcela González Rivas, using information provided by water systems representatives and from websites. Current rates as of the time of writing, July 2020. Note that WPJWA does not separate fixed vs volumetric charges, instead it charges \$25.21 for the first 3,000 gallons and afterwards \$8.42 for every 1000 gallons. Note that PWSA also charges for blocks of 1000 gallons consumed, even if not consumed in its entirety. In comparison, PAWC and WVWA charges for every 100 gallons.

Traditionally, however, PWSA water service rates were not the highest in the city. For decades they were lower than those of PAWC, the privately owned company. It is important to put the current rates in historical perspective, as PWSA’s infrastructure conditions and consequently current rates are at least partly explained by an agreement that put PWSA at a disadvantage vis-à-vis PAWC (private). The agreement was signed by the city’s legislative body—Pittsburgh City Council—with PAWC’s predecessor company in 1958 (which lasted until 2020). The agreement forced all city residents, regardless of their water service provider, to pay the same service rates, effectively subsidizing the private water company for 60 years, amounting to millions of dollars that could have been reinvested in public water infrastructure. Meanwhile, the private company was using these funds to invest in its own infrastructure (Bauder 2019).

Under growing financial pressure, the PWSA Board decided to establish a public-private partnership with Veolia Water in 2012 to take over management of water services (WaterWorld 2013). This arrangement soon resulted in a series of problems, including boil water advisories and spikes of lead in water, ending in lawsuits between PWSA and Veolia in 2016 and undermining the trust of consumers in the quality of their water (Rosenfeld 2017). PWSA’s management returned to public control, but in 2018 PWSA was put under state regulatory oversight (Hughes 2017), where it had to comply with an ambitious investment plan, resulting in further rate increases.

It is important to note here that one of the advantages of the governance structure of public water operators is that they often set up mechanisms for public participation. For example, the Board of Directors of PWSA traditionally works with civil society organizations on issues related to water,

including affordability. When PWSA was placed under PUC oversight this was formalized. For example, each rate increase must be approved by the PUC and includes participation from a variety of actors. The PUC also requires utilities under its oversight to set up a low-income assistance advisory committee (LIAAC). The role of the LIAAC is to shape assistance programs with members from PUC, the consumer protection office, PWSA staff, Board members, as well as members of civil society and community-based organizations, setting up an official participatory process.

According to interviews with members of this committee, there are differences in how to address low enrollment levels in assistance programs. PWSA is focused on improving community outreach and launched a new initiative, PGH20 Cares, to help reach potential beneficiaries by working solely on increasing enrollment in current programs in low income neighborhoods with a dedicated website, payment plans for people making between 250% and 300% of the FPL, and tabling sign ups at community events. Civil society and community-based organizations in LIAAC are also advocating for full protections, making water shut off moratoria permanent and implementing a debt forgiveness program. Debt forgiveness was implemented in 2020 for customers in the Bill Discount Program that accepts people making less than 150% of the FPL. Those in the program earn \$15 forgiven from their water debt for every monthly, on-time payment. Renters who are not the responsible billing party do not qualify for this program. Permanent shut off moratoria has not been enacted.

All this is not to say that PWSA did not have good governance before PUC oversight. In fact, the PWSA's Board of Directors had instituted water protections for low-income customers in late 2017 working closely with civil society organizations as part

of "Our Water Campaign" efforts. However, the procedures instituted under the oversight formalize a more democratic process, providing a record of participation and increasing transparency, which are all steps in the right direction within PWSA, and the PGH20 Cares initiative is working hard to address customer assistance shortcomings.

### *Customer Assistance Programs in Pittsburgh*

Every utility in Pittsburgh has customer assistance programs. The two largest, PWSA and PAWC, have some of the most comprehensive in the region, but enrollment rates are low, both before and during the COVID-19 pandemic. As part of the research for this paper interviews were conducted with community leaders and community organizers, as well as conducting a survey of community-based organizations and found some of the reasons that might explain the low enrollment of the programs. The discussion focuses on PWSA because it serves most of Pittsburgh's residents, and it is the operator for which we have more information.

The relatively low enrollment in the PWSA's programs is likely related to the fact that these programs – which are similar to other utility assistance programs – do not provide enough assistance (Czewinski et al. 2017, 148). For example, they are missing customers with incomes not low enough to qualify but who still struggle to pay their water bills, such as elderly groups on a fixed income. Furthermore, the programs require customers to pay past due charges or make a sincere effort of payment, which usually means paying a portion of the past bills and committing to paying the rest within a set amount of time. Without at least partial debt forgiveness, accrued bills represent a severe financial burden.

Table 5: Customer assistance programs offered by water systems in Pittsburgh

Water system/assistance program		Prior to COVID19	Expansions	Process of registration
<b>PWSA</b>				
	Winter Shut Off Moratorium	Income eligibility 250% of FPL	Waived income eligibility requirement throughout 2020	Call PWSA, Dollar Energy or Community Based organizations
	Bill Discount Program	150% of the Federal Poverty Level.	Waived the 12 month recertification throughout 2020	
	Hardship Grant Program (Annual up to \$300.00)	150% of the Federal Poverty Level.	Waived the sincere effort of payment requirement throughout 2020	
<b>PAWC</b>				
	H2O Help to Others Program	Payment arrangement, proof of financial hardship	NA	Call water system directly
	Grant Programs (Annual grant up to \$500.00)	200% of the Federal Poverty Level	NA	
	Service Fee Discounts	150% of the Federal Poverty Level	NA	
<b>WVWA</b>				
	Hardship Program (Grant up to \$100, every six months)	150% of Federal Poverty Level and sincere effort of payment	Expanded to 200% of FPL and increased grant to \$200	Dollar Energy
<b>WPJWA</b>				
	Payment plan	50% deposit of debt, balance to be paid within two weeks to two months	50% deposit was waived with a three month repayment schedule	Call water system

Source: Marcela González Rivas based on information from water systems representatives and their websites at the time of research, July 2020.



The programs' low enrollment is also due to several factors discussed earlier in this paper, namely lack of information about them. PWSA engaged in community outreach by holding public information meetings across neighborhoods responding to spikes of lead in the water and the boil water advisories that took place in 2016 and 2017, they include information as an insert in customers' bills, and they established the PGH20 Cares team in 2020 for outreach to low income customers, but it would appear that most people are still unaware of the programs. Survey responses indicated a general lack of information about municipal assistance programs by customers and by community-based organizations, with comments such as "residents not having access to a computer", "water and sewer companies not having these assistance programs", and "not understanding information about programs".

It is also evident that registration for the programs is not a straightforward process. For example, the PWSA's customer assistance programs website lacks simple directions for enrolling. At the time of writing (September 2021), the PGH20 Cares website stated that people in need should check their eligibility with a chart on the website and then call Dollar Energy Fund, the third party that handles enrollment, to confirm eligibility and enroll. But the process of signing up for assistance through Dollar Energy can be confusing because one could also do it through a community-based organization. This involves choosing the organization based on the customer's zip code and calling the organization itself. When calling Dollar Energy directly, the process is straightforward: a representative helps customers fill out an application, indicating income of all household residents, and the paper is submitted and takes 2 to 3 months to get processed, if approved. But if customers try signing up through a community organization, the process varies widely across

organizations; some of them respond promptly and provide help over the phone, while others were not informed about water assistance programs or did not answer the phone after several days of trying.

This lack of clarity is clearly an obstacle to enrollment. This is especially true for those experiencing poverty, as research shows that navigating assistance programs can be difficult for families living with chronically limited budgets (Anandi et al. 2013). In Pittsburgh, low income communities include communities of color, refugees and immigrants. In surveys of organizations providing services to refugees and immigrants in the summers of 2019 and 2020, water affordability was identified as the number one challenge and there is lack of information about assistance programs (González Rivas, 2019 and 2020). Lack of knowledge on the programs includes language as a barrier, even though PWSA has contracted out interpretation services for customers who do not speak English.

In sum, the current PWSA programs could make improvements to enhance their existing assistance programs. Aside from simplifying and clarifying the enrollment process and improving outreach to low income groups, seniors, and other potential beneficiaries of programs, PWSA could further enhance their service by expanding debt forgiveness and making shut off moratoria permanent. The Philadelphia Tiered Assistance Program provides an illustration of best practices because it is based on a household's affordability level, available to low income customers. The TAP design also takes into account the extra burden that low-income households face navigating assistance programs and the onerous processes of applying for assistance. By simplifying the process to include a single application, and by offering a variety of ways of registering (on-line, in person and by



mail), the program aims to remove barriers to access (Lakhani, 2020).

### *Conclusion*

Water affordability issues are not new in the United States, but the COVID-19 pandemic has exacerbated them and highlighted the extreme importance of making water accessible and affordable for everyone. Hopefully, the lessons learned from the pandemic can be leveraged to better serve people everywhere. Water utilities in Pittsburgh have worked for years to address affordability, and the publicly owned PWSA in fact established more enhanced measures than its private counterpart PAWC in response to the pandemic.

However, these affordability programs are not nearly as effective as they could be and should be. There are a number of obstacles that contribute to this. Many of the customer assistance programs from Pittsburgh water utilities simply do not offer enough assistance, making people less likely to go through the trouble of applying, and when they do, it often does not meaningfully improve their situation. The difficulty in applying is another major barrier to these programs doing what they are intended to do. Application processes are often confusing and unclear, they are prohibitively difficult if people do not have access to a computer or phone or lack the time to figure out and go through the process, and people are frequently just simply unaware that assistance is out there. Renters often have an added layer between themselves and assistance if the utility is run through their landlords. Lack of trust between the community and the utility can also hamstring efforts to sign people up for assistance programs from the start. Additionally, it is vital to remember that Pittsburghers of color face systemic issues of racism and poverty that make affording water particularly difficult.

On a macro scale, water affordability assistance is unlikely to come to Pittsburgh from the top down. Federal funding for water infrastructure across the country has fallen 77% since 1977, and there is no sign of a reversal in the trend. The United States has no codified right to water, and it has no permanent federal aid programs for water, unlike LIHEAP for energy bill assistance.

The prospects for implementing the necessary policies to address Pittsburgh's water affordability crisis are particularly daunting for the public water operator due to historical legacies, such as the agreement from 1958 that served to starve them of funds, a lack of federal funding, and the fact that it is responsible for the majority of low-income households in the city. Alleviating the burden for people struggling across the city will require PWSA to put water affordability at the center of its mission, especially as it undertakes expensive measures to replace old infrastructure. To push for broader reforms, PWSA and public water utilities should engage and participate with coalitions of actors pushing for increased funding and real protections for clean, safe, affordable water in this country.

There are ways to address the affordability issue, and Philadelphia's TAP demonstrates many of them. Streamlined, clear, and accessible applications for assistance programs, water debt forgiveness, and truly helpful programs all go a long way to knocking down barriers to enrollment, helping people make ends meet, and restoring trust between the people and the utilities. When water is treated as a human right, people here in Pittsburgh and across the country can begin to see real differences made.

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## List of interviews

- Nick Bianchi, Executive Director, Wilkesburg-Pen Joint Water Authority, July 10<sup>th</sup>, 13<sup>th</sup> and 15<sup>th</sup>
- Patrick Dowd, former Pittsburgh City Council member and former member of PWSA's Board of Directors, July 9<sup>th</sup>
- Michele Garvey, Director of Administration, West View Water Authority, June 15 and 30<sup>th</sup>
- Glenn Grayson, member of PWSA's Low Income Assistance Advisory Committee, July 9<sup>th</sup>
- Deborah Gross, Pittsburgh City Council member and former member of PWSA's Board of Directors, June 25<sup>th</sup>
- Krystle M. Knight, member of PWSA's Low Income Assistance Advisory Committee, July 20<sup>th</sup>
- Gary Lobaugh, External Affairs Manager for Western Pennsylvania, Pennsylvania American Water Company, July 6<sup>th</sup> and 21<sup>st</sup> and August 8<sup>th</sup>
- Noble Maseru, member of PWSA's Low Income Assistance Advisory Committee, June 30
- William Pickering, PWSA's Executive Director, July 13<sup>th</sup>
- Jennifer Presutti, PWSA's Deputy Director, July 13<sup>th</sup>
- Julie Quigley, Director of Administration, PWSA, June 19, June 26, July 13<sup>th</sup> and multiple email exchanges
- Monica Ruiz, Casa San José's Executive Director, May 19<sup>th</sup>
- Allyson Shaw, former campaign leader of clear rivers and our water campaign, Pittsburgh UNITED, July 13<sup>th</sup>
- Megan Stanley, Director of Pittsburgh Commission on Human Relations, June 30<sup>th</sup> and July 13<sup>th</sup>
- Madeline Weiss, Environmental Justice Organizer, Pittsburgh UNITED, July 7<sup>th</sup>
- RaVonne Muhammed, Administrator, Customer Assistance Division, Philadelphia Water Revenue Department, March 11<sup>th</sup>, 2021 and August 9<sup>th</sup>, 2021

# REFERENCES

- Anandi Mani, Sendhil Mullainathan, Eldar Shafir and Jiaying Zhao P. 2013. *Science* Vol. 341 (6149), pp. 976-980. doi: 10.1126/science.1238041
- Bauder, Bob. 2019. Pittsburgh, PWSA to end 25-year financial arrangement. *Triblive*. See: <https://triblive.com/local/pittsburgh-allegheny/pittsburgh-pwsa-to-end-25-year-financial-arrangement/>
- Berhazer, S., 2019. *Challenges And Innovations: Current And Future States of Water Affordability: Part 2 – Environmental Finance Blog*. [online] Environmental Finance Blog. Available at: <<http://efc.web.unc.edu/2019/05/09/challenges-and-innovations-current-and-future-states-of-water-affordability-part-2/>> [Accessed 15 October 2020].
- Czewinski, Fretwell, Fosler, Lindsay and Pagano. 2017. Developing a New Framework for Community Affordability of Clean Water Services. National Academy of Public Administration for the EPA.
- Environmental Finance Center 2017. An Overview of Clean Water Access Challenges in the United States. Chapel Hill, NC: UNC Environmental Finance Center.
- Epa.gov. 2016. *Drinking Water And Wastewater Utility Customer Assistance Programs*. [online] Available at: [https://www.epa.gov/sites/production/files/2016-04/documents/dwww.utilities.cap\\_combined\\_508-front2.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/dwww.utilities.cap_combined_508-front2.pdf) [Accessed 15 October 2020].
- Feinstein, L., 2021. *Keeping the Water On, Addressing rising water-bill debt during the COVID 19 economic crisis*. [online] Available at [https://www.spur.org/sites/default/files/202103/spur\\_keeping\\_the\\_water\\_on.pdf](https://www.spur.org/sites/default/files/202103/spur_keeping_the_water_on.pdf) [Accessed 06 September 2021].
- González Rivas, 2019 and 2020. Exploring the Impact of Water Related Issues on Low Income, Immigrant and Refugee Communities in Pittsburgh and Surrounding Areas. Ford Institute Working Group on Water Insecurity. University of Pittsburgh.
- Howell, Junia, Sara Goodkind, Leah Jacobs, Dominique Branson and Elizabeth Miller. 2019. "Pittsburgh's Inequality across Gender and Race." Gender Analysis White Papers. City of Pittsburgh's Gender Equity Commission. <https://www.waterworld.com/water-utility-management/article/16207437/city-of-pittsburgh-veolia-water-extend-partnership-to-build-on-firstterm-success>
- Hughes, Sarah Anne. 2017. Bipartisan bill proposes putting Pittsburgh's water authority under state oversight. Available: <https://archive.theincline.com/2017/05/25/bipartisan-bill-proposes-putting-pittsburghs-water-authority-under-state-oversight/>
- Lakhani, 2020. Revealed: millions of Americans can't afford water as bills rise 80% in a decade. The Guardian. Available: <https://www.theguardian.com/us-news/2020/jun/23/millions-of-americans-cant-afford-water-bills-rise>
- McNulty, Timothy. 2001. Water rate subsidy a drain for Pittsburgh. PittsburghPost Gazette. Available: <https://old.post-gazette.com/neighborhood/20010820water0820p2.asp>
- Nootbaar, Mark. 2010. Council to review water subsidies in New Year. WDUQ News. Available: <http://wduqnews.blogspot.com/2010/12/council-to-review-water-subsidies-in.html>
- Nonko, Emily. 2020. "How Philadelphia Has Tried to Address Water Debt." Next City. <https://nextcity.org/daily/entry/how-philadelphia-has-tried-to-address-water-debt>

- Philadelphia Water Department. 2016. *City of Philadelphia Tiered Assistance Program (TAP)*. <https://pdfs.semanticscholar.org/62b6/262f07e04f3170c84bd61d3f58afc5d99178.pdf>
- Rosenfeld, 2017. Pittsburgh's Water System Is Why We Shouldn't Run America Like a Business, *The Nation* <https://www.thenation.com/article/archive/pittsburghs-water-system-is-why-we-shouldnt-run-america-like-a-business/>
- Schneemann, M., Tello, L., 2019. *Water Affordability Programs and Policies: A National Review*. *University of Illinois SeaGrant Extension*. [online] Available at: [https://iiseagrant.org/wp-content/uploads/2019/08/WAPP\\_FINAL.pdf](https://iiseagrant.org/wp-content/uploads/2019/08/WAPP_FINAL.pdf) [Accessed 07 September 2021].
- United Nations. 2015. *The Human Right to Water and Sanitation Media Brief*. [https://www.un.org/waterforlifedecade/pdf/human\\_right\\_to\\_water\\_and\\_sanitation\\_media\\_brief.pdf](https://www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_media_brief.pdf).
- University of North Carolina, 2015. Report on Federal Funding Trends for Water and Waste water facilities. Available: <http://efc.web.unc.edu/2015/05/14/federal-funding-trends-for-water-and-wastewater/>
- US Census Bureau, 2018. Quick facts <https://www.census.gov/quickfacts/pittsburghcitypennsylvania>
- Water World. 2013. City of Pittsburgh, Veolia Water extend partnership to build on first-term success.