Keeping the Water On

Addressing rising water-bill debt during the COVID-19 economic crisis
Acknowledgments

This policy brief is part of Rising Together, SPUR's policy response to the impacts of the COVID-19 pandemic.
spur.org/risingtogether

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Special thanks to many thoughtful reviewers: John Tang of San Jose Water Company; Sophia Skoda, Kelly Zito, Andrew Lee and Richard Lou of East Bay Municipal Utility District; Douglas Wallace of Douglas I. Wallace Consulting; Jennifer Clary of Clean Water Action; Michael Perlstein, Simone Hudson and Megan Scott of San Francisco Public Utilities Commission; Katie Ruby of California Urban Water Agencies; and Nick Josefowitz and Karen Steen of SPUR.

The SPUR Executive Board adopted this brief as SPUR policy on March 2, 2021
Introduction

What happens when people can’t pay their water bill? Eventually, most utilities will disconnect their service. More than three million people have their water disconnected each year nationwide. Even in California, which has legally recognized the Human Right to Water since 2012, hundreds of thousands of households have their water shut off each year.

It’s not clear how many of those households fail to pay because of financial distress. But disconnections disproportionately occur in low-income communities of color, indicating that they are often a function of financial troubles and systemic injustices. Disconnections tend to cluster in low-income communities, and Black households are more than twice as likely to experience water shutoffs as white families.

Without running water, people cannot easily wash their hands, bathe, clean and cook. In the era of COVID-19, with the Center for Disease Control urging every person to wash their hands frequently, losing running water is not just a health risk for the people who must live without it. It places the entire community at greater risk of contagious disease.

While water is inexpensive compared to other essential needs such as housing and health care, households that are already struggling to afford day-to-day basics may have difficulty paying their bills. Water prices have been rising far faster than the pace of income in the United States. A family of three using water just for indoor purposes, with no outdoor irrigation, spent on average about $45 for drinking water each month in 2015. The charge for treating the wastewater that leaves the homes, which often appears on the same bill, typically added another $43 for a total monthly expenditure of $88 on water and wastewater.

Climate change, aging infrastructure, past underinvestment in drinking water systems, dwindling financial aid from the federal government, stricter water quality regulations and emerging source water contaminants continue to push the price of water higher. Water systems are at a crossroads: They need to raise rates to cover the cost of delivering a public service, but a growing share of people in California and the U.S. live in poverty. With the addition of the COVID-19 health and economic crisis, even more residents struggle to pay their water bill.

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5 In California, the average price for drinking water rose 45 percent from 2007 to 2015, after adjusting for inflation. Median household income for the state declined six percent during the same period. California Water Board. Options for Implementation of a Statewide Low-Income Water Rate Assistance Program, Fig. 3. Sacramento, California, 2019.
6 All dollar amounts in this paragraph are given in 2020 dollars.
Recognizing the importance of maintaining access to water during COVID-19, California Governor Gavin Newsom issued a moratorium on water disconnections for bill nonpayment in April 2020. This followed action by the California Public Utilities Commission (CPUC) and more than 100 private and public water systems in the state to suspend disconnections.

But moratoriums do not eliminate the obligation of customers to pay their bills. Eventually, if the moratorium is lifted without reforms to existing policies, customers who have fallen behind on their bills will face either paying a large lump sum, or losing water service.

Yet forgiving customer debt — or arrears, as utilities refer to past-due payments — is not as simple as it may seem. Most water utilities are publicly operated nonprofit government agencies. They need to balance tradeoffs between providing affordable water and covering their costs. Without external financial assistance for utilities to forgive customer debt, they will have no choice but to spread the cost of uncollected debt among remaining ratepayers. If and when that becomes impossible, local governments may be forced to sell off utility assets.

In California, local public agencies have been subject to the constraints of Proposition 218 since it passed in 1996. Proposition 218 requires that fees charged by local agencies be proportional to the cost of service and places limits on the use of funds. The intent was to ensure that fees and other charges paid by property owners reflect only the cost to serve them and do not subsidize other government programs. As a consequence, public water utilities are prevented from using revenue from water bills to offset the cost of operating assistance programs for low-income residents. Investor-owned water utilities, on the other hand, are able to recoup the cost of the program from customers that do not receive low-income assistance.

Even if the legal barriers could be erased, many small drinking water systems would be incapable of operating a robust customer assistance program. In the Bay Area, as in the rest of California, most drinking water systems serve fewer than 10,000 people. These small drinking water systems, especially those that serve primarily low-income communities, can’t subsidize the cost of assistance programs without charging their remaining customers exorbitant fees. Moreover, small systems typically have limited staff and don’t have the administrative capacity to operate assistance programs.

During the COVID-19 pandemic, water utilities and customer advocates have raised the alarm about a rising tide of customer debt that could lead to financial troubles for water agencies and shutoffs for struggling customers. In San Francisco, the number of water customers behind on their bills nearly quadrupled between February and August 2020. San Jose Water saw average customer debt more than double. Simply banning shutoffs permanently, without ensuring that water systems can collect the revenue they need to deliver safe drinking water, is financially unsustainable. At the same time, shutoffs and their close relative, flow restrictors, are a harsh and inequitable way to enforce payment from low-income customers. The ideal solution will prevent shutoffs for financially vulnerable families in a way that addresses the underlying issue of customer debt and preserves the financial health of water agencies.

10 CPUC. “CPUC Ensures Essential Utility Services for Consumers to Assist In COVID-19 Mitigation,” March 17, 2020. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M329/K673/329673725.PDF
14 CPUC and California Water Board, page 29.
There is no simple solution. A combination of discounts on bills, decreased fines and fees, debt management programs, and new revenue sources will all need to be brought to bear.

This policy brief describes the challenges of maintaining water access and preserving the financial health of California water utilities during the dual crises of an economic recession and a pandemic. We take a closer look at current programs to provide water bill discounts, with examples from San José, San Francisco and Oakland. We end with a series of recommendations on reducing fines and fees and improving customer assistance programs. We look at two components of a customer assistance program: bill discounts to reduce the ongoing cost of water, and arrearage management to reduce accumulated debt.

Some of the measures we propose can be adopted by water utilities themselves, but most of these efforts will be limited in their implementation unless a large, stable source of funding can be found. Reforming California law would enable public water utilities to better fund customer assistance program. But the better option would be for the state or federal government to fund and operate customer assistance programs.

The larger issue of keeping water affordable for all customers requires systemic efforts to address rising water rates and using rate design to keep the cost of water for essential needs low. Ultimately, customer assistance programs will never enroll all eligible customers, and thus the most universal solution is to ensure that water is affordable without a discount program. These larger systemic issues of keeping the price of water low are essential but are not the focus of this policy brief.

Drinking Water Utilities in the Bay Area

The Bay Area’s water systems are managed by a network of special districts, city and county agencies, and private companies. There are more than 200 water retailers and wholesalers in the region.15 Most water systems in the region are public and governed by a local or regional elected official. Some are investor-owned water utilities subject to regulation by the California Public Utilities Commission. Water systems are considered large if they serve more than 3,300 connections or 10,000 people.16 The three largest water utilities in the Bay Area are San Francisco Public Utilities Commission, East Bay Municipal Utility District and San Jose Water. Together with two slightly smaller utilities in San José, San José Municipal Water and Great Oaks Water Company, these utilities serve as the retail water suppliers for the 2.43 million residents of the three cities where SPUR works: San Francisco, Oakland and San José. East Bay Municipal Utility District also serves much of rest of Alameda County and part of Contra Costa County.

The Role of Bill Discount Programs

Enrolling customers in bill discount programs can slow the rate at which customers accrue debt during the COVID recession. Many U.S. water utilities, particularly large ones, offer their own customer assistance programs. Nationally, about half the utilities that serve more than 100,000 customers offer a low-income customer assistance program. Only one-third of smaller utilities offer such programs.17 Even when assistance programs exist, the programs are usually insufficient to

16 Statute governing public water system size designations: Health and Safety Code Section 116275.
make standard water rates affordable for low-income customers. In the time of COVID, these programs do little to offset the hundreds of dollars of debt many families are accruing.

There is evidence that programs to reduce water bills for households otherwise unable to pay actually increase the total revenue collected by utilities. The reason is simple. When people are faced with a bill too large to pay and will be disconnected whether they pay as much as they can or pay nothing, the rational choice is to pay nothing. People are more likely to pay a smaller water bill in full than make a partial payment on a larger bill.

Current Water Bill Discount Programs Fall Short

The first major shortcoming with water discount programs is that they enroll only a small percentage of eligible customers. Eligible customers must pay their own water bill (the bill cannot be paid by a landlord or building manager) and earn less than a given income threshold for their household size (such as less than two or three times the Federal Poverty Limit). San Francisco Public Utilities Commission (SFPUC) reported that a mere 4.5% of eligible customers — 1,200 in all — were enrolled in its assistance program in 2019. East Bay Municipal Utility District (EBMUD) estimates that its program reaches 10% to 21% of eligible customers. San Jose Water (SJW) does not have its own estimate of eligible customers, but it does provide the number of customers enrolled in 2019, which was 19,741. Based on a rough estimate of the number of eligible households, it is likely that SJW enrolls roughly 50% to 60% of them. While the number of customers enrolled will likely increase during COVID, the starting baselines are quite low. (Sources for these estimates are provided in the Appendix.)

The better penetration of the SJW assistance program is probably because it’s an investor-owned water utility. Investor-owned utilities have two major advantages in running effective customer assistance programs compared to their public counterparts. First, they’re legally allowed to use ratepayer revenue for low-income customer assistance. Second, they have more information on the identity of their low-income customers because of a data-sharing arrangement with energy utilities. Unlike public utilities, investor-owned utilities are subject to regulation by the CPUC. Since 2012, the CPUC has required energy and water companies under its purview to share information on low-income customers. This has enabled water companies to identify and enroll a higher proportion of eligible customers in their assistance programs.

Enrollment rates in other assistance programs are useful as benchmarks for the kinds of penetration that are possible in assistance programs. CalFresh, the state system to provide food aid, is generally considered to have a dismal enrollment rate compared to most assistance programs but still reaches 71% of eligible customers. CARE reaches 84% of eligible customers. This suggests that water assistance programs could reach more people with more resources and more streamlined application processes.


20 SFPUC. “Operating Information Performance Measures Fiscal Year 2019.” In Comprehensive Annual Financial Report. San Francisco, CA, 2019. https://sfwater.org/Modules/ShowDocument.aspx?documentid=14902. Note: the 4.5% figure may be an underestimate. People familiar with the method for calculating the figure noted that the estimate of people eligible for assistance is based on the number of low-income households in San Francisco reporting that they pay their own water bill on the American Community Survey, which may be inflated (pers. comm., Ronak Dave Okoye). Our independent estimate is that the figure may be closer to 7%, as reported in the Appendix.


Why is enrollment so low in most drinking-water and sewer assistance programs? To explore this question, we compared bill discount programs operated by SFPUC, EBMUD and SJW and the CARE program operated by Pacific Gas and Electric (PG&E). A few differences emerged. First, the more highly enrolled programs — operated by PG&E and SJW — have simple applications that require no additional documentation. SFPUC and EBMUD ask applicants for tax returns and proof of identity. The higher-enrolled programs are operated by utilities with higher average monthly bills, suggesting that demand for assistance programs is not just a function of good program design but also a function of high bills. Other factors that likely drive a higher enrollment rate for CARE are its long-standing, well-funded marketing campaign and the name recognition it has as a program offered by all the large electricity and gas providers in the state.

Other assistance programs implement model practices that should be replicated. EBMUD’s program offers a higher percentage discount and a more generous income limit for enrolling than other programs. SFPUC’s temporary Emergency Residential Assistance Program, which was instituted during the COVID crisis, has the highest income limit, at double the area median income. The higher income threshold is important in a high-cost region such as the Bay Area, where even households making more than average may struggle with the cost of living.

SFPUC, EBMUD and SJW all provided a wealth of easy-to-find information about their assistance programs online. San José Municipal Water serves the northern part of the city, while Great Oaks Water serves the southeastern portion of the city. Both systems provide inadequate public information on their assistance programs. It was difficult to find application forms online, and we were unable to readily determine answers to basic questions, such as the benefits provided by the programs, from a review of their web sites.²⁴ Great Oaks Water Company does not provide instructions on how to submit an application. San José Municipal Water requires customers to bring the printed form into City Hall — burdensome in the best of times, and unsafe during a pandemic.


²⁴ Some information on the benefits provided by these programs is buried in San José Municipal Water’s Rules and Procedures documents and in Great Oaks Water Company’s general rate case documents. These documents are not readily accessible or understandable to the average customer.
## Figure 1. Comparison of Five Bay Area Customer Assistance Programs

<table>
<thead>
<tr>
<th>Program name</th>
<th>SFPUC¹</th>
<th>SFPUC²</th>
<th>EBMUD³</th>
<th>SJW⁴</th>
<th>PG&amp;E⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program name</strong></td>
<td>Emergency Residential Assistance (temporary; expires end of 2020)</td>
<td>Customer Assistance Program</td>
<td>Customer Assistance Program</td>
<td>Water Rate Assistance Program</td>
<td>California Alternative Rates for Energy</td>
</tr>
<tr>
<td><strong>Online submission?</strong></td>
<td>Yes</td>
<td>No</td>
<td>No; planning to allow email submission</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Requires additional documentation?</strong></td>
<td>No</td>
<td>Yes for some customers ⁶</td>
<td>Yes ⁷</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Income limit ⁸</strong></td>
<td>200% area media income</td>
<td>200% federal poverty level</td>
<td>300% federal poverty level</td>
<td>200% federal poverty level</td>
<td>200% federal poverty level</td>
</tr>
<tr>
<td><strong>Income limit for household of 2</strong></td>
<td>$205,000</td>
<td>$34,480</td>
<td>$52,200</td>
<td>$34,480</td>
<td>$34,480</td>
</tr>
<tr>
<td><strong>Discount</strong></td>
<td>15% off water, 35% off sewer</td>
<td>15% off water, 35% off sewer</td>
<td>50% off water up to 1,050 gpcm*; 35% off sewer</td>
<td>15% off water (SJW doesn't provide sewer)</td>
<td>20% off gas and electricity</td>
</tr>
<tr>
<td><strong>Percent of eligible customers enrolled</strong></td>
<td>Unknown, new program</td>
<td>4.5% – 7%</td>
<td>10% – 21%</td>
<td>50% – 60%</td>
<td>84%</td>
</tr>
</tbody>
</table>

* Gallons per capita per month

### Sources:


⁶ SFPUC customers not receiving services from San Francisco Human Services Agency must submit either federal tax returns or income documentation and proof of occupancy for each household member.

⁷ EBMUD customers must submit, proof of ID and proof of income for each household member.

⁸ Area median income and federal poverty level are calculated based on household size. For example, 200% of the federal poverty level is $34,480 for a two-person household and $43,440 for a three-person household.
Recommendations

The following recommendations focus on improving customer assistance programs and reducing fines and fees to address the immediate problems of accumulating debt that can lead to shutoffs. These strategies all require funding, either from ratepayer revenue (if legal barriers can be removed for the public utilities) or from state or federal funding.

Right-Size Bills and Reduce Debt to Prevent Post-Moratorium Shutoffs

1. Offer arrearage management plans and shutoff relief to customers with low incomes and those who have experienced a sudden loss of income.

Who’s responsible: Water utilities should offer arrearage management plans to customers; the CPUC and the Legislature should set minimum requirements.

Arrearage management plans forgive a portion of customer’s debt each time they pay their current bill. For example, the CPUC recently required the large California energy utilities to forgive one-twelfth of a customer’s arrears every time they pay their current bill; after 12 on-time payments, the entire past-due balance is forgiven. Arrearage management plans bring customers back into a paying relationship with a utility. The utility retains a paying customer and avoids spending money attempting to collect debt that customers are unable to pay.

Customers should qualify for an arrearage management plan if they are low-income or have experienced a COVID-related financial hardship. They should be able to stay enrolled in the program as long as they make at least a nominal payment, such as a few dollars every two months. As long as they are enrolled in the program, they should be exempt from disconnections and flow restrictors.

The CPUC is considering ordering large private water utilities to enact arrearage management plans. However, the order would affect utilities serving less than 16 percent of the state’s population. CPUC and the Legislature should act to ensure that all water utilities offer such plans.

2. Reduce or eliminate water disconnection and reconnection fees for all customers.

Who’s responsible: Water utilities should reduce fees; the CPUC and the Legislature should set upper limits on fees.

Utilities can reduce and eliminate the fees levied for disconnection and reconnection. The SFPUC provides a useful case study of a public agency that successfully reduced its disconnection and reconnection fees.

Until July 2018, SFPUC customers owing at least $50 more than 45 days after the bill was due started on the pathway to shutoff. At this point, fees quickly began to accumulate, beginning with a $55 notice fee, a $55 shutoff fee when water was turned off, and a $55 reconnection fee for restoring service. In all, a customer who owed $50 for 70 days and failed to arrange a payment plan would owe an additional $165 in penalties, on top of the hardship of a service disruption.

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Francisco was not unusual in this regard: Fines for late payment, disconnection and reconnection of water service typically ranged from $12 to $166 in California in 2018.\textsuperscript{28} California’s Health and Safety Code was updated in 2018 to limit reconnection fees, but the change only applies to customers who earned less than 200% of the federal poverty line and were served by utilities with more than 200 connections.\textsuperscript{29}

In 2018, the SFPUC — under the leadership of the City of San Francisco’s Financial Justice Project — convened an Affordability Working Group to re-examine its service disconnection policies. The focus was on reducing “high pain, low gain” fees that burdened low-income families while generating little revenue for the city. They concluded that while disconnection and reconnection fees were a major burden for financially struggling families, they contributed very little to the utility’s total income.

The SFPUC eventually adopted two major changes recommended by the Affordability Working Group: It eliminated shutoff and reconnection fees, and reduced the shutoff notice fee for all customers.

Other public water utilities should follow the lead of SFPUC to reduce or eliminate high-pain, low gain fees that contribute little to the utility’s overall income and are mainly paid by customers already struggling to meet their basic needs.

Proposition 218 should not stand in the way of revising disconnection and reconnection fees for public water utilities. It requires that fees charged be proportional to the cost of service, but it does not specifically mandate that a fee must be charged for every service provided. Utilities provide other services without fees, such as free water conservation devices, consultations on high leaks and bills, and educational events. It’s possible that the amount of money recovered from these fees is small enough, and the amount of money lost by severing the paying relationship large enough, that these fees generate little or no revenue for the utility and forgoing them would have no adverse impact on rates.

3. Decrease barriers to enrollment in customer assistance plans.

Who’s responsible: Water utilities should reduce barriers to enrollment in customer assistance programs; the CPUC and the California Legislature should set minimum requirements.

Customer assistance programs do not address accumulated debt, but they slow the rate at which customers continue to accumulate it and reduce their current bills as they pay off their past ones. Water utilities should increase enrollment by implementing the following components of good program design:

- **Simplify the application process.** As SPUR has argued elsewhere,\textsuperscript{30} procedural barriers should not stand in the way of customers receiving benefits they are eligible for. Utilities should implement practices that streamline enrollment as follows: Allow customers to fill out and submit applications online, and ensure the application works on mobile devices. Accept telephonic signatures (a recording of one’s voice made on the phone) instead of requiring handwritten signatures. Allow customers to self-certify their eligibility without supporting documentation at the time of enrollment; instead, require customers to sign an agreement that they will supply supporting documentation upon request. Remove re-reporting requirements for people living on fixed incomes, such as the elderly and people with disabilities, as their incomes are not likely to change.


\textsuperscript{29} California Health and Safety Code, Section 116914.

• **Share information with other social assistance programs.** Other programs like CARE and CalFresh have information on which customers are likely to be eligible for water assistance. Auto-enrolling customers who are eligible, or conducting active outreach to those who are likely to be eligible, can increase program enrollment.

• **Set an income eligibility threshold above the cost for basic needs in the utility’s service area.** Assistance programs should set the income cap at or above the local cost for a two-bedroom apartment, food, utilities (other than water), health care and transportation. The Economic Policy Institute’s Family Budget Calculator\(^\text{31}\) and U.S. Housing and Urban Development’s list of Fair Market Rents\(^\text{32}\) are good starting points to understand the local cost of living.

• **Expand outreach efforts to publicize the program.** Water utilities should collaborate to develop a consistent name and brand for all California water assistance programs to build off a common base of customer education. Advertising materials should be available in multiple languages. Customer service representatives should mention the program and be able to take applications over the phone for customers with limited literacy skills. Community-based organizations are key partners for conducting community outreach. Most water systems in our review provide clear information about their programs on their websites; however, San José Municipal Water and Great Oaks Water Company should provide more information online to explain program benefits and enrollment process to customers.

### Fund Customer Assistance Programs

4. **Reform Proposition 218 to allow public agencies to more easily fund customer assistance programs.**

*Who’s responsible:* California Legislature

Proposition 218 is the key barrier preventing public agencies from finding large, stable funding sources for customer assistance and debt management. Proposition 218 could be narrowly amended to allow public utilities to use ratepayer revenue to operate customer assistance programs. The California State Legislature could place the measure on the ballot, which would need to be approved by a majority of voters.

As the failed 2020 effort at Proposition 13 reform showed, this effort would not be easy. It would require years of concerted effort and public persuasion by water equity advocates and public water agencies. And even if agencies could operate their own assistance programs, many smaller agencies serving disadvantaged populations would lack the resources to do so. The most far-reaching and immediate way to find funding for customer assistance is to look to state or federal funding sources.

5. **Develop and fund a state or federal water customer assistance program.**

*Who’s responsible:* State or federal government

Ultimately the best scale for operating a customer assistance program is at the state or federal level. This allows pooling of resources between prosperous and disadvantaged areas and directing much-needed funding to smaller utilities with limited resources. State and federal taxation boards have the advantage of being able to use progressive means of revenue, such as income taxes and luxury good taxes.


The federal government already operates the Low-Income Home Energy Assistance Program to assist low-income households with energy bills, but a similar program for water has never been implemented. There are two proposals on the table to change this.

The first is a State Water Resources Control Board proposal to develop a statewide revenue source to provide a discount on water bills for customers earning less than 200 percent of the Federal Poverty Line. The proposal laid out three major program components: bill discounts for low-income water customers with an account in their name, a renter’s credit for water customers who do not directly pay a bill, and water crisis assistance for low-income customers facing disconnection for late bills. The total cost for the program was estimated at $600 million annually.

Congress allocated $638 million to forgive overdue water and sewer bills, falling far short of the billions of dollars advocates had called for. One investigative report found that just a dozen large cities in the United States had 1.1 billion in unpaid residential customer debt, indicating that a few hundred million in federal funds will be woefully insufficient. Another $25 billion for rental relief can be used for overdue utilities payments, but most of that money will likely go to rent and energy bills, since relatively few renters pay their own water bills.

A state or federally administered program has many advantages over locally administered assistance programs. First, state and federal government funds are not subject to Proposition 218 restrictions. Second, pooling resources at the state or federal level allows smaller water utilities to provide customer assistance programs that otherwise would be unable to do so. Third, the state and federal government have the option to draw revenue from progressive sources such as income and luxury good taxes.

The federal government has an added advantage over either state or local funding in that it can incur deficit spending. The State of California, which is required to pass a balanced budget each year, has woefully few resources during the economic downturns when customers most need an assistance program.

**A Critical Moment for Water Assistance Programs?**

The United States has funded bill discounts and crisis assistance for home energy use since 1980. The political will to establish a national energy assistance program came about in the wake of the oil crises of the 1970s and skyrocketing energy prices. There were widespread stories of families suffering through cold winters without heat. Energy providers and customer advocates teamed up to advocate for the program, which has the joint benefit of preserving an essential service for customers while shoring up the financial stability of utilities.

Customer assistance for water has lagged behind, in part because water historically has been less expensive than energy, and because water utilities and water customer advocates are more fragmented and less politically organized than utilities and advocates in the energy sector. Rising water and wastewater costs compounded by the COVID-19 public health and financial crises may present the right political moment to take action on addressing water affordability and disconnections.

Water utilities do not provide an optional service. They play an essential role in the community by safeguarding access to a basic tool for health and well-being. At the same time, they cannot support rising customer debts rising indefinitely. To preserve the financial well-being of water systems and the low-income households they serve, the moment to act is before shutoff moratoriums lift and households are faced with paying a crushing debt or losing water service.

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Appendix

Estimating Enrollment of Eligible Customers in Assistance Programs

SPUR estimated the number of eligible customers in each water utility’s service area by estimating the proportion of families in each utility service area living below the income threshold for customer assistance, multiplied by the number of single-family residential connections. Each step was conducted as follows:

- We only considered single-family residential customers as eligible for a customer assistance program (see Figure 2, Line A). Residents of multifamily housing typically do not directly receive a water bill and are therefore ineligible for customer assistance programs.

- We obtained the income threshold for assistance programs as explained in Figure 1 (Line B).

- We intersected U.S. Census data on families in poverty with drinking water utility boundaries in ArcGIS to estimate the number of families below their respective utility’s customer assistance program income threshold and the total number of families in each utility’s service area (Lines C and D).

- We calculated the proportion of families in a service area below their respective utility’s customer assistance program income threshold (Line C / Line D).

- We estimated the number of eligible customers (Line E) by multiplying the proportion of families in a service area below their respective utility’s customer assistance program income threshold by the single-family residential potable connections (Lines A * (C/D)).

- We gathered the number of customers enrolled in each utility’s customer assistance program from utility reports when available (Line F).

- We divided the number of customers enrolled in each utility’s customer assistance program by the number of estimated eligible customers to calculate the percent of eligible customers enrolled (Line G = F/E).

- Where available, we give each utility’s own estimate of enrollment rates (Line H).

We compared the resulting estimates to the estimates provided by some utilities themselves using different methods. SPUR’s estimates were higher than SFPUC’s results (7% versus 4.5%), but lower than EBMUDs (8% versus 10% – 21%). This approach may underestimate enrollment rates by overestimating the number of low-income families in single-family homes. In reality, low-income families are likely to make up a greater proportion of multifamily residents. Nonetheless, our results were within a few percentage points of SFPUC and EBMUD’s own estimates, suggesting that this is a reasonable rough estimate of percent enrollment.
Figure 2. Estimated Enrollment of Eligible Customers in Assistance Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>SFPUC</th>
<th>EBMUD</th>
<th>SJW</th>
<th>San José Municipal Water</th>
<th>Great Oaks Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Single-Family Residential Potable Connections</td>
<td>111,397</td>
<td>330,474</td>
<td>204,337</td>
<td>1,155</td>
<td>19,772</td>
</tr>
<tr>
<td>B. Income Threshold</td>
<td>200% federal poverty level</td>
<td>300% federal poverty level</td>
<td>200% federal poverty level</td>
<td>200% federal poverty level</td>
<td>200% federal poverty level</td>
</tr>
<tr>
<td>C. Families Below Income Threshold</td>
<td>31,163</td>
<td>122,053</td>
<td>46,840</td>
<td>2,753</td>
<td>5,421</td>
</tr>
<tr>
<td>D. Total Families</td>
<td>188,427</td>
<td>449,439</td>
<td>313,010</td>
<td>29,160</td>
<td>40,483</td>
</tr>
<tr>
<td>E. Eligible Customer Accounts</td>
<td>18,423</td>
<td>89,746</td>
<td>30,578</td>
<td>109</td>
<td>2,648</td>
</tr>
<tr>
<td>F. Customer Accounts Enrolled in Assistance Program</td>
<td>1,200</td>
<td>6,952</td>
<td>17,987</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>G. Percent of Eligible Customers Enrolled</td>
<td>7%</td>
<td>8%</td>
<td>59%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H. Utility-Provided Estimate of Percent of Eligible Customers Enrolled</td>
<td>4.5%</td>
<td>10% – 21%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

* We were unable to find information on customer enrollment for San José Municipal Water and Great Oaks Water. Great Oaks Water did not report its number of enrolled customers as required in Schedule E-2 of its 2018 and 2019 annual reports.

Sources:


Water utility service area boundaries from California Water Board. “California Drinking Water System Area Boundaries Map.” California State Geoportal, October 21, 2020. [https://gis.data.ca.gov/datasets/fbba842bf134497c9d611ad506ec48cc_0](https://gis.data.ca.gov/datasets/fbba842bf134497c9d611ad506ec48cc_0).


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