



SUBURBAN DETROIT WATER UNAFFORDABILITY: CAUSES, CONSEQUENCES, AND THE NEED FOR COMPREHENSIVE POLICY INTERVENTIONS

By Dana Kornberg, Mackenzie Taradalsky, Victoria Guster-Brown, Sylvia Orduño, and Diane Weckerte

KEY FINDINGS

- Water is unaffordable for residents across Oakland and Macomb counties, even in higher-income communities.
- Water shut-off policies create significant distress for families.
- Financial shortfalls can be both chronic and short-term, resulting from job instability or loss, caretaking responsibilities, and physical and mental health issues.
- Residents receive inadequate and confusing information about existing payment assistance programs, and many qualified households never receive any form of assistance.
- In the absence of formal programs, some residents have been able to make informal payment plan arrangements with their local water departments.
- Residents report steep increases due to stormwater charges, smart meters, and the switch to monthly billing.
- There is a lack of formal process for residents to dispute unusually high water bills.

INTRODUCTION

Michigan is blessed with a significant portion of the world's freshwater supply, but water quality and affordability have been persistent issues affecting households throughout the state. Overwhelmingly, researchers, policymakers, and community advocates have addressed these problems in central cities—and understandably so, given the devastation of the Flint water crisis, water shutoffs in Detroit, and widespread lead contamination. However, because of the suburbanization of poverty, there are now more residents struggling to afford and access clean, safe water in suburban communities where there are also fewer social welfare institutions to meet their needs.¹ In recent decades, suburban communities have become more diverse and include a growing number of low-income and poor households, along with immigrant communities and a range of racial and ethnic groups.² Nationally, between 2000 and 2014, there was a 65% increase in suburban residents below the federal poverty line (Figure 1). By 2014, a majority (56%) of metropolitan-area residents living below the federal poverty line lived in the suburbs.³ These trends have been most pronounced in Midwestern cities like Detroit, where suburban poverty increased by 87% between 2000 and 2014 (Figure 2).⁴

The growing number of residents with low incomes poses significant challenges for suburban communities, which are highly fragmented. Unlike in cities, where social services have long been centralized and place-based, suburban communities include a large number of governments that tend to have fewer resources to serve their residents.^{5, 6, 7} The relative isolation of suburban life and the value put on privacy further disguises public problems as individual dilemmas, which can further discourage people from seeking out available resources. Yet, the presence of smaller and local governments presents an opportunity to be more responsive to residents' needs.

The rise of suburban poverty over the last two decades, combined with growing water costs, has made water and sewage bills increasingly unaffordable for many suburban Detroit households.⁸

Figure 1: Number of People Below the Federal Poverty Level in the United States, by Community Type: 1970-2015

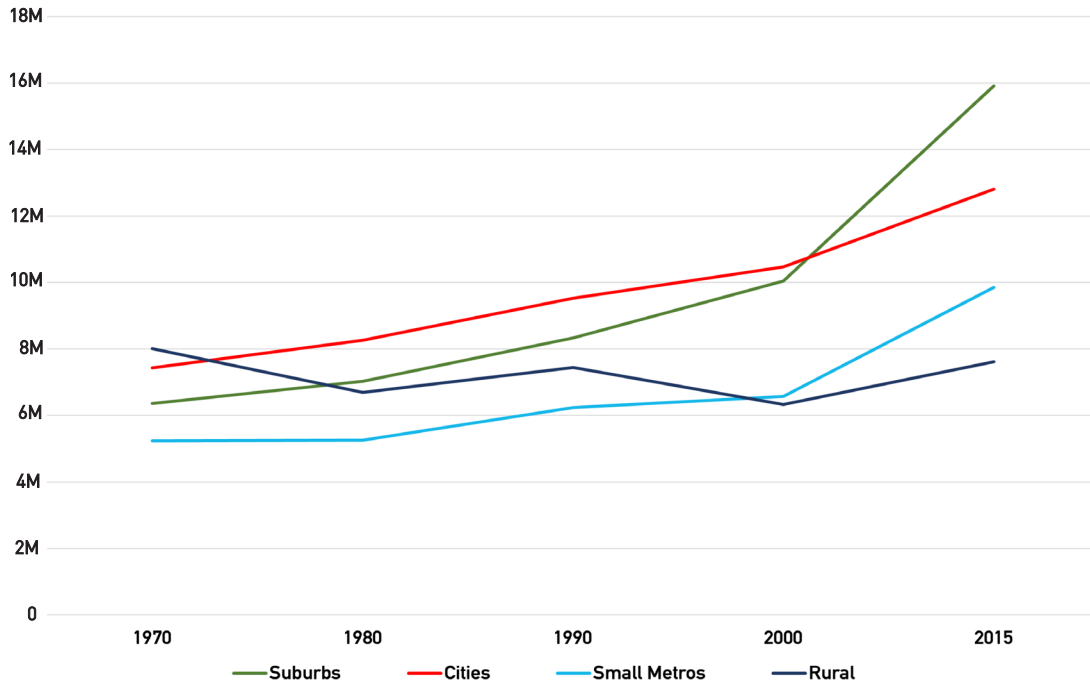
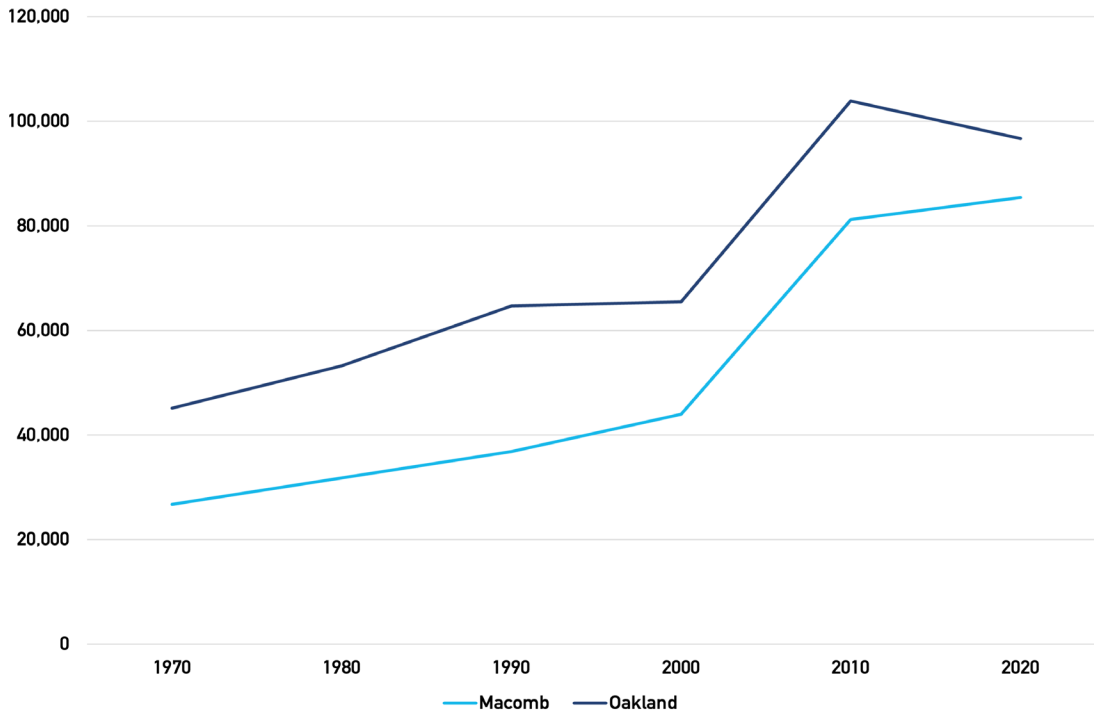


Figure 2: Persons in Poverty: 1970-2020

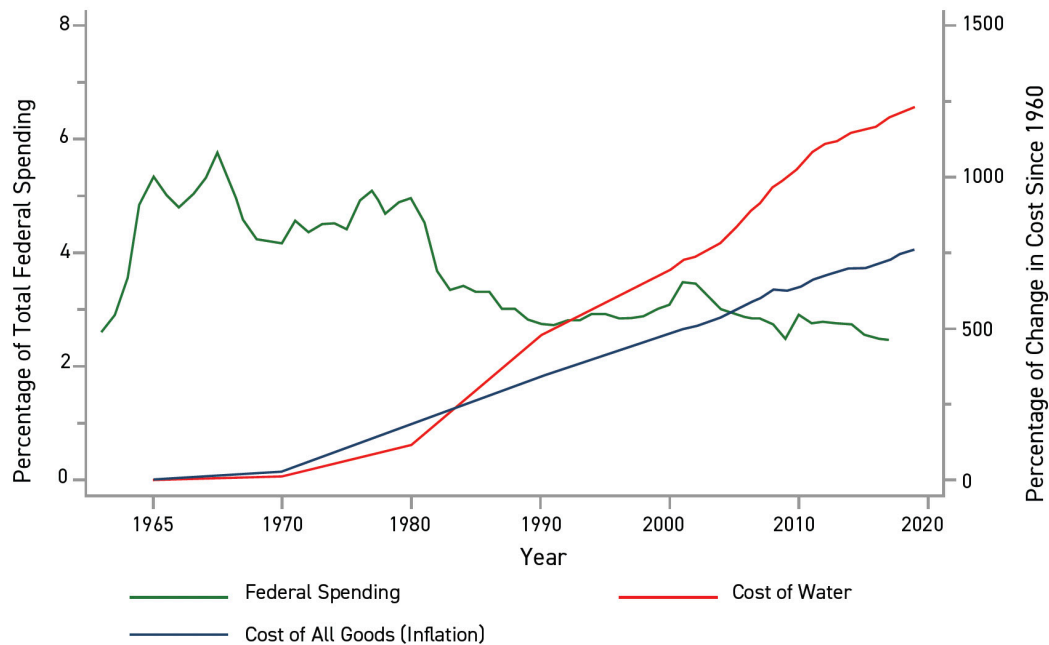


Source: Brookings Institution analysis of decennial census and American Community Survey data

As a national water affordability expert concluded in an analysis of 83 communities across the Detroit metro area: "No community in Southeast Michigan in the GLWA [Great Lakes Water Authority] service territory is exempt from the

presence of unaffordable water burdens."^{9, 10} In recent decades, water bills nationally have grown at rates higher than inflation, disproportionately affecting lower-income households (Figure 3).¹¹

Figure 3. Cost of Water Rose Nationally as the Percentage of Federal Spending on Water Infrastructure Declined, 1960–2018



Source:
Congressional
Budget Office,
IPUMS USA, and
U.S. Bureau of
Labor Statistics

Image Source:
University of
Michigan | Michigan
Statewide Water
Affordability
Assessment Report
(<https://myumi.ch/W2rek>)

With assistance programs inadequate to meet this growing need, many suburban communities rely on water shut-offs or tax liens in an effort to force payment and prove to bondholders, federal loan programs, and private investors that they are willing to conduct strict enforcement.^{12, 13} Yet the threat of shut-off or losing a home to unaffordable taxes creates significant distress for families with low incomes who must learn to prioritize their water bills even over other necessities like health care and housing.¹⁴

This brief demonstrates that, for reasons including poverty, health issues, unemployment, caretaking responsibilities, and abnormally high bills, water bills have become unaffordable for residents across suburban Detroit. We conclude by offering additional insights on how the State of Michigan, GLWA, and local water departments can address water affordability issues in the Detroit metro region.

BACKGROUND

Our team of researchers is a collaboration between University of California–Santa Barbara and the People’s Water Board Coalition (PWBC), a Detroit-based coalition advocating for the human rights to water and sanitation and for equitable access and affordability for impacted communities. The project recruited residents across Oakland County and Macomb County, Michigan, who were willing to share their experiences with being past-due on their household’s water bills.¹⁵ We focused on these counties to supplement existing knowledge about Detroit and Wayne County. We conducted participant recruitment in 2021 across the region over a span of eight

months. Our team distributed study flyers at 12 food pantries, hung flyers at 11 libraries and seven laundromats, and posted the study information on several neighborhood Facebook pages and NextDoor groups. We aimed to capture residents across the metro area, a majority of whom do not receive any kind of bill payment assistance. This approach contrasts with other studies that have worked through social service agencies and interviewed the small fraction of residents who successfully receive assistance. We completed 20 interviews, 15 of which were ultimately deemed valid for the study. Our interview process included asking respondents whether they wanted to use their real names, choose a pseudonym, or have us choose a pseudonym for them. The names included here reflect respondents’ preferences.

Our difficulty in recruitment speaks to several challenges, including locating those who were not already connected to existing government or nonprofit programs, the closure of in-person spaces due to COVID-19, the stigma of poverty, and the disappointment many residents expressed when we did not have resources apart from \$50 gift cards for participation to offer them. These 15 narratives are powerful because not only were they difficult to obtain; more importantly, they offer a little-seen window into the experiences of suburban residents struggling to afford their water bills.

The 15 study participants from across Oakland and Macomb counties were between 27 and 72 years old, with an average age of 54. Seven out of 10 participants who shared their family’s finances reported incomes below 150% of the federal poverty line, which is the measure most commonly used for existing water assistance programs.

Table 1: Study Participant Demographics

	Community	Race	Age	Total # in Household	Senior?	Own home	Income as % of Federal Poverty Line*
1. Susan	Oak Park	White	60s	1	Y	Y	80%
2. Rob	Walled Lake	White	60s	2	Y	Y	-
3. Missy	Roseville	White	40s	2	N	Y	70%
4. Lauren	Ferndale	White	30s	1	Y	Y	-
5. Tamra	Roseville	White	60s	3	Y	N	-
6. Stephan	Birmingham	White	70s	1	Y	N	100%
7. Lexi	West Bloomfield	White	50s	4	N	Y	-
8. Catherine	Southfield	Black	40s	4	N	N	130%
9. Nicki	Oak Park	Black	50s	2	N	Y	85%
10. Rachel	Novi	Black	40s	1	N	Y	-
11. Lisa	Ferndale	Black	30s	3	N	Y	270%
12. Amy	Southfield	Mixed	50s	2	N	N	390%
13. Samantha	Hazel Park	White	40s	4	N	Y	75%
14. Charita	Ferndale	White	70s	2	Y	Y	95%
15. Eric	Center Line	Black	20s	3	N	Y	340%
		Mode	Avg. Age	Avg. Household Size	Total # of Seniors	Total # of Homeowners	Median
		White	52	2.4	6	11	96%
* Calculated based on household size. Data included for all respondents who provided this information.							

FINDINGS

1. Water is unaffordable for residents across Oakland and Macomb counties, even in higher-income communities.

Participants from diverse backgrounds and communities shared their experiences with water unaffordability. We engaged with residents from middle-class communities including Roseville, Southfield and Oak Park and residents of more affluent areas including West Bloomfield and Birmingham. From these diverse voices and experiences, one major theme was obvious: residents struggled to afford their water bills. Several participants expressed frustration around accessing the fundamental right of safe and clean water, especially within a state surrounded by the Great Lakes.

2. Financial deficits result from chronically low incomes, job losses, and family changes.

Many respondents reported that they had insufficient income, a challenge exacerbated by the COVID-19 pandemic. Financial limitations forced residents to make tradeoffs with their bills, as has been previously reported, paying down some bills and leading to others becoming past-due.¹⁶ Respondents reported

feeling overwhelmed by the prospect of never being able to catch up. Lexi, a single mom in West Bloomfield, explained, “I am struggling with all my bills, it’s not just the water bill ... it’s every bill.” Nicki, a school bus monitor in the city of Oak Park, shared that this juggling act has meant that she has “never been caught up, ever, ever” on her household’s water bills. Likewise, Samantha, a substitute teacher in Hazel Park, explained that her household had been “doing the same kind of dance around shut-offs,” with every water bill meaning a potential shut-off, which would seriously disrupt life for her family. Stephan, who depends on social security income in Birmingham, had to turn to his landlord for help because he “could not pay one month’s rent.” Fortunately, his landlord allowed him “to spread it out over the next months,” allowing him to pay his other bills. Unemployment also led to financial shortfalls. When Catherine of Southfield lost her job in 2020, she did not receive unemployment compensation for nine months, leading to a shortfall in her family of four’s annual income of around \$33,000.

For the majority of residents we interviewed, every bill brought the stress of figuring out how their families could get by without losing a basic need. However, we found that

even middle-income households could face hardships due to unusually high water bills and unexpected life events. For example, Rob of Walled Lake experienced a “forced retirement working for Bank of America” and was experiencing stress because he knew the severance payments he was receiving were “going to end.” Eric of Center Line missed a single water bill payment due to quarantining with COVID-19 and planning a wedding, only to find that his usual bill had increased twenty-fold to over \$2,000. Combinations of unstable income, other sources of debt, family changes like divorce or a death in the family, and inexplicably high water bills led to hardship for residents even at higher income levels.

3. Health issues and caretaking obligations create severe financial strains on households.

Many of the households we interviewed included children, the elderly, caregivers, and people managing chronic health issues. Health issues and caregiving responsibilities made it difficult for many residents to make ends meet. For example, Tamra of Roseville described a tremendous battle with cancer (“I was ill for a long time, I had cancer twice”) and was a caretaker for her elderly mother “all the time” until she passed away at 94 years old. Missy, also of Roseville, is a single parent who is a full-time caregiver for her 12-year-old son who has autism and is nonverbal, and Missy suffers from migraines and bone tumors. Stephan of Birmingham described the challenges created by mental health issues, especially anxiety and depression. Other residents reported managing illnesses like hypertension, diabetes, and asthma. These conditions create a range of other challenges, including financial shortfalls due to taking time off of work, not being able to work at all, high medical bills, and challenges physically and mentally managing household finances (e.g., forgetting PINs for accounts).

4. Residents receive inadequate and confusing information about payment assistance programs from their water departments.

A major challenge study interviews highlighted was the lack of information from water departments around payment assistance and payment plans. Of our 15 interviewees, 10 reported not receiving any information about payment assistance programs. For residents who did receive assistance information, in Ferndale, Oak Park, and Southfield, the information provided could be overwhelming. For example, an informational sheet distributed in Oak Park included a list of 13 organizations, ranging from the federal government to local human service and religious organizations, in no particular order. While contact information is provided for each, there are no details about the type of assistance offered or the qualifications required to receive it, leaving it up to the resident to contact each one.

5. Many qualified residents have never received any form of payment assistance.

Of our 15 participants, just one was currently receiving any type of formal assistance, even though seven had incomes under 150% of the federal poverty line, which is the criteria widely used to determine eligibility for water bill assistance. Although four participants had received assistance at some point, most had received it more than five years ago. This points to a gap in available assistance programs reaching households that need it.¹⁷ Three residents reported receiving financial support from family members and local nonprofits (Salvation Army and St. Vincent’s) for their bills.

6. Some residents depend on informal arrangements with their local water departments to provide relief.

A few participants in Oak Park and Ferndale successfully set up payment plans with their local water departments, though these were done informally rather than through a formal program. Charita of Ferndale described her self-advocacy efforts to pay water bills by calling her water department and explaining her financial situation. However, she reported never receiving “any paperwork” formally documenting the agreement. Instead, she spoke with an employee over the phone who she described as “very understanding, especially with senior citizens.” Lauren, also of Ferndale, worked with the water department after receiving an unexpectedly high water bill to make an arrangement that allowed her to “pay chunks of it at a time. So it wasn’t like an assistance program necessarily.” Much like Charita and Lauren, Nicki of Oak Park also received unaffordable water bills for many years. Nicki described calling her water department and explaining that she could only afford to pay “\$100 a month” and “could do nothing more than that.” Fortunately, these residents felt empowered to advocate for themselves. However, they did not have documented, formal payment plans or assistance resources but were instead subject to the willingness and ability of water department officials to work with them. This, we found, can vary significantly between communities. In other places, residents had to pay the money or face a water shut-off.

7. Water shutoff policies create significant distress on residents and their families.

Of the 15 study participants, four had experienced a water shut-off in the communities of Ferndale, Hazel Park, Oak Park, and Roseville. Residents who had their water shut off highlighted the emotional and physical challenges that resulted, which took a toll on their mental and physical health. After Missy’s water was shut off in Roseville, she described feeling stressed out “beyond all belief” and like a “failure.” Missy explained how this was exacerbated by the fact that “you know the city will tell you, well, we can’t come back out until tomorrow. Or you’ll be lucky if you can get (the money) to us by 3 (p.m.). They love saying that, “if you’re after three, sorry

you'll have to wait till the next day.” Similarly, Nicki shared that her multiple water shut-offs in Oak Park felt “embarrassing for one [and] heartbreaking for two.” In addition to these participants, however, several others expressed distress over the threat of a potential shut-off. Charita of Ferndale said she felt “financially strapped and depressed” and stressed about being unable to afford water: “I wake up in the middle of the night to go to the ladies room. It’s the first thing on my head, keeps me from going back to sleep. First thing in the morning, when I go to sleep at night until I can finally pray to sleep. You know, I’ve asked for help from the dear Lord above. I know he’ll come through eventually.”

Water shut-off policies create significant distress for households who worry about losing water especially for children and elders.

8. Residents have experienced increased water bills due to new stormwater charges, the installation of smart meters, and the switch from quarterly to monthly billing.

Residents in certain communities reported that their bills increased significantly after adding stormwater drainage charges, installing smart meters, and switching from quarterly to monthly billing cycles. Susan of Oak Park received a monthly bill in August 2021 for \$107, whereas her previous quarterly bill, received in June 2021, was \$163, or \$54 per month. Her bill had doubled. In Ferndale, Lauren and Charita both said the installation of smart meters had increased their bills, with Lauren sharing, “Everybody’s water bills were going up drastically after these meters were installed.” Charita received a bill of around \$1,000 once the new meter was installed. In Birmingham, Stephan explained, “the largest portion of the water bill is due to water running off the property and into the system.” He knew that he would “have to install water collection barrels at each of the downspouts in order to qualify for savings,” but as a person on a fixed income at the federal poverty line, “Of course, that would be quite costly, you know, for all that equipment, so I didn’t do anything.”

9. Residents have trouble disputing unusually high water bills at their local water departments.

Residents who receive unusually high bills reported having trouble disputing them. Ferndale resident Lauren discussed calling her local water department to dispute her water bill but reported that the department “wouldn’t budge on it at all,” telling her “this is what you owe ... like that’s that.” In Roseville, Missy shared that she did not know disputing her water bill was “even an option.” Eric, a resident of Center Line, shared that when he went to pay his water bill as usual, he noticed that his “outstanding balance was over two grand.” Eric learned that his water meter was malfunctioning, causing the water usage rate to increase to a shockingly high level and leading to a second bill of around \$1,500. Without any solution from the water department, Eric was currently pursuing legal action.

10. Residents engage in water conservation activities to save on their bills.

Residents were concerned about conserving water and took various measures to reduce their usage, including finding and repairing leaks, relying on rain to water the lawn, and minimizing water usage when washing dishes and clothing. As Catherine of Southfield put it, “We can’t water the grass, you know, because the water bill will just blow up. So we have to rely on when it rains.” Catherine also explained that she tries to wash clothes in cold water to save energy and run the dishwasher to save water: “You know, we just try to figure things out to keep the water bill down...but we’re still kind of struggling with it.” Susan of Southfield’s chronic health issues require her to carefully manage her diet, which growing fresh vegetables helps her to do. However, she told us, she has to be careful not to water them too much because of the cost. Samantha is mindful of turning off hoses “so they’re not just dripping away.” Across communities, residents engage in water conservation activities to lower their bills.

11. Residents relied on COVID-19 stimulus money to pay their bills.

The negative impacts of living through a pandemic—including job loss and severe illness—were apparent throughout the interviews. One positive outcome of that period was the distribution of stimulus funding, which all of the residents we interviewed used to pay their water bills and other household expenses. Catherine, who was laid off and did not receive unemployment benefits for nine months, said the stimulus checks “helped so much, oh my God, because I was still waiting to get my unemployment during those times.”

POLICY RECOMMENDATIONS

Since 2005, local water advocates have marshaled evidence for the implementation of a Detroit income-based water affordability program that could expand to address the needs of residents at all income levels. A comprehensive Southeast Michigan water affordability analysis recommended that water municipalities in the region implement an income-based water rate structure.¹⁸ In March, the Great Lakes Water Authority (GLWA) took significant steps in this direction, overhauling the Water Residential Assistance Plan (WRAP)_to provide credits to households that make up to 200% of the federal poverty line to ensure that their water bills will be no more than 3% of their monthly income. An affordability policy approach stands in stark contrast to assistance programs, which have been historically underfunded; provide only small amounts of assistance (e.g. \$25 per month under the previous WRAP program; address only short-term needs versus long-term problems; and offer support to customers only after instead of *before* becoming past-due.^{19, 20}

This monumental step by GLWA is poised to offer significant remedy for many residents in metro Detroit. GLWA serves 3.8 million households and 40% of the state’s population, making it a central stakeholder in addressing issues of water affordability and access. However, there are still important steps that GLWA, local water departments, and the State of Michigan can take to address issues of water access and affordability. Water is an important and accessible entry point for social service providers and policymakers because while water bills are lower than other expenses like housing, they have also been rising faster than any other household expense except for health care.²¹ Households struggling to afford water bills are very likely to be in need of a wider range of services, so alleviating the distress of affording water would relieve some of the pressure. Local and regional departments can implement affordability programs and take measures to ensure continued access to water, such as banning water shut-offs, but statewide programs would help to ensure that such interventions are implemented at a comprehensive scale. We offer the following additional recommendations to reduce water insecurity and promote water affordability:

The State of Michigan should:

- Create uniform guidelines that ensure the universal human right to water and sanitation without exclusion.
- Pass legislation that calls on local departments and agencies to implement water affordability programs to cover all residents across the state, including automatic enrollment for low-income residents currently receiving social services.
- Establish a fund to support income-based water affordability programs across the state to ensure their long-term sustainability.
- Implement statewide shut-off protection programs that end water shut-offs and ensure adequate bill notification practices, dispute resolution processes, and enrolment in available affordability and assistance programs.
- Require water utilities to report data on policies, programs, disconnections and reconnections, rates, and arrearages in order to adequately budget and plan statewide.

Water utilities, including regional operators like GLWA, can take steps to address water insecurity issues at their root. They should:

- Secure local, state, and federal revenue streams to ensure the long-term viability of affordability programs (i.e. more than two years for WRAP) to match the chronic financial deficits that customers with low incomes face.
- Advocate for statewide affordability measures to ensure that water affordability plans are enacted in *all* cities and

townships, including automatic enrollment for residents currently receiving social services.

- Prohibit water shut-offs, which create significant distress and lead to unsafe conditions for families across the region. Prioritize this policy: 1) for vulnerable households with children, elderly persons, people with disabilities, and chronic health conditions, and 2) during extreme temperature (e.g., winter freeze and summer high heat) months.
- Provide supplementary short-term payment assistance plans for households facing temporary emergency shortfalls.
- Enact public health protections and public safety protocols to mitigate the spread of disease, bacteria, and viruses.

In the interim, local water departments can take these measures immediately:

- Stop water shut-offs, which create significant distress and lead to unsafe conditions for families across the region. Prioritize this policy: 1) for vulnerable households with children, elderly persons, people with disabilities, and chronic health conditions, and 2) during extreme temperature (e.g., winter freeze and summer high heat) months.
- Provide supplementary short-term payment assistance plans for households facing temporary emergency shortfalls.
- Ensure that all eligible residents have access to available water affordability and assistance programs, using multiple methods of outreach, and that residents currently receiving social services are automatically enrolled.
- Clear residents’ past bills or arrears when implementing affordability programs to reduce their debt burden and allow for successful current and future repayment structures.
- Assist with property line pipe and plumbing repairs, including sewer lines, for families with low incomes.
- Offer greater transparency with water rates and billing calculations, especially in relation to stormwater charges, the transition to smart meters, and periodic billing transitions.
- Disseminate water conservation tools and educational opportunities to promote savings.
- Create formal systems through which residents can dispute unusually high water bills to ensure their consumer rights.
- Explain all public health protection policies as carried out through the utility’s operations and protocols.

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