NEED TO KNOW

WATER RATES:
WATER AFFORDABILITY

Water affordability is a central element to water access. When water costs make water unaffordable, it can pose a health and safety issue and a myriad of administrative and political problems. Water affordability is typically measured by the annual cost of water bills as a percentage of median household income. Households paying an amount for water that exceeds an affordability threshold are considered to be paying a cost that is unaffordable and a "high burden." Table 1 shows the measures of affordability developed by different organizations. While these thresholds are developed based on median household incomes, many agencies in the U.S. also base affordability on poverty levels.

Table 1. Measures of affordability as a percentage of median household income

Affordability Threshold	Organization
1.5%	California Department of Public Health
2%-2.5%	US Environmental Protection Agency (USEPA)*
3%	United Nations Development Program (UNDP)

Note: * The EPA's affordability threshold is for water and wastewater bills combined, and would therefore be lower for water alone.

A commitment to water affordability is rooted in both human rights and public welfare. While recognition of the Human Right to Water goes back to the 1970s, the legal basis of this right was strengthened in 2012 when the California Legislature passed AB 685, which established a human right to water in California and directed "all relevant state agencies, including the department [of water resources], the state board, and the State Department of Public Health, [to] consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria."

There is also an increasingly recognized consequence of unaffordable water bills on water service providers through "increased collection costs, rising levels of arrearages [non-payment] and numbers of accounts with arrearages, an increased number of terminations of water service, and swelling criticism from various sectors of the community."[i]

WATER AFFORDABILITY PROGRAMS IN CALIFORNIA

Water affordability programs offer a means to support customers who cannot afford their water rates. A number of water service providers in California currently provide some type of assistance to low-income customers. However, programs vary greatly between providers in both their structure and the amount of assistance they provide. See Table 2 for a description of some water affordability programs offered in Northern California.

Concerns around the stipulations of Proposition 218 (California's Right to Vote on Taxes) have led some water service providers to conclude that water affordability programs may lead to legal challenges if they are deemed a subsidy from one customer class to another and, therefore, are too risky. However, there are several ways to set up and fund affordability programs that can reduce risks, including finding alternatives to rate-based revenue sources, providing services specific to low-income customers, and improving the management of the water system. These approaches are described in more detail below.

Table 2. Examples of Water Affordability Programs for Low-income Households in California

Water Supplier	Program	Benefit	Amount of Discount (assuming an average monthly bill)	Eligibility	Funding Source
CalWater	Low Income Rate Assistance (LIRA) Program	50% Discount up to $12 on monthly service charge	$7.02/month	Same as California Alternative Rates for Energy (CARE) program	CPUC-approved flat rate surcharge on residential customers. This ranges from $0.24 - $0.41/month depending on the district.
San Jose Water Company	Water Rate Assistance Program (WRAP)	15% Discount on total water bill	$8.27/month	Same as CARE program	CPUC-approved surcharge on residential customers of $0.20/month.
City of Napa	RateShare Discount	$4.75/bimonthly Discount	$2.38/month	Same as CARE program	Funds come specifically from leasing cell phone tower space on the City's water tank property sites.
City of Sacramento	Salvation Army Family Services	Up to $100	(one-time assistance)	Income requirements	Salvation Army is an independent charity organization that has its own budget.
East Bay MUD	Customer Assistance Program (CAP)	50% Discount on service and commodity charges	$27.73/month	Same as CARE program	This discount is not financed; it is a Board-approved lower rate.
San Francisco Water, Power, and Sewer	Community Assistance Program (CAP)	15% Discount on water bill	$10.90/month	Same as CARE program	Funded through: Tax-deductible donations and unused credits from customers who overpay on their water bill.

STRATEGIES FOR SUCCESS

While water service providers face distinct obstacles, that do not apply to other utilities, affordability programs offered by the energy and telecommunications sectors can provide some lessons to improve water affordability programs. Affordability programs in the energy and telecommunications sectors can be characterized by their consistency: they often use the same or similar standards for eligibility, have stable sources of funding, and routinely release data about participation in the program in order to track progress. The similar eligibility guidelines mean that each individual service provider does not need to invent its own affordability program, and they also create a standard set of practices throughout the State, contributing to relatively high participation rates.

Rate affordability must necessarily consider the multiple challenges that customers face in accessing basic water services. For example, in the Central Valley, residents often purchase bottled water for drinking because their drinking water is not safe to drink (Moore et al. 2011). This creates a conundrum of how to make rates more affordable, while ensuring that residents receive safe water and that source water is adequately protected in the long run. Below are some key strategies for the development of successful affordability programs.

Use existing eligibility requirements from other sectors to automatically enroll customers.

There are many well-established programs to ensure that low-income households have affordable access to utility services for electricity, natural gas, and telecommunications, including California Alternate Rates for Energy (CARE); the Family Electric Rate Assistance Program (FERA); the Federal Low Income Home Energy Assistance Program (LIHEAP); the Low Income Energy Efficiency Program (LIEE); and the California LifeLine Program (see Table 3). A number of water suppliers use the same program-enrollment eligibility as CARE or another public assistance program such as Medicaid/Medi-Cal; Women, Infants, and Children Program; Supplemental Security Income; Temporary Assistance for Needy Families (TANF); or Tribal TANF.

Energy affordability programs have been in existence for many years and routinely collect information about who is eligible. In some cases, utilities or public welfare agencies may be able and willing to share this information with water service providers. In such cases, it can minimize administration costs to automatically enroll customers who are participating in programs with matching eligibility requirements, sending a letter to the household announcing that they will receive benefits unless they request otherwise.[ii] However, even if this information is not made available, a water service provider can allow customers to enroll themselves with proof of participation in a program with matching eligibility requirements.

For example, the Golden State Water Company has a low-income rate assistance program based on the same eligibility requirements as CARE. Thus, the Company allows customers to enroll in their water affordability program by simply "submitting a copy of a current utility bill showing eligibility for CARE."[iii] This method of enrollment is straightforward in terms of customer enrollment and administration. However, the process should be clearly communicated to all water customers to ensure a high level of participation.

Table 3. Eligibility Requirements for Affordability Programs for Electricity, Natural Gas, and Telecommunications

Program	Utility	Benefit	Eligibility (assuming a family of 4)	Funding Source	Participation Rate
CARE	Electricity	20% Discount	Total annual household income below $46,100	Public Goods Charge	60.55%[1]
CARE	Gas	20% Discount	Total annual household income below $46,100	Public Goods Charge	35.4%[2]
FERA	Electricity	Tier 3 energy usage billed at Tier 2 rate (for consumers slightly exceeding the eligibility threshold of CARE)	Total annual household income below $46,101-$57,625 (250% of federal poverty guidelines)	Public Goods Charge	14.6%[3]
LIHEAP	Energy	~$200 credit used for utility bill payment	Total annual household income less than $47,200 (60% of state median income)	U.S. Department of Health and Human Services Community Services Block Grant	17%[4]
ESAP (LIEE)	Energy Efficiency	Free weatherization services	Total annual household income below $46,100	Public Goods Charge	42.1%[5]
LifeLine	Telecommunication	Several services available to lower telephone bills	Total annual household income below $34,800	Public Goods Charge	20-50%[6]

[1] This figure does not include the Sierra Pacific Power Company as it was derived from only the annual reports made available through the Low-Income Oversight Board – an advisory board to the California Public Utilities Commission.
[2] This figure does not include Alpine Natural Gas or West Coast Gas Company for the same reason.
[3] This figure does not include Southern California Edison for the same reason.
[4] This figure represents LIHEAP participation nationally.
[5] This figure comes from the 2011 update of CPUC's CA Energy Efficiency Strategic Plan.
[6] This percentage range comes from a study by the Universal Service Administrative Company.

Pursue alternatives to rate-based revenue sources.

Revenue can be collected from a variety of sources to fund affordability programs besides the rate-base, including federal grants, private charities, and rental/usage fees. One example of a federal assistance program is the Low Income Home Energy Assistance Program (LIHEAP), a block grant funded by the Federal Department of Health and Human Services.[iv] Through LIHEAP, eligible residents receive a credit to help pay utility bills, including water bills. The share of LIHEAP that the State of California receives is approximately $150 million annually, and the California Department of Community Services and Development acts as the intermediary that distributes this share of LIHEAP to community organizations that operate programs for each county.[v] This is not an automatic entitlement program and less than 20% of those eligible for the funding are currently participating. Water service providers could send information to eligible customers about this program or help them enroll.

Beyond federal assistance programs, there are also a number of private charities that may provide water affordability assistance. For example, the City of Sacramento Department of Utilities developed a partnership with Salvation Army to provide a "Customer Assistance Program" for elderly, low-income, or disabled customers to help pay utility bills, financed through donations to Salvation Army. In addition, there are many examples of innovative approaches to fund affordability programs from accepting tax-deductible donations (in some cases allowing customers to round-up to the nearest dollar on water bills), to creating a fund from unused credits for overpayment, to property leases. For example, several water service providers in California use the funds collected from leasing cell phone tower space on their properties to fund affordability programs or non-rate revenues such as rental income; property taxes (in the case of special districts); and general fund revenues (in the case of some cities).

Provide services to low income customers.

While reducing the bill for low-income customers is the most direct method to address affordability, there are a variety of services that can be provided to reduce financial hardships for low-income customers (see Table 4). For example, budget billing removes uncertainty by averaging the bill over the year, reducing seasonal fluctuations and summer peaks. While budget billing does not reduce the total cost of water over the course of the year, it can improve affordability in summer months when water use typically increases.

Consider the conservation signal.

Finally, when designing an affordability program, water utilities can consider encouraging water conservation and efficiency. For example, rather than offering a percentage discount on the total water bill, which increases as more water is used, consider capping the percentage discount based on the average water use for the particular household size. In addition, consider applying discounts to, or waiving completely, the fixed portion of the water bill, which does not vary by customer usage, rather than the variable portion, which reflects customer usage and can be reduced through water conservation and efficiency efforts.

Table 4. Services to improve water affordability (adapted from Saunders et al. 1998)

Service	Description
Bill timing	Change the timing of bills to more closely coincide with the income stream of the household. For example, time bills to coincide with customer's receipt of Social Security or pension income.
Budget billing	Allow methods of bill payment to avoid unaffordable peaks (typically during summer months).
Pre-termination protections	Provide full due process protections before terminating water service – for example, required notice of customer's opportunity to enter a budget billing program or deferred payment arrangement.
Appropriate charges	Ensure that all charges for late payments, disconnection and reconnection, and deposits are imposed after clear notification and do not exceed the true costs of the services provided. For example, a water service provider may choose to waive late payment fees for low-income customers.
Conservation programs	Provide assistance to help reduce usage by curtailing leaks and installing conservation devices – for example, target low-income houses for audit, retrofit, and rebate programs.
Debt management plans	Establish incentive programs that reward customers for timely payments with partial forgiveness of old debt and provide installment plans to re-pay old debt.

Improve technical, managerial, and financial capacity.

Many water systems, particularly in rural and disadvantaged communities, suffer from poor technical, managerial, and financial (TMF) capacity. For instance, water systems may have no full-time staff and have water rates that don't adequately cover long-run costs of running a system. In many places, even where current rates do not cover system costs, they are still unaffordable for many residents.

Regional solutions and water system consolidation offer one promising approach to improve TMF. As more small water systems consider how to share water services or consolidate physically, there may be opportunities to improve TMF capacity and benefit from economies of scale. In the process of developing regional solutions or joint collaborations, particular attention must be paid to ensure that rates ensure system sustainability *and* affordability. In essence, opportunities to consolidate physically or share services across utilities can help incorporate affordability considerations from the beginning, even if affordability programs are also necessary.

Other approaches besides regionalization include: completing asset management plans and energy plans and attending Board trainings. An asset management plan helps determine critical system improvements and the associated costs per connection. An energy audit helps identify energy and associated cost savings. Board trainings help educate boards about water rates and system finances (see Water Rates: Communication and Education). In assessing TMF capacity, some states, like Arizona, offer additional technical resources to low-TMF systems.[iv] Providing resources to these systems is critical in order to support improved planning and training efforts.

ENDNOTES

[i] Saunders, M., P. Kimmel, M. Spade, and N. Brockway. 1998. Water Affordability Programs. American Water Works Association (AWWA). Denver, CO: AWWA.

[ii] *Ibid.*

[iii] Golden State Water Company. Not dated. Golden State Water Company Notice and Application for California Alternate Rates for Water (CARW) Program. Accessed online at: http://www.gswater.com/wp-content/uploads/2012/10/CARWBillInsert2012-2013English.pdf

[iv] "Low Income Home Energy Assistance Program (LIHEAP)." California Department of Community Services and Development. Accessed online at: http://www.csd.ca.gov/Programs/Low%20Income%20Home%20Energy%20Assistance%20Program%20(LIHEAP).aspx.

[v] *Ibid.*

[vi] Arizona Department of Environmental Quality. 2011. Capacity Development Program, Governor's Report: FY 2009 – 2011. EQR 11-04.