

**Recommendations for  
Implementation of a Statewide  
Low-Income Water Rate  
Assistance Program**



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## Acknowledgments

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**The report and appendices are available on the State Water Board’s website at:**  
[https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/assistance/](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/).



## Introduction

This report has been prepared in accordance with the requirements of Chapter 662, Statutes of 2015 (AB 401, Dodd), which requires the State Water Resources Control Board (State Water Board), in collaboration with the State Board of Equalization and relevant stakeholders, to develop a plan for funding and implementing a Low-Income Water Rate Assistance Program. The statute requires the Board to submit a report to the Legislature by February 1, 2018, with its “findings regarding the feasibility, financial stability, and desired structure of the program, including any recommendations for legislative action that may need to be taken.”

In 2012, California enacted the Human Right to Water Act (Assembly Bill (AB) 685), establishing a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking and sanitary purposes. Since the passage of AB 685, the Legislature passed, and the Governor signed, various laws<sup>1</sup> aimed at making this policy a reality. With the passage of Senate Bill (SB) 200 this year, 1 million Californians will begin to receive safe drinking water. There is, however, more to do. In recognition that many Californians may not be able to pay their water bills, the Legislature enacted the Low-Income Water Rate Assistance Act (AB 401, 2015), which directed the State Water Resources Control Board (State Water Board or Board) to submit recommendations for a statewide Low-Income Water Rate Assistance Program (W-LIRA).

In this report, the State Water Board recommends components for developing a successful program to help low-income households afford their drinking water. Specifically, this report identifies potential program recipients, different mechanisms for delivering assistance to low-income households, and possible funding sources to implement such a W-LIRA program. The purpose of this report is to present recommendations for a W-LIRA program for the consideration of the Legislature. The recommendations outlined within this report reflect discussions with public interest groups and stakeholders.

While AB 401 specifically focuses on assisting low-income households in affording their drinking water, the State Water Board is committed to achieving the Human Right to Water in full. This includes implementation of safe drinking water solutions, reducing vulnerability to shortages, community-level affordability and financially sustainable drinking water systems, and access to water and sanitation for the most marginalized in our society. While the state continues to develop these comprehensive solutions, creating a W-LIRA program will provide a safety net for low-income residents statewide.

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<sup>1</sup> These laws include: SB 88 (2015), SB 552 (2016), SB 1263 (2016), AB 401 (2015), AB 1668 & SB 606 (2018), AB 2501 (2018), SB 998 (2018), and SB 200 (2019).





## Executive Summary

This report has been prepared in accordance with the requirements of Chapter 662, Statutes of 2015 (AB 401, Dodd), which requires the State Water Resources Control Board (State Water Board), in collaboration with the State Board of Equalization and relevant stakeholders, to develop a plan for funding and implementing a Low-Income Water Rate Assistance Program. The statute requires the Board to submit a report to the Legislature by February 1, 2018, with its “findings regarding the feasibility, financial stability, and desired structure of the program, including any recommendations for legislative action that may need to be taken.”

### The Growing Water Affordability Challenge

Drinking water is a basic human need. California households, however, find it increasingly difficult to satisfy this need as the retail cost of water has risen substantially over the last decade and is expected to rise significantly over the coming years. Figure 1 shows that, adjusting for inflation, the average Californian household paid around 45% more per month for drinking water service in 2015 than in 2007. The burden of rapidly rising drinking water costs falls disproportionately on the 13 million Californians living in low-income households, many of whom have seen their incomes stagnate during the same period. The high and rising costs of other basic needs for California residents, including housing, food, and other utility services, means that cost increases for any single need, such as water, can force families to make difficult and risky tradeoffs which could harm their health and welfare. Expenditures to meet basic water needs are expected to continue to rise rapidly due to the need for water systems to replace aging infrastructure, meet treatment standards, diversify supplies, and maintain a well-trained workforce.

**Figure 1. Inflation-Adjusted Increase in Average Price of Water (15 CCF<sup>2</sup>) for California Households**



Source: American Water Works Association Data, 2007-2015

## Need for a Statewide Program

Only about half of California’s population is served by a community water system (CWS)<sup>3</sup> offering some form of rate assistance program, and most of these existing programs have low levels of enrollment and limited financial resources. As a result, less than 20% of the state’s low-income population served by CWSs currently receives benefits from a low-income rate assistance program.

There are financial obstacles to providing a rate assistance program to water users at the system level. Many of the approximately 2,900 individual CWS cannot operate standalone rate assistance programs because they lack an adequate rate base to support benefit expenditures. As illustrated in Figure 2, using 200% of the federal poverty level (FPL) as the baseline eligibility criteria for W-LIRA programs would mean that—for many large systems<sup>4</sup>—more than 50% of their customers would be eligible for assistance. The problem is even more extreme for many smaller systems. To operate individual low-income rate assistance programs, these systems would likely have to impose outsized burdens on higher-income households. Even then,

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<sup>2</sup> Centum cubic feet (CCF) is also known as a hundred cubic feet (HCF), which is 748 gallons. For a four-person household, 12 CCF of use per month equates to 75 gallons of water per person per day.

<sup>3</sup> Health and Safety Code section 116275, subdivision (i) defines a community water system as a public water system serving at least 15 connections used by yearlong residents or regularly serving at least 25 yearlong residents of the area served by the system.

<sup>4</sup> Those serving a population of 3,000 or more. High cross-subsidy burdens are even more problematic among smaller systems.



publicly-owned systems would be legally prevented from imposing water rates on non-eligible customers that exceed the cost of serving those customers.<sup>5</sup>

**Figure 2. Large Water Systems with High Percentages of Low-Income Households That Could be Eligible for Rate Assistance**



Note: Calculated using Census data and system water boundaries. The percentages shown above represent the proportion of residential customers served by the system who have incomes under 200% of the Federal Poverty Level.

Due to the impracticality of a comprehensive low-income rate assistance program at the system level, the Board envisions a statewide program with benefits distributed through water bills, crisis assistance for water ratepayers, and a renter’s water credit for residents who pay for their water indirectly through rent.

The Board recommends the use of progressive revenue sources (i.e., taxes) for most of the program cost to avoid burdening the very state residents the program seeks to serve. For example, taxes on personal and business income would provide progressive revenues. To balance potential volatility of these sources, the Board also recommends taxes on bottled water, which should generate more stable revenue and have a direct nexus to water use.

Eligibility criteria and benefit levels would influence the total program costs. AB 401 defined “low-income” as 200% of the FPL; however, the Board evaluated alternate eligibility criteria that could feasibly be implemented across the state (some of which are discussed in Appendix D). Benefit levels could be tied to the cost of water, other assistance programs, or certain affordability criteria.

<sup>5</sup> Cal. Const., art. XIIIID, § 6, subd. (b)(3).

The first component of the program scenario would offer a three-tiered direct bill credit to all eligible residential households (those with incomes under 200% of the FPL) in the state.<sup>6</sup> This component would provide a benefit equivalent to the tiers below. The monetary value of the on-bill credits provided in each tier would be based on the expenditure necessary for a monthly consumption level of 6 CCF for each of the 2,900 CWS, rather than each household's actual amount of water consumed (and corresponding bill level), as explained in Chapter 2.

### **Text Box 1: Direct Bill Credit Component Benefit Levels**

**Tier 1:** bill credit equal to *20 percent* of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the federal poverty level (FPL) in water systems and where the charges for 6 CCF is less than \$62,

**Tier 2:** bill credit equal to *35 percent* of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the FPL in water systems and where the charges for 6 CCF is between \$62 and \$83, and

**Tier 3:** bill credit equal to *50 percent* of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the FPL in water systems and where the charges for 6 CCF is above \$83.

Because the average monthly water bill for 6 CCF is around \$41 per month,<sup>7</sup> most low-income households would be in Tier 1.

The proposed eligibility criteria would apply to all low-income households regardless of residency status. The Board supports a program with inclusive eligibility criteria, and specifically rejected recommending use of federally funded programs with legal residency mandates (e.g., CalFresh). The estimated costs and number of households benefited by these proposed components are shown on the next page in Table 1.

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<sup>6</sup> The Federal Poverty Level is based on household size, so larger households would qualify with higher incomes than smaller households.

<sup>7</sup> See Appendix D of this report.

**Table 1. Three Component Program Design**

<b>Program Component</b>	<b>Estimated Number of Households Benefitted</b>	<b>Estimated Cost (millions)</b>
Component 1- Direct Water Bill Credits	1,766,248	\$141.2
Component 2- Renter’s Water Bill Credits	2,583,397	\$237.1
Component 3- Water Crisis Assistance*	351,063	\$184.9
Short-Term Assistance to CWS to administer program components	Not applicable	\$43.0
<b>Total 3 Program Cost</b>		<b>\$606.2</b>

\*Households eligible for Component 3 may also be eligible for Components 1 or 2.

The second component of the program would deliver credits equivalent in monetary value to Tier 1 (shown above) to low-income households who receive water from a CWS but are not directly billed for water service. This component would operate as a state income tax credit. The third component of the program would provide crisis assistance to help prevent drinking water service shutoffs for low-income households with past due bills.

The proposed benefit levels of these program components would provide substantial assistance to all low-income households, but also a larger benefit to those served by CWS with the greatest drinking water expenditure burden, in parallel with other utility assistance programs. Specifically, both the program eligibility criteria and first two benefit tiers of the first component correspond to the California Alternative Rates for Energy (CARE) program design where 4.3 million low-income households receive a 30-35% discount on their electric bill and a 20% discount on their natural gas bill. In addition, the crisis assistance component (third component) is designed based on the energy crisis assistance program administered under the Low-Income Heating and Energy Assistance Program (LIHEAP).

The three-component approach would directly address water bill burdens to the largest extent possible which serves as a significant advantage compared to any other benefit delivery method. In addition, by enabling water systems to administer benefits both directly on-bill and by utilizing the existing state income tax system framework (component 2), this approach would eliminate the administrative complexity of matching water system boundaries (and thus rates and benefit levels) by any state-level agency or program that is unfamiliar with the drinking water system landscape.

This three-component program scenario is projected to have a total cost of about \$606 million for the first year, including both benefit distribution and program administration. Costs would

adjust over time based on changes in the number of eligible households and CWS water rates. Costs may also decrease over time, as program-funded system costs for program administration would decrease after the initial implementation phases. The total annual cost includes ongoing program management costs, such as potential expanded household enrollment verification procedures, marketing and outreach, and benefit distribution system modifications, as discussed further in Chapters 2, 3, and 4 and the Appendices. The total annual cost also includes the cost of tracking and delivering benefits, fund management, and designing and evaluating metrics for program effectiveness.

Although there are many options for improving water affordability, the need to address this growing crisis is clear. The Board looks forward to working with stakeholders, the Administration, and the Legislature to develop and implement policy solutions.



# Chapter 1

## Why Help Households Pay for Drinking Water Service? The Need for Low-Income Rate Assistance in California

AB 401 mandates that the State Water Board, in collaboration with the Department of Tax and Fee Administration<sup>8</sup> and relevant stakeholders, develop a plan for the funding and implementation of a W-LIRA, which would include specified elements (see Appendix A for the full text of AB 401). This report (including its appendices) reflects the analysis and recommendations from the planning process envisioned by AB 401.

### Why help households pay for drinking water service?

Rising income inequality coupled with California’s high cost of living means that many households, especially low-income households, find it increasingly difficult to meet basic needs, including housing, food, clothing, transportation, healthcare, and utilities including water. Currently, 34% of Californians—roughly 13 million people—live in households with incomes under 200% of the FPL, which was \$50,200 for a family of four in 2018. When families are unable to pay their bills, they face difficult and highly consequential trade-offs, like skipping meals and going hungry, delaying or avoiding medical treatment, risking eviction, or facing potential disconnection for electric, gas, or water services.

An analysis of U.S. Census data reveals that the real median household income in California in 2017 was lower than in 2007.<sup>9</sup> Across the nation more broadly, there has been stagnation in real incomes for low- to moderate-income earners and a lack of households moving out of poverty conditions spanning the last 30 years.<sup>10</sup> At the same time, the largest necessary cost of living—housing costs—have shown rapidly increasing divergence from household income since 2000.<sup>11</sup> Low-income households need more support to make ends meet. Providing all low-income

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<sup>8</sup> The Department of Tax and Fee Administration now performs functions that the State Board of Equalization performed at the time of AB 401’s passage.

<sup>9</sup> Alternatively, the percentages of households under 100% or 200% of the FPL were slightly higher in 2015 than 2005.

<sup>10</sup> Drew Desilver (2014). Pew Research Center. *For most workers, real wages have barely budged for decades*. Available at: <http://www.pewresearch.org/fact-tank/2014/10/09/for-most-workers-real-wages-have-barely-budged-for-decades/>; Elise Gold (2015). Economic Policy Institute. *2014 Continues a 35-Year Trend of Broad-Based Wage Stagnation*. Available at: <http://www.epi.org/publication/stagnant-wages-in-2014/>.

<sup>11</sup> California Housing and Community Development Department (2017). *California’s Housing Future: Challenges and Opportunities Public Draft*. Available at: <http://www.hcd.ca.gov/policy-research/plans-reports/docs/California%27s-Housing-Future-Full-Public-Draft.pdf>.

households with financial assistance to help pay their water bills is a small, but important, way the state can support provision of basic necessities for all Californians.

Table 2 shows the results of the stagnation in household incomes for the lower end of the income distribution in California. Recent data shows that nearly 15% of California households have an income below the FPL and more than one-third of California households have an income below 200% of the FPL.<sup>12</sup>

**Table 2. Financially Disadvantaged California Households**

<b>Designation</b>	<b>Percent of State Households</b>
Below 100% of Federal Poverty Level	14%
Below 150% of Federal Poverty Level	24%
Below 200% of Federal Poverty Level	34%

Source: 2010-2014 American Community Survey Data

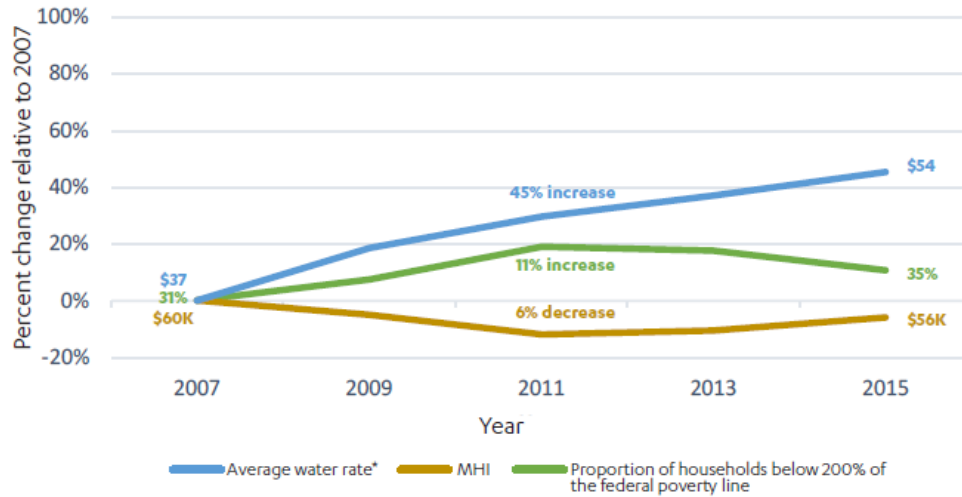
Figure 3 illustrates the combined effects of stagnating incomes and rising retail drinking water costs for low- and median-income households.

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<sup>12</sup> The percentage of households below the 100% and 200% FPL closely corresponds to the national averages, which are 16% and 35%. For reference, 200% of FPL for a 4-person household in 2015 was \$48,600. This income level roughly corresponds to the Board’s 2015 median household income cutoff for defining “disadvantaged communities” (DAC) of \$49,454. The DAC threshold in turn is set at 80% of the state’s median household income (which is \$61,818) and the metric is widely used to determine eligibility for other drinking water system financial assistance programs in California. The 200% FPL threshold is particularly relevant for considering the need for a W-LIRA program because existing low-income rate assistance programs most commonly use these income levels as eligibility criteria. AB 401 also defines low-income at the 200% FPL threshold. The FPL, as a federally designated threshold, does not have a cost of living adjustment and is the same in California as all other states, despite the higher cost of living.



**Figure 3. Changes in water rates relative to median household income and the proportion of low-income households since 2007 (adjusted for inflation)**



There are at least four additional rationales for supporting the development of a W-LIRA program in California:

1. *The devastating health and livelihood impacts people experience when water is unaffordable,*
2. *The rapidly rising retail cost of drinking water,*
3. *The general absence of robust low-income rate assistance or affordability programs for water, despite the availability of comparable programs for other utility needs, and*
4. *The inability of many individual water systems to self-fund a rate assistance program.*

Explanations for each of these motivations for a W-LIRA program occur below.

### **Health and livelihood impacts**

If water is unaffordable, low-income households will likely either consume less water than is healthy and/or consume less of other vital goods and services to pay for the water they need.<sup>13</sup> In other words, low-income households face tradeoffs that harm their health and welfare.<sup>14</sup> For

<sup>13</sup> Davis, Jon P. and Teodoro, Manuel P. (2017). “Financial Capability and Affordability.” Chapter 22 in *Water and Wastewater Finance and Pricing: The Changing Landscape*, Fourth Edition.

<sup>14</sup> Morduch, Jonathan, and Schneider, Rachel. *The Financial Diaries: How American Families Cope in a World of Uncertainty*. Princeton University Press, 2017.

instance, in Detroit, households have prioritized the immediate need of electricity for heating over water, and the city experienced a high rate of water shutoffs due to non-payment.<sup>15</sup>

During the course of public engagement regarding the development of an affordability program, Board staff heard troubling stories of shutoffs at the public meetings around the state and in comment letters.<sup>16</sup> Moreover, some data has been collected in the Board's 2018 Electronic Annual Reporting System (EAR) regarding the prevalence of water shutoffs following the passage of SB 998 (2018). The data reported by about 500 of the state's largest CWS suggest that there are at least 250,000 drinking water service shutoffs of occupied single-family residential accounts annually in the state. Appendix I summarizes this information in more detail.

Unaffordable water service, especially in light of low-income households' extremely constrained incomes, can lead to service disconnections. A major public health concern from water shutoffs is water-related illnesses. For instance, the recent Hepatitis A outbreak across parts of California among at-risk populations without permanent shelter has been partially attributed to a lack of access to adequate water and sanitation facilities.<sup>17</sup> A recent study by the Henry Ford Hospital also examined the public health implications of water shutoffs in Detroit. By analyzing water-borne illnesses and comparing them to home addresses of water shutoffs, researchers found that patients diagnosed with skin and soft tissue diseases were 1.48 times more likely to live on a block that experienced water shutoffs. Following the release of the study in July 2017, a panel of experts, including physicians, called for the declaration of a public health emergency in the city because of the correlation between water shutoffs and water-related illnesses.<sup>18</sup> For similar reasons, the City of Pittsburgh Water and Sewer Authority recently placed a moratorium on drinking water service shutoffs in the winter season.<sup>19</sup> At a broader scale, shutoffs and lack of affordable access to water can result in an economic burden to the state, as low-income families facing these challenges incur outsized healthcare costs, some of which are subsidized by the public sector.

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<sup>15</sup> Filson, J. and Avery, T. (2017). "Water Shutoffs in Detroit: An Ongoing Crisis." *Food & Water Watch*.

<sup>16</sup> See [https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/assistance/](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/) for links to AB 401 comment letters.

<sup>17</sup> For instance, see California Department of Public Health (2018). "Hepatitis A Outbreak in California". Available at: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Hepatitis-A.aspx>.

<sup>18</sup> Chambers, Jennifer. Experts: Water shutoffs causing public health emergency. *The Detroit News*. [Online] July 26, 2017. Available at: <http://www.detroitnews.com/story/news/local/detroit-city/2017/07/26/detroit-water-shutoffs-health-study/104016812/>.

<sup>19</sup> The Pittsburgh Water and Sewer Authority (2017). Winter Moratorium Program- Frequently Asked Questions. Available at: [http://apps.pittsburghpa.gov/redtail/images/1647\\_WinterMoratoriumProgram\\_FINAL.PDF](http://apps.pittsburghpa.gov/redtail/images/1647_WinterMoratoriumProgram_FINAL.PDF).

Households that cannot pay their water bill also face negative impacts to their credit and risk loss of property and/or eviction. For example, the City of Baltimore’s water system often sells unpaid water bills as property liens in tax sales. Households that cannot pay back the bill and additional charges and interest to the buyer of the lien lose the home to foreclosure. From 2014 to 2015, the number of homes sold at tax sales in Baltimore with water-only liens rose from 671 to 902.<sup>20</sup>

### ***Rapidly-rising water costs***

Understanding household drinking water affordability requires consideration of a household’s necessary expenditure for water and income, along with the costs of other vital goods and services such as housing, utilities, food, transportation, and healthcare.<sup>21</sup> Water affordability becomes a more pressing issue for households as water service rates rise.

The Board began maintaining water rate data for California’s drinking systems in 2014. Using this data for estimation purposes, the average California household in 2015 paid around \$41 per month for 6 CCF of drinking water service. Longer-standing sources of rate data indicate that the rising retail price of water has dramatically outpaced inflation in California (and the U.S. more broadly) over the last decade.<sup>22</sup> Moreover, financial analysts project the retail price of water to rise significantly in California over the coming years.<sup>23</sup>

A number of factors explain the rising rates for water service, three of which are relatively unique to water among the basic service sectors.<sup>24</sup> First, water has been historically underpriced

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<sup>20</sup> Jacobson, Joan (2016). *Keeping the Water On: Strategies for addressing high increases in water and sewer rates for Baltimore's most vulnerable customers*. The Abell Foundation.

<sup>21</sup> For instance, see Teodoro, M. P. (2018). Measuring Household Affordability for Water and Sewer Utilities. *Journal-American Water Works Association*, 110(1), 13-24. While designing a statewide affordability program with an eligibility or benefit criteria which takes into account the cost of other vital goods and services for low-income households may be ideal, it was deemed infeasible for two reasons. First, it is not possible to obtain accurate and representative data on variation in other essential costs outside of large metropolitan areas, as shown in a close reading of Teodoro, 2018. Second, and perhaps more importantly, it is unreasonable to expect a potential statewide drinking water affordability program to compensate for the high local cost of other essential services given that this potential program has no federal or state general fund assistance and is being considered after the establishment of other much longer-standing benefit programs.

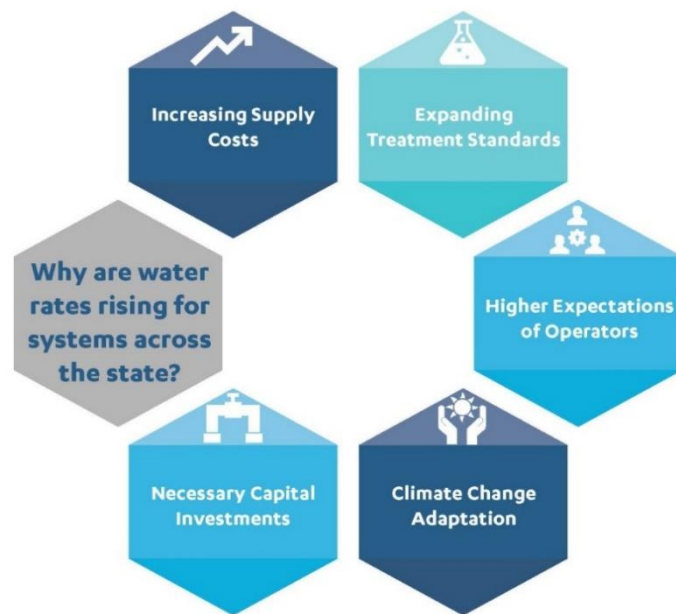
<sup>22</sup> 2015 California-Nevada Water and Wastewater Rate Survey. American Water Works Association and Raftelis. Available at: <https://www.ca-nv-awwa.org/>.

<sup>23</sup> Carroll, Rory. September 18, 2015. “California water prices set to rise next year: Fitch.” Available at: <http://www.reuters.com/article/us-california-water-rates/california-water-prices-set-to-rise-next-year-fitch-idUSKCN0QN1PH20150818>.

<sup>24</sup> 2015 California-Nevada Water and Wastewater Rate Survey. American Water Works Association and Raftelis. Available at: <http://ca-nv-awwa.org/canv/downloads/2016/CANVRateSurvey2015.pdf>; [American Society of Civil Engineers, California Infrastructure Overview \(2017\)](#).

compared to the true cost of service,<sup>25</sup> leading many water systems in California to underfund or put off infrastructure maintenance, replacement, and other critical activities. Second, increasingly stringent water quality standards also require additional costs for treatment and operator training which further stress financial capacity.<sup>26</sup> Third, the percentage of federal support in total public infrastructure spending for water utilities has fallen from over 30% in the 1970s to less than 5% in 2015.<sup>27</sup> In other words, CWS must finance their own operations to a much greater extent than in the past. These funding constraints and increasing costs combine with other factors to drive increasing water rates in the state, as summarized in Figure 4.

**Figure 4. Drivers of Rising Water Rates in California**



Source: Based on feedback from water system managers and review of academic literature on water rates.

Source: Based on feedback from water system managers and review of academic lecture review on water rates.

Among these cost drivers, climate change adaptation will play a significant role in the future of water affordability as both populations and suppliers shift behaviors and practices in response to

<sup>25</sup> For instance, see Timmins, C. (2002). Does the median voter consume too much water? Analyzing the redistributive role of residential water bills. *National Tax Journal*, 687-702.

<sup>26</sup> Hanak, E., Gray, B., Lund, J., Mitchell, D., Chappelle, C., Fahlund, A., Jessoe, K., Medellin-Azuara, J., Misczynski, D., Nachbaur, J., Suddeth, R., Freeman, E., and Stryjewski, E. “Paying for Water in California.” (2014). Public Policy Institute of California, pg. 35.

<sup>27</sup> U.S. Congressional Budget Office (2015), Public Spending on Transportation and Water Infrastructure, 1956 to 2014, Available at: <https://www.cbo.gov/publication/49910>; Eskaf, Shadi, September 26, 2015. “Four Trends in Government Spending on Water and Wastewater Utilities Since 1956” Available at: <http://efc.web.unc.edu/2015/09/09/four-trends-government-spending-water/>.

climatic impacts. At the household level, the effects of higher temperatures will be felt across the state, with increases of 5°F and 10°F predicted by the 2030s and late 2090s, respectively.<sup>28</sup> Numerous studies show these increased temperatures will increase residential water demand;<sup>29</sup> the most specific urban case study in New York City shows an annual per capita increase of water consumption for temperature increases above 78°F.<sup>30</sup>

Alongside this increase in demand, there will also be an increase in the difficulty of maintaining safe and consistent water supplies due to physical and hydrologic shifts throughout the state, including drought. One widely-recognized challenge is sea level rise, which infiltrates groundwater with salts, decreasing groundwater availability for drinking water supplies.<sup>31</sup> Additionally, the increased prevalence of wildfire burns across California diminishes watershed health and will likely lead to increases in the costs of drinking water supplies.<sup>32</sup> Perhaps most importantly for California, the Sierra Nevada snowpack, which currently supplies the state with over 60% of its water supply for urban and agricultural uses<sup>33</sup>, is shrinking and will continue to do so, forcing water providers to seek alternatives.

In addition to past and expected future water rate increases for all customers, the water sector differs from other basic services due to its wider variability in retail rates across a wider range of retail systems. Retail rate divergence by neighboring systems is common within California.<sup>34, 35</sup> While the average California household paid around \$41 per month for 6 CCF of drinking water service in 2015, actual prices paid by households varied tremendously. Many systems (1024) charge rates higher than the state average, with some charging one and a half (128), two (16), or three times (4) the average price for the same amount of water. The state's geography, population distribution, and hydrology mean that source water quality and quantity greatly vary, and many smaller systems face high costs to obtain and treat water.

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<sup>28</sup> CalEPA & CPDH, 2013.

<sup>29</sup> Pacific Institute, 2012; Wang et al., 2015; Neale et al., 2007.

<sup>30</sup> Protopapas et al., 2000.

<sup>31</sup> Hoover, et al., 2017.

<sup>32</sup> Westerling et al. (2011) and Westerling & Bryant (2007).

<sup>33</sup> Sierra Nevada Conservancy. "California's Primary Watershed." Sierra Nevada Conservancy. 2019. <https://sierranevada.ca.gov/ca-primary-watershed/>.

<sup>34</sup> Such divergence is also found in contexts outside California. For instance, see Gregory, Ted; Reyes, Cecilia; O'Connell, Patrick M.; and Caputo, Angela; Same Lake, Unequal Rates: Why our water rates are surging – and why black and poor suburbs pay more. (October 25, 2017). Chicago Tribune, Available at <http://graphics.chicagotribune.com/news/lake-michigan-drinking-water-rates/index.html>; Jordi Honey-Rosés, David Gill, Claudio Pareja (March 2016), British Columbia Municipal Water Survey 2016.

<sup>35</sup> For instance, see the analysis of retail price variation for 18 CCF in Los Angeles County in DeShazo, J.R.; Pierce, Gregory; and McCann, Henry. "Los Angeles County Community Water Systems Atlas and Policy Guide: Supply Vulnerabilities, At-Risk Populations, Conservation Opportunities, Pricing Policies, and Customer Assistance Programs." UCLA: Luskin Center for Innovation.

Prominent examples of very high drinking water costs include those experienced by residents of Cantua Creek in Fresno County and Lucerne in Lake County. Residents of Cantua Creek report paying roughly \$174 a month for water for their essential needs.<sup>36</sup> Following substantial rate decreases, residents of Lucerne still pay over \$120 a month for 12 CCF of consumption. Moreover, rates are expected to rise substantially across many CWS in California. For instance, in the City of Fontana, residents are experiencing a 30.7% increase in water rates over a three-year period.<sup>37</sup> Larger cities are not exempt from this trend; rates for the City of San Francisco have risen 127% over seven years.<sup>38</sup> As discussed in other parts of this report, differences in systems' geographic locations, source water quality, regulatory oversight, and socioeconomic profiles drive variation in rates across water systems in California.

### ***Comparable programs exist for other utilities***

Another justification for the creation of a W-LIRA in California is that statewide programs already operate to subsidize other essential household utilities. As discussed in more detail in Appendix C, robust, relatively longstanding programs mandated at the federal or state levels subsidize basic energy and telephone services for eligible low-income households that apply.

By contrast, no state or federal programs provide affordability assistance directly to households for drinking water services. In fact, overall federal involvement in water utilities has declined over time. The relative role of federal financial support for water utilities nationwide has fallen since the mid-1970s, as compared to local and state government financial support for water utilities. Figure 5 shows that the federal government supported over 30% of total spending on water utility infrastructure through the 1970s, but less than 5% by 2014.<sup>39</sup>

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<sup>36</sup> Public comment made by Cantua Creek resident at the AB 401 Public Meeting. (2017). Fresno, CA. Additional information available at: <http://www.co.fresno.ca.us/home/showdocument?id=5925>.

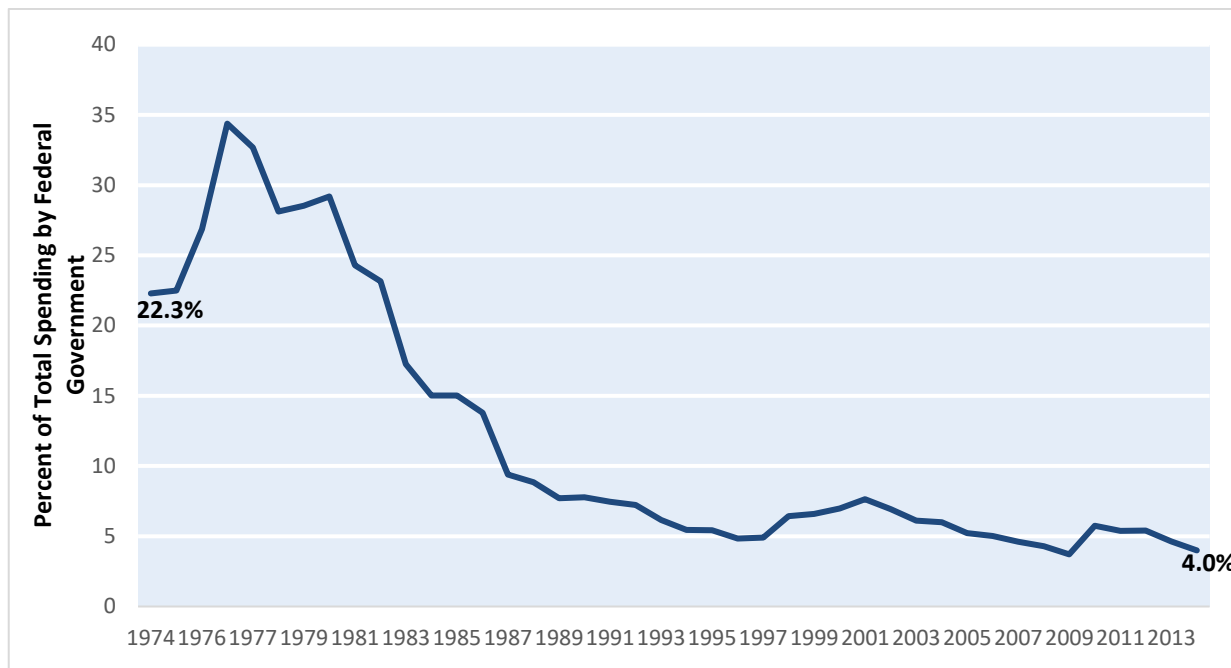
<sup>37</sup> "Water Rates for Fontana Water Company Customers Will Go Up 30.7 Percent, CPU Says." (2017). *Fontana Herald News*. Available at: [https://www.fontanaheraldnews.com/news/water-rates-for-fontana-water-company-customers-will-go-up/article\\_af2cb0e4-6d97-11e7-a4e0-eb5fe175579c.html](https://www.fontanaheraldnews.com/news/water-rates-for-fontana-water-company-customers-will-go-up/article_af2cb0e4-6d97-11e7-a4e0-eb5fe175579c.html).

<sup>38</sup> The Price of Water: Water Rates Dashboard-San Francisco. (2017). *Circle of Blue*. Available at <http://www.circleofblue.org/waterpricing/>.

<sup>39</sup> See the Congressional Budget Office's March 2015 report *Public Spending on Transportation and Water Infrastructure, 1956 to 2014*, which contains detailed data of public spending on transportation and water infrastructure at local, state, and federal levels.



**Figure 5. The Percent of Total Public Infrastructure Spending on Water Utilities by the Federal Government (1974-2014)<sup>39</sup>**



Nationwide, programs addressing water affordability have traditionally been left up to individual CWS. This holds true in California with the exception of large investor-owned utility systems, which are regulated by the California Public Utilities Commission (CPUC) and required to provide LIRA programs.

***The limitations of self-funded system rate assistance programs***

The State Water Board estimates that approximately 46% of the entire California population is served by a water system offering some type of rate assistance. Unfortunately, however, the presence of a rate assistance program does not mean that the program adequately addresses the affordability need experienced by the system’s population. The biggest obstacle faced by existing programs is their limited funding and inability to support those households that are most in need. This obstacle exists because many low-income households do not pay a water bill directly, and many current programs have low enrollment levels and provide insufficient support. In addition, except for programs run by investor-owned water systems, existing rate assistance programs are funded by revenues derived from sources other than water rates and charges to avoid violating constitutional restrictions on the use of water fees and charges, and are generally insufficient to provide benefits to all eligible households.

Table 3 shows drinking water systems which served 31% of the state’s population in 2015 and which all offered rate assistance programs. The table shows the 2015 annual rate assistance program expenditures of these systems, and were those most likely to have higher enrollment rates amongst systems which did have LIRAs in California.

**Table 3. W-LIRA Program Expenditure for Sample Water Systems in California (2015)**

<b>Water Systems</b>	<b>Percent of State's Population Served by System</b>	<b>Amount spent on low-income rate assistance in 2015 (millions)</b>
Los Angeles Department of Water and Power (LADWP)	10%	\$26
CPUC Private Water Systems	14%	\$27
24 Other Large Urban Public Water Suppliers	7%	\$4.2
<b>TOTAL</b>	<b>31%</b>	<b>\$57.2</b>

Sources: LADWP and CPUC financial reports, and a survey of municipal systems conducted directly by the Board

Perhaps the most salient justification for a statewide W-LIRA program is the fact that many individual water systems in California cannot financially support rate assistance programs on their own. Most of the systems with the highest LIRA eligibility burdens (i.e. with the highest percentages of eligible customers) are small or very small and lack the means to self-fund their own W-LIRA programs. Many larger systems would also see high eligibility rates. Although about 2,900 CWS operate in California, over 90% of the population is served by the 400 largest systems. Figure 2 above illustrates that even among some large systems which serve 3,000 or more customers, imposing a requirement to run standalone rate assistance programs would likely cause outsized affordability burdens. The Board's research shows that individual CWS would bear vastly different cost burdens to independently provide assistance to their eligible customers. Overall, more than 22% of CWS of all sizes throughout the state would have eligibility burdens exceeding 50% of their residential customers. This would force individual systems to identify sizeable revenue sources at the system level to support their separate LIRA programs while not imposing additional burdens on their eligible, low-income customers.

Funding individual W-LIRA programs at the system level without violating constitutional restrictions would likely be infeasible for publicly owned water systems. Systems could impose special taxes, but those measures would need to be submitted to the local electorates and approved by a two-thirds majority.<sup>40</sup> Among systems with high eligibility burdens, there may be significant local resistance to approving such taxes. Alternatively, systems would almost certainly face legal challenges to recovering LIRA expenses from water rates and charges. Article XIID of the California Constitution, added by Proposition 218 in 1996, requires, among other things, that the revenues derived from property related fees and charges not exceed the

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<sup>40</sup> Cal. Const., art. XIIC, § 2, subd. (d).

funds required to provide the property related service.<sup>41</sup> Most importantly for purposes of W-LIRA funding, Proposition 218 also requires that property related fees and charges not exceed the proportional cost of service attributable to the property.<sup>42</sup> In addition, the service for which a fee or charge is imposed must be immediately available to the property owner, rather than for future or potential use.<sup>43</sup>

The systems bear the burden of proving compliance with these cost-of-service requirements. Proposition 26, adopted in 2010, places the burden on local governments for proving by a preponderance of evidence that the amount of a fee or charge is “no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits from, the governmental activity.”<sup>44</sup>

These substantive restrictions on ratemaking by publicly owned water systems prevent subsidization of one customer’s water rates by another and would pose serious, if not fatal, obstacles to publicly owned water systems funding individual W-LIRA programs from water rates and charges. As a result, publicly owned water systems instead fund existing W-LIRA programs from revenues derived from sources other than water rates and charges, such as lease revenues or voluntary donations. These non-rate revenue options are limited and considered insufficient to sustainably fund W-LIRA programs throughout the state.

Even if publicly owned water systems were not subject to Proposition 218 for the purposes of funding W-LIRA programs, the economic reality discussed above would mean that systems would have to place outsized burdens on ineligible customers in areas with high numbers of eligible customers. In addition, because of the variation of eligibility burden among systems throughout the state, the impact on ineligible customers for supporting W-LIRA benefits could vary significantly from one system to another. Most importantly, many systems would simply not be able to fund sustainable rate assistance programs that meet the goals envisioned by the Human Right to Water and the Low-Income Water Rate Assistance Act. Given the challenges facing water systems with high eligibility burdens, a statewide W-LIRA would be a more feasible means to address the statewide Human Right to Water policy.

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<sup>41</sup> Cal. Const., art. XIID, § 6, subd. (b)(1).

<sup>42</sup> Cal. Const., art. XIID, § 6, subd. (b)(3).

<sup>43</sup> Cal. Const., art. XIID, § 6, subd. (b)(4).

<sup>44</sup> Cal. Const., art. XIIC, § 1.



## Chapter 2

### Direct Water Bill Credit Component Design Scenario

#### *Eligibility, Benefit Level, and Total Cost*

This chapter describes the direct water bill credit component (Component 1), with a focus on three key elements in the component’s design: eligibility, benefit, and cost. This component would deliver direct bill credits to low-income households who are also direct ratepayers, defined as those paying a water bill from a CWS. This direct benefit delivery strategy was developed in response to comments received on the Board’s January 2019 draft AB 401 report (Appendix B), which provides background including descriptions of the CARE and CalFresh distribution options outlined in the Appendices. For Component 1, the Board would have administrative and oversight responsibilities, while the water systems would be responsible for program implementation. Each of the roughly 2,900 CWS would need to: (1) ensure that its billing system is capable of delivering the monthly W-LIRA credit, (2) train personnel about the W-LIRA program, (3) modify its marketing, education, and outreach programs, and (4) comply with applicable requirements for reimbursement with State funding. In addition, the CWS would be responsible for verifying the income eligibility of households applying for the W-LIRA credit. Most changes would need to be made at the initial implementation stage. The proposed revenue plan for the program includes approximately \$43 million in annual revenue that could be used during the first two years of implementation to support these changes for CWS, as further outlined at the close of this chapter, and afterward be allocated to support the water crisis assistance component.

For each component of the program, *eligibility* is defined as the number of component-qualifying households based on socioeconomic criteria. *Benefit* is the type and dollar amount of annual financial assistance received by an eligible household. *Estimated annual component cost* is equal to the number of eligible households multiplied by the benefit per household and adjusted for expected enrollment (which decreases total costs) and administrative costs (which increases total costs). Table 4 below shows a basic example component scenario cost calculation incorporating each of these three design elements.

**Table 4. Example W-LIRA Program Scenario Calculation**

<b>Eligibility</b>	Estimated Number of Eligible Households	1,000
<b>Benefit</b>	Theoretical Benefit per Household	\$100
	Maximum Total Benefits to be Distributed	\$100,000
<b>Annual Cost</b>	Accounting for Expected Enrollment Level*	\$84,000
	<b>Estimated Annual Program Operating Cost**</b>	<b>\$92,400</b>

\*This enrollment value mirrors the California Alternative Rates for Energy (CARE) program’s enrollment level 84%, as explained in Chapter 4.

\*\*Assuming 10% administrative costs to operate the program, as explained in Chapter 4.

## **Eligibility: Baseline eligibility as 200% of the FPL**

Most assistance scenarios that were used in the Board’s analysis have a common eligibility criterion of household income equal to or below 200% of the FPL, regardless of applicant residency status. There are several reasons for the establishment of this common eligibility criterion. Firstly, 200% of the FPL is explicitly defined as the “low-income” criterion in the AB 401 legislation text. Secondly, this eligibility criterion is inclusive; more than one-third of the state’s households have incomes at or below 200% of the FPL. Thirdly, 200% of the FPL is a commonly used criterion by other Low-Income Rate Assistance Programs (LIRA) and social benefit programs (most notably CARE) in California. Use of 200% of the FPL has a clear precedent and allows for potential administrative cost efficiencies between eligibility for other programs and the new W-LIRA program. This component has the advantage of providing not only substantial affordability assistance to all low-income households, but also a larger benefit to those who have the greatest drinking water cost burden.

## **Benefit Type: Percentage of total bill benefit**

Since all CWS, except those regulated by the CPUC, have discretion over rate design, there is wide variability in rate structures across the state (discussed in Chapter 1). Consequently, CWS across the state charge vastly different total dollar amounts for the same volume of water consumed (i.e., 6 CCF), even within the same customer class (residential customers using the same sized pipe). The Board thus faces the challenge of developing proposals for providing eligible households with equitable benefits to meet affordable drinking water levels.

In the context of a statewide water assistance program, there is no administratively feasible way to provide an individual percentage discount for each household,<sup>45</sup> unless verified data on each households’ consumption can be reported to the program administrator.<sup>46</sup> By providing a benefit based on the necessary household expenditure to consume 6 CCF, Components 1 and 2 bypass these logistical challenges while providing a baseline of support to a range of households in need.

Furthermore, given the complexity of rate structures, a benefit assigned as a percentage of a residential bill at a specified consumption level (including all fixed and variable costs, but excluding other non-water service related charges and fees) is likely to be more equitable than a flat benefit discount or a discount to a certain component of the bill. To illustrate this point, Table 7 below shows an example of the affordability support experienced by households served

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<sup>45</sup> This is how the four large energy investor-owned utilities operate the California Alternative Rates for Energy (CARE) program.

<sup>46</sup> While this could be achieved via a data transfer process for some systems, the per household consumption-based bill discounts would prove administratively costly to implement across all water systems which either do not meter consumption, have different billing periods, or do not have fully digitized administrative operations (see Chapter 4 for more discussion of this challenge).

by different CWS with different rate levels and structures, at the same consumption level (6 CCF).

### Three-Tiered Benefit Structure

The tiered benefit structure for the direct bill credit component was developed based on the estimated average statewide water expenditure of about \$41 a month for 6 CCF. Low-income households that pay more than 150% (Tier 2) and 200% (Tier 3) of the state average water bill for 6 CCF would be eligible for a higher percentage of bill discounts structured through the Proposed Program Scenario. The tiered percentages of bill discounts were chosen with reference to those offered by CARE at 20% (Tier 1) and 35% (Tier 2), with the highest tier of 50% (Tier 3) increasing incrementally by another 15%. The average necessary expenditure for 6 CCF from a CWS in California in 2015 was about \$41. The direct bill credit component of the program would provide:

***Tier 1.*** bill credit equal to 20 percent of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the federal poverty level (FPL) in water systems and where the charges for 6 CCF is less than \$62,<sup>47</sup>

***Tier 2.*** bill credit equal to 35 percent of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the FPL in water systems and where the charges for 6 CCF is between \$62 and \$83, and<sup>48</sup>

***Tier 3.*** bill credit equal to 50 percent of the amount charged by the water system for 6 CCF to all households that have incomes below 200% of the FPL in water systems and where the charges for 6 CCF is above \$83.

The three proposed benefit tiers would provide some assistance to all low-income households, but a larger benefit to those in the CWS with the greatest drinking water expenditure burden (150% and 200% of the state average for 6 CCF respectively). The 20% credit level is equivalent to the CARE discount for natural gas service, as well as the high end of the discount range currently offered by existing low-income rate assistance programs in California. A credit of 35%, also offered to CARE customers for electricity service, helps households that face water bills more than 150% to 200% of the state average. Finally, the 50% credit tier seeks to assist customers of CWS charging more than 200% of the state average for 6 CCF. This top tier has a precedent in California Water Service's LIRA offerings, which provides a 50% benefit level for households served in very high cost areas.<sup>49</sup> Following annual updates to the Board's record of

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<sup>47</sup> \$62= 150% of the state average expenditure for 6 CCF of \$41.

<sup>48</sup> \$83= 200% of the state average expenditure for 6 CCF of \$41.

<sup>49</sup> Available at: <https://www.calwater.com/>.



drinking water costs, information used to determine eligibility and benefits would be regularly adjusted.

The proposed direct bill credit component has the collective advantages of providing substantial affordability assistance to all low-income households that pay water bills directly, and also a larger benefit to those who face the greatest drinking water cost burdens.<sup>50</sup> The biggest disadvantage of this component is that it does not support households that pay water bills indirectly through rent.

For the approximate 1.8 million low-income households who directly pay water bills to CWS, these systems would provide direct bill credits as outlined below via a three-tiered approach for monthly discounts based on 6 CCF of consumption (see Table 5). Eligibility determination and program enrollment could either be migrated from the CARE program, which would require multiple legal agreements to ensure customer privacy, or via self-certification, which would entail additional burdens for both low-income households and CWS. The Board recommends that the Legislature adopt rules for migrating the CARE data that will boost enrollment while maintaining data privacy protections.

**Table 5. Direct Bill Credit Scenario Breakdown of Eligibility and Cost**

	<b>Benefits Afforded to Directly Billed Customers (Millions of Dollars)</b>			
	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>	<b>Total</b>
Estimated # of Eligible HH	1,712,467	42,811	10,970	1,766,248
Maximum Benefits	\$134.1	\$12.6	\$6.2	\$152.9
Accounting for 84% Enrollment	\$112.6	\$10.6	\$5.2	\$128.4
Accounting for Program Operating Costs (10%)	<b>\$123.9</b>	<b>\$11.6</b>	<b>\$5.7</b>	<b>\$141.2</b>

CWS would in turn be reimbursed by a state fund on a regular basis (e.g., monthly, quarterly, or annually) for the monetary value of the credits which they give to their customers enrolled in the program.

<sup>50</sup> While additional or alternative eligibility criteria or benefit tiers might allow for more refined targeting, going beyond the complexity of the primary scenario would be extraordinarily difficult for a statewide program.

## Consumption: 6 CCF of monthly water cost

Based on stakeholder feedback from the draft report, the Board revised the three-tiered direct benefit design to provide a benefit based on a 6 CCF rather than a 12 CCF monthly consumption level. Providing direct bill credits up to the 6 CCF consumption level supports affordability for the average California household by accounting for 90% of the indoor use standard for the average household in the state<sup>51</sup> (3 persons), as shown in Table 6. Using 6 CCF as a standard consumption level is consistent with the state’s policy goals of increasing water conservation and providing safe, accessible, and affordable water for essential (indoor) uses.

**Table 6. Daily Water Use Available to a Family of Three at 6 CCF Monthly**

Daily Water Use Category	Amount Available to Average Household
Indoor Use	147 (49 gallons x 3 people per household)

6 CCF = 4,488 gallons. This amount equates to approximately 90% of the 5,019 gallons necessary for a 3-person household as set out in AB 1669.

For this component and the Renter’s Water Credit component detailed below, a benefit associated with a percentage of a fixed volume like 6 CCF would be provided regardless of whether an individual household is consuming above or below this level. A shortcoming of this approach occurs when necessary household level consumption exceeds 6 CCF (through variation in household size above 3 residents), as no additional assistance would be provided. A key benefit of using a fixed consumption level, however, is that the W-LIRA program is less exposed to risk of manipulation and does not subsidize or incentivize over-use.<sup>52</sup> In addition, since most low-income households do not pay a water bill directly, there is no way to determine their water use, and providing them with benefits requires a uniform approach such as using a fixed consumption level (e.g. 6 CCF) for calculating a benefit level.

To illustrate how a benefit based on a fixed consumption level would work, Table 7 shows an example comparing two eligible low-income households. The two households are served by the same CWS but have different consumption levels. The monthly water bill for 6 CCF in this system is \$40, and thus the benefit distributed to each household would be \$8 (20% of \$40).

<sup>51</sup> The average household size in the state is 3 persons, and the standard for indoor use is set by AB 1668 (2018) at 55 gallons/person/day through 2025.

<sup>52</sup> On the other hand, using a benefit calculation which is untied to consumption but is set based on the rate set by the system for a consumption level is potentially open to manipulation by systems via rate setting. Systems could respond to a W-LIRA program by shifting the rate burden to consumption levels below 6 CCF, and thus elevate the benefit for eligible households. This type of rate setting would cause harm to a system’s non-eligible households who consume less than 6 CCF of water and dampen the conservation signal to all households. Therefore, the net incentive to a given system to alter rates is unclear. However, water system representatives stated that they would not or could not practically engage in this type of rate setting.

Therefore, when allotting a percent discount to 6 CCF in the various billing tiers, households simultaneously reduce their water bill and receive a positive signal for conservation and reducing water consumption.

**Table 7. Illustration of Benefit for Fixed Volume Provided to Households with Different Water Consumption Levels**

	<b>Household A</b>	<b>Household B</b>
Water consumption level	6 CCF	12 CCF
Initial monthly water bill amount	\$ 40	\$ 60
Monthly benefit received	\$ 8	\$ 8
Percent of monthly bill reduction from benefit	% 20	% 13
<b>Remainder of bill to be paid by household</b>	<b>\$ 32</b>	<b>\$ 52</b>

Another reason for choosing 6 CCF as the primary option for analysis is the access to robust real expenditure data available at that consumption level. As described in Appendix D, the independent analysis for this report was undertaken using self-reported, system-level expenditure at three consumption levels: 6, 12, and 24 CCF. In light of the state’s water conservation priorities, public health goals, and based on stakeholder feedback, both 12 and 24 CCF levels were considered too high to subsidize.

### **Enrollment and Administrative Cost Assumptions**

To calculate the annual cost for this W-LIRA component, the plan assumes an 84% enrollment of program-eligible households. The CARE program achieves this enrollment rate, which is the highest enrollment rate observed among state or federal benefit programs. The plan also assumes an additional 10% administrative (or overhead) cost above the dollar value of benefits directly distributed to households for this component. Accessing comparable data or calculating exact administrative cost burden, even for large state and federal benefit programs, is not straightforward. While some existing Board programs have lower overhead rates than 10%, most state or federal benefit programs have higher rates. Moreover, the water systems would incur substantive start-up costs, including data management, marketing and outreach, billing system adjustments, and fund management that will require higher initial administrative costs and that will vary depending on the selected program option. Around 14% of the state’s households would be income-eligible for this component. Of these households, roughly 97% will be supported by Tier 1, and only a small proportion of households will be eligible for the more generous, higher benefits offered in Tiers 2 and 3 respectively.

### **Costs of Direct Bill Credit Administration Borne by Water Systems**

Delivering a benefit through direct bill credits will trigger new administrative costs for water systems, which may include billing system changes, enhanced customer interaction, compliance with requirements for reimbursement with State funding, and program promotion costs. The

administrative costs for such a component would likely vary by system depending on the existing billing software and customer support staff. Moreover, it is important to recognize that costs incurred for small systems will likely be higher in proportion to their overall budget, presenting unique challenges and considerations.

In addition to reviewing existing system operation guidance materials<sup>53</sup> and published literature, we reached out to numerous water systems and system associations to obtain information in as much detail as possible to inform our assessment of likely system-level administration costs. While we received some limited point estimates, we did not receive sufficient response to model administrative costs empirically. When the Board obtains additional information, it will use this information to develop more specific estimates of administrative costs for CWS, as well as how revenue from the program might be used in the first two years of implementation to offset some of these costs. See Appendix E and Appendix H.

Research conducted by the Water Research Foundation in 2010<sup>54</sup>—also recently cited by the Jersey Water Works<sup>55</sup>—states that customer assistance programs usually have modest budgets. The research also notes the financial benefits to water systems of such programs, including potential increased customer revenues and collection costs.

## Alternative Scenarios

Appendix D discusses the advantages and disadvantages of several alternative program designs with different eligibility and benefit criteria (and thus total costs) to the proposed three components, which were fully considered in the process of plan development and stakeholder engagement. Using the data and methods described in Appendix D, more than 70 scenarios were evaluated over the past four years. Additionally, Appendix F discusses the advantages and disadvantages of indirect assistance options which can enhance affordability, namely water system consolidations, water use reduction support, and the implementation of progressive rate structures.

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<sup>53</sup> Including AWWA’s M1 Principles of Water Rates, Fees, and Charges - Manual of Water Supply Practices.

<sup>54</sup> See Water Research Foundation, Best Practices in Customer Payment Assistance Programs, 2010, pp. xxi, 28, <http://www.waterrf.org/publicreportlibrary/4004.pdf>.

<sup>55</sup> Jersey Water Works (April 2019). Policy Options: Promoting Affordability of Public Water and Sewer Service for Low-Income Households in New Jersey.



## Chapter 3

### Renter's Water Credit Component Design Scenario *Eligibility, Benefit Level, and Total Cost*

The second component of the W-LIRA program would deliver a Renter's Water Credit (Component 2), via the state income tax system, to low-income households who receive water from a CWS but are not directly billed by one, and thus cannot receive a benefit through the component outlined in Chapter 2. For Component 2, the California Franchise Tax Board (FTB) would be responsible for implementation. Tax forms (and tax preparation software) would have to be modified. To deliver direct benefits to these households, FTB would annually apply the credits on individual tax filings based upon whether a filer met program eligibility criteria, namely low-income status and self-identifying as not directly paying a water bill. The Legislature or FTB would also have to determine the appropriate level of benefit for a household that moved in or out of the State during the year.

As detailed in the Board's January 2019 draft report and Appendices, benefit delivery to in-need households through the water bill is not always possible because many low-income households pay for water indirectly through rent to their landlord. Estimates of direct bill payers vary, but Table 8 shows data from the 2015 American Housing Survey (AHS) indicating that far more households in California pay indirectly for water than for energy utility service.

**Table 8. Californian Households Reporting That They Do Not Pay a Direct Bill for Utility Service Bill/Service Type**

Bill/service type	Prevalence
Water	44%
Natural Gas	13%
Electricity	5%

Source: 2015 American Housing Survey data, California sub-sample

2015 AHS data allows us to calculate the number of direct water bill-paying households by housing type and income based on a representative sample of the California housing stock. We estimate that, among households with incomes under 200% federal poverty level (FPL) in California, about 60% (or 2.6 million households) do not directly receive a water bill and thus cannot access current benefits from water affordability assistance programs. Providing benefits to these households would require an alternative benefit delivery method other than a direct bill credit. In the water sector, master-metering has effectively prevented water affordability benefits

from reaching eligible households.<sup>56</sup> Given the lack of complete data on direct bill-paying by income which can be matched to the water system level, we layer the statewide estimates of direct bill payers by housing type onto our household income data (from the U.S. Census) at the system level as more fully described in Appendix D.

For the estimated 2.6 million low-income households who receive water services but are not directly-billed customers of CWS, the most viable<sup>57</sup> benefit delivery approach appears to be delivering a credit through the Franchise Tax Board's (FTB) income tax system. This credit would be similar to the existing California's renter credit available to eligible tax payers through the state income tax system maintained by the FTB.<sup>58</sup> This credit currently gives \$60 to single filers and \$120 to married/joint filers, although there was a 2019 legislative proposal to raise this to \$220 and \$434 respectively.<sup>59</sup> Full eligibility requirements are provided in the Revenue and Taxation Code, however, in general, eligible filers must a.) have an income tax liability; b.) have been a California resident for the entire year; and c.) have a California adjusted gross income (AGI) \$41,641 or less if single filing/filing separately or \$83,282 if filing a joint return.

The Renter's Water Credit delivered via the state income tax system would be a flat credit or dollar value amount equivalent to 20% of the state average expenditure for 6 CCF, which is about \$41. The benefit would be equivalent to \$8.20 per month or about \$100 per year; however, it would be an annual benefit. The flat dollar value benefit would minimize administrative complexity and cost.

## Enrollment and Administrative Cost Assumptions

As with Component 1, to calculate the annual cost for this W-LIRA component, the plan assumes an 84% enrollment of program-eligible households. The plan also assumes an additional 10% administrative (or overhead) cost above the dollar value of benefits directly distributed to households for this component. See Table 9 on the next page.

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<sup>56</sup> We have only identified one system (the City of St. Helena) which actually delivered benefits to non-metered customers (in this case, mobile home park residents). Reimbursement checks were made out to 44 senior mobile park tenants who shared 1 master meter and 1 low-income multi-family unit.

Additionally, there were 2 tenants in single family homes who received reimbursements checks and 64 single-family customers who received a water credit.

<sup>57</sup> Other potential means of benefit delivery explored included direct cash assistance (i.e., cash, check, electronic bank transfer, other) to eligible households via a new state fund or an expanded EBT program that can be safely accessed by all low-income households.

<sup>58</sup> See "Nonrefundable Renter's water credit" (2018) <https://www.ftb.ca.gov/individuals/faq/ivr/203.shtml>.

<sup>59</sup> As of this writing. See:

[http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200SB248](http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB248).

**Table 9. Renter’s Water Credit Scenario Breakdown of Eligibility and Cost**

	<b>Benefits Afforded to Indirectly-Billed Customers (Renter's Credit Benefit) (Millions of Dollars)</b>			
	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>	<b>Total</b>
Estimated # of Eligible HH	2,504,734	62,617	16,045	2,583,397
Maximum Benefits	\$ 248.8	\$6.2	\$1.6	\$256.6
Accounting for 84% Enrollment	\$209.0	\$5.2	\$1.3	\$215.5
Accounting for Program Operating Costs (10%)	<b>\$229.9</b>	<b>\$5.7</b>	<b>\$1.5</b>	<b>\$237.1</b>

Extensive outreach would be necessary to make eligible, indirectly-billed customers aware of this benefit opportunity. Currently, indirectly-billed customers eligible for the renter’s water credit component may have little to no contact with their CWS on an ongoing basis, much less be aware of low-income assistance offered for water service.<sup>60</sup> Ideally, the preferred alternative benefit delivery opportunity would be advertised to all electric and gas low-income customers who are enrollees in electricity LIRAs at the outset of the program, as well as on an annual basis.

Additionally, the benefit offered by this component could be adjusted on a county basis to account for variation in housing costs—and thus disposable income—using the California Housing and Community Development’s “Very Low-Income Guidelines,” which are used to determine housing assistance by county. This approach would give proportionally greater benefits to high-cost counties, while giving proportionally lower benefits to residents of low-cost counties. This would raise the estimated combined cost of Components 1 and 2 to \$388 million annually, as well as more significantly shift the geography of benefits to more urbanized counties.

One disadvantage of the renter’s water credit component of the program is that the majority of eligible households (those who do not directly pay water bills) would be placed on an annual rather than billing cycle benefit delivery timeline. Although a billing cycle timeline is likely more relevant to supporting program-eligible households, income tax rebate benefits would only arrive annually, making this approach less useful, especially to those struggling with cash flow. Another major disadvantage is that not all low-income households file income taxes, which would preclude benefit access.

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<sup>60</sup> For instance, see Barnett, M. J., Jackson-Smith, D., & Endter-Wada, J. (2018). Implications of nontraditional housing arrangements for urban water management in the United States Intermountain West. *Society & Natural Resources*, 1-22.



Additionally, the benefit would be available to eligible low-income renters, who could either be indirectly-billed by a CWS or use an individual well. Individual well users who are homeowners, however, may not be eligible under the renter's credit structure. Potential methods to benefit delivery solutions for low-income tenants are discussed in Appendix K.

While there is no perfect approach to delivering affordability assistance to low-income households which do not directly hold accounts with CWS, the renter's water credit approach is feasible because it relies on an existing, successful benefit delivery mechanism instead of creating a new one. Moreover, its advantages outweigh the disadvantages of alternative approaches such as direct cash assistance (cash, check, electronic bank transfer, other) to eligible households via a new state fund, or working with stakeholders to develop an expanded EBT program that could be safely accessed by all low-income households.



## Chapter 4

### **Water Crisis Assistance Component Design Scenario** *Eligibility, Benefit Level, and Total Program Cost*

This chapter outlines the means of delivering the third benefit component of the W-LIRA program, water crisis assistance for those directly billed customers who are in danger of having their drinking water service shut off due to inability to pay their bill on time. This component would act to prevent shutoffs for low-income residential customers with past due drinking water bills and draws on the example of the Energy Crisis Intervention Program (ECIP). ECIP is a component of the broader California Low Income Home Energy Assistance Program (LIHEAP). We estimate a total annual budget of approximately \$185 million for the water crisis assistance component of the W-LIRA program. This type of water crisis assistance component provides additional benefits compared to those standalone benefit program scenarios outlined in the January 2019 draft report. As with the other two components of the W-LIRA, no such statewide program currently exists to prevent water service shutoffs in the U.S.<sup>61</sup>

In the water crisis assistance component, at least four categories of parties would be involved: a state agency overseeing the component, water systems, local assistance service providers, and households. Eligible households which received shutoff notices from their water system would enroll in the state program via the existing network of local assistance providers operating throughout the state. Water systems would then be required to maintain service to households. A state claims administrator, through local service providers, would reimburse eligible claims from water systems for lost revenues from enrolled customers' nonpayment.

#### **Motivation for this Approach**

The first advantage of including a water crisis assistance component in the W-LIRA is its ability to provide assistance to address water affordability crises. A second advantage is its clear and compelling performance metric—the reduction of service shutoffs due to the lack of households' ability to pay, which corresponds to the most extreme affordability hardships. Several Board documents, including the January 2019 draft report and several comment letters responding to the draft report, already outline the importance of addressing drinking water service shutoffs, fees, and the requirement to inform customers of procedural options. This component also presents the advantage of involving CWS in revenue recovery

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<sup>61</sup> We have identified a few informal or small-scale shutoff prevention assistance efforts undertaken by non-profit organizations (such as the United Way and religious institutions) which offer direct cash benefits to low-income households under threat of shutoff. Other groups, such as the Western Service Workers Association, advocate on behalf of low-income customers and directly work with local water systems to prevent shutoffs and reduce past due amounts. While these efforts will continue to be helpful even in the presence of a statewide W-LIRA program, these means of assistance are limited in scope and geography, and do not offer equal opportunity to all Californians.

and demonstrates a clear and immediate nexus to reducing the burden of drinking water bills for in-need customers.

Senate Bills 598 (Hueso, 2017) and 998 (Dodd, 2018) demonstrate the state's commitment to addressing shutoffs. SB 998 begins to track the prevalence of, and procedures regarding, discontinuation of residential water service by CWS with more than 200 service connections. Among other safeguards, the legislation requires systems to adopt policies regarding water shutoffs and offer specific opportunities for customers to avoid losing water service.

## Component Design Considerations

Given the lack of program precedents for statewide drinking water service shutoff prevention assistance, the Board considered various component design elements. As with the direct benefit component of the W-LIRA, the key considerations included the determination of program eligibility, benefits, and the estimated annual component cost. Using varying income and rates data to define eligibility, and different benefit levels related to eligibility criteria, more than 20 component scenarios were evaluated.

Options analyzed included:

1. Exact eligibility level: Would water crisis assistance adhere to the income and drinking water cost data outlined in the other proposed components of the W-LIRA program design (outlined in Chapters 2 and 3) or should a county-level methodology and service provider level of discretion be adopted similar or identical to the ECIP?
2. Exact reimbursement level and frequency: Would water crisis assistance adhere to the ECIP standards that cap annual benefits for particular households, or allow for different, potentially more creative benefit criteria as employed in other states?<sup>62</sup> Would a partial reimbursement design be feasible or desirable?
3. Depending on funding supply relative to demand, would the water crisis assistance component seek to offer equal opportunity for enrollment throughout the year?

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<sup>62</sup> For instance, recognizing some of the limitations of a flat, one-time reimbursement level, in 2009 the state of Illinois instituted a novel Percentage of Income Payment Plan option for low income customers, which caps the amount those customers pay for natural gas and electric utilities at six percent of their incomes. This program, however, has experienced mixed success and funding support. See: <https://www.illinoislegalaid.org/legal-information/setting-utilities-percentage-income-payment-plan>.

## Recommended Component Design

Our recommended water crisis assistance component design is shown below in Table 10.

**Table 10. Proposed Water Crisis Assistance Component Design**

<b>Program Characteristics by Household Category (Bill Amount Relative to State Average)</b>					
<b>Eligibility Criteria- Households below 200%FPL</b>	<b>&lt;100%</b>	<b>&gt;100%</b>	<b>&gt;150%</b>	<b>&gt;200%</b>	<b>&gt;250%</b>
Benefit Amount (\$/household/year)	\$400	\$500	\$600	\$700	\$800
Households Eligible within Category	1,176,511	398,958	39,386	8,415	1,678
Estimated Need	20%	25%	30%	40%	50%
Estimated Households in Need	235,302	99,740	11,816	3,366	839
Maximum Benefit Cost (Millions of dollars)	\$94.1	\$49.9	\$7.1	\$2.4	\$0.6
<b>Total Program*</b>	<b>\$184.9</b>				

To ensure that households facing greater costs receive sufficient support to prevent shutoffs, we propose an escalating benefit corresponding to a household’s 6 CCF bill, relative to the statewide average bill. Estimating the number of households in need is less certain due to both the scarcity of quantitative information describing shutoff needs, and due to the expected effects of the direct benefit component of this W-LIRA program. Assuming that both the direct components are implemented concurrently to this water crisis assistance component, we expect reduced need for water crisis assistance. As such, we have estimated that, as shown in Table 10, between 20% and 50% of the directly-billed low income households might need support, with higher proportions of need corresponding to those in systems with very high bills, relative to the state average.

### Eligibility

Administrators of the ECIP program estimate that, with its annual expenditure of approximately \$153 million in 2015,<sup>63</sup> it was only able to assist 5-7% of the income-eligible population, with basic eligibility defined as the higher of 150% of the Federal Poverty Level or 60% of the state median income. Given the mandate of AB 401 and the larger envisioned budget for the drinking water assistance component, we recommend a core eligibility criterion for the shutoff assistance component of households with incomes below 200% of the FPL. Higher levels of assistance needs are expected, and thus higher benefit levels are offered for households with lower incomes or higher necessary expenditure for 6 CCF of water.

<sup>63</sup> See <https://www.csd.ca.gov/>.

Determining eligibility for a water crisis assistance component requires some understanding of the prevalence of shutoffs among the low-income population. Both systems<sup>64</sup> and local advocacy organizations<sup>65</sup> already collect some of this information, which they shared with us for use in our estimates, but more data will be needed in the future to inform our understanding of drinking water shutoff prevalence and prevention in California.

Data made available by some large water systems suggest that levels of shutoffs are low as a proportion of the overall residential customer population. These data, however, may not be representative of shutoff patterns among smaller CWS and do not identify the proportion of shutoffs among the low-income population specifically, which is likely higher than for the overall residential customer population—as demonstrated in analyses of residential energy service shutoffs in California.<sup>66</sup> As outlined in Chapter 1, the goal of the crisis assistance component is not only to prevent shutoffs but also to enable low-income households to avoid making hard tradeoffs between water service and paying for other necessary goods and services, such as other utilities, food, and rent. Moreover, crisis assistance is designed to assist in-need households who experience acute expense shocks with little savings on hand, a factor which has been shown to correlate with utility service shutoffs.<sup>67</sup> Accordingly, we set our estimated levels of the extent of need at between 20-50% depending on the eligible sub-population. These estimates may be refined with additional data.

Monetary crisis assistance would not be available to those low-income households who do not receive water bills directly and instead pay for water as a part of their rent. Based on Board data and input collected from water systems, while many systems already maintain policies to prevent shutoffs to master-metered residential accounts, there remain at least 9,000 such accounts shutoff by systems a year (2018 Electronic Annual Reporting data), and some systems may not have legal authority to pursue alternate means of collection from delinquent account holders.

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<sup>64</sup> We have looked for public data of this nature from water systems. The best data, which is still quite sparse, is derived from the CPUC annual reports of the Class A investor owned utilities. These utilities serve 15% of the population and have more standardized procedures in place for dealing with shutoffs than other systems.

Each of the Class A utilities' annual reports contain a line item for "uncollectible revenue." A few of these utilities report data on past due revenue at different time periods, but do not specify whether past due revenue is accrued on low-income customer accounts, or whether these amounts are ultimately paid. A few (but not all) other Class A utilities report the number of residential customer shutoffs by CARW/non-CARW status, but do not in turn relate this to the magnitude of non or partial-payment.

<sup>65</sup> One example of such an organization is the Western Service Worker's Association, which works on behalf of low-income customers facing hardships in San Diego to access benefits from San Diego City Water's H2O SD Program (which is limited to \$100 once per year for 500 customers), in addition to more generous debt relief.

<sup>66</sup> See Richard White (2017). A Review of Residential Customer Disconnection Influences and Trends. California Public Utilities Commission.

<sup>67</sup> SB 598. (July 2017). Assembly Utilities and Energy. Bill Analysis. Available at: [https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201720180SB598](https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180SB598).

The Community Services and Development Department (CSD)<sup>68</sup> found that, in the context of their water crisis assistance pilots described below, many landlords pay one water bill for an entire apartment complex. The cost of the water joint bill is then included in the rent for each tenant. The CSD found it difficult to prompt landlords to work with CWS to devise ways of assisting individual tenants who might need assistance paying the water bill portion of their rent.

In instances where landlords or property owners are delinquent on master-metered residential water accounts, Appendix J outlines options based on precedents which different types of water systems may pursue to maintain continuous drinking water service to residents while also seeking alternate methods of collecting the unpaid bills.

## Benefit

Determining appropriate levels of water crisis assistance (i.e. the benefit) also necessitates an understanding of the level of assistance needed when facing a shutoff. The ECIP program employs a flat one-time benefit per eligible customer of \$1,000 per year which includes past due bills. The average claim amount was \$447. Given that households typically spend less on drinking water service than for gas and electricity combined (or even electricity alone), annual maximum benefits could be below \$1,000 for drinking water customers, as proposed below.<sup>69</sup>

The few estimates we received, including data from CSD's two water crisis pilots described below, suggest that the average water bill delinquency ranged between \$150-300 for a typical customer who experienced a shutoff. Fully assessing the benefit needed and scoping the impact of potential program designs will require additional information on existing levels of low-income customer debt, delinquent payments, and shutoff prevalence. Given these estimated one-time levels of need and accounting for the likelihood that households with lower-income and higher drinking water costs may need assistance more often, we propose maximum annual benefits at between \$400-800 annually.

## Administrative Costs

Administrative costs for the proposed water crisis assistance component would be minimized by relying to the extent feasible on the existing ECIP. However, setting up and operating a water crisis assistance component would require more household-level verification through an additional layer of service providers. Given this administrative complexity, we recommend a maximum administrative cost of 20% for this component.

## Precedents for Water Crisis Assistance Component of the W-LIRA

At least three precedents for this component exist in California: the Energy Crisis Intervention Program (ECIP) currently operating statewide through the guidance of the California Department of Community

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<sup>68</sup> All of the below information regarding ECIP and water pilots is based on documentation provided electronically in 2019 from CSD staff to Board staff on CSD's experience running these assistance programs.

<sup>69</sup> The typical drinking water bill in California is about two-thirds that of the typical electricity bill and one-half of the combined electricity and natural gas bills, per the 2015 American Housing Survey.

Services and Development (CSD), short-term water assistance pilots operated by CSD during the drought, and a recently-initiated pilot run by the United Way in conjunction with Cal-American Water in Monterey. Each of these three precedents offers lessons learned for the proposed shutoff assistance component.

### **LIHEAP ECIP**

ECIP is a component of the broader California Low Income Home Energy Assistance Program (LIHEAP), and most closely models the scope and longevity of the water crisis assistance component proposed here. LIHEAP also maintains similar sub-programs to the ECIP in other U.S. states via block grants allocated by the federal government. Although LIHEAP's federal block grant is not guaranteed, the grant funding did not dip significantly in the most recent recession, suggesting a relatively robust funding source. Nationally, 5.4 million households received benefits under these programs in 2017.<sup>70</sup>

Within LIHEAP,<sup>71</sup> ECIP provides assistance to low-income households in crisis situations. Examples include a household that received a 24- to 48-hour disconnect notice or service termination by its utility company or a household facing an energy-related crisis or life-threatening emergency in the applicant's household, including a combustible appliance. This program provided financial relief to approximately 78,000 customers with an average benefit of \$447 in 2015 (resulting in \$35 million of annual direct benefit spending).<sup>72</sup> Customers could receive a maximum benefit of up to \$1,000<sup>73</sup> once a year.

The basic water crisis assistance component envisioned for a customer to receive financial assistance is modeled partially on the ECIP program design.<sup>74</sup> In the ECIP program, eligible low-income households which receive imminent shutoff notices from their utility system request crisis assistance via local service providers located across the state.<sup>75</sup> Energy utilities are then notified to maintain service to households which are enrolled in the program and credits are applied directly to customer accounts with the utilities.<sup>76</sup>

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<sup>70</sup> See

[https://static1.squarespace.com/static/58d34ef4725e25f7c638d984/t/5c6db2c741920285754ff78a/1550693063613/comm\\_ocs\\_liheap\\_factsheet\\_nov2018.pdf](https://static1.squarespace.com/static/58d34ef4725e25f7c638d984/t/5c6db2c741920285754ff78a/1550693063613/comm_ocs_liheap_factsheet_nov2018.pdf).

<sup>71</sup> For full details regarding administrative reporting for various components of LIHEAP, see <https://www.csd.ca.gov/>.

<sup>72</sup> Similarly, the Home Energy Assistance Program (HEAP) provides one-time financial assistance to help offset an eligible household's energy costs (utility bill). This program reached approximately 150,000 customers in 2015.

<sup>73</sup> CSD staff indicate that this maximum benefit is outdated.

<sup>74</sup> The proposed water crisis assistance component would not be funded from block grants as in ECIP but instead from the revenue sources outlined in Chapter 5. Moreover, the list of service providers could differ from CSD's ECIP list.

<sup>75</sup> To enroll in the program, households must prove residency in California as well as documentation to verify their income and energy burden. There is no known auditing function for customer fraud, although the required documentation for enrollment lowers this risk vis a vis other self-certifying programs such as CARE.

<sup>76</sup> In a small number of cases where the in-need household is not a direct customer, a "warrant" (or check) is sent directly to the household.



CSD, through local service providers, quickly reimburses utility systems for unrecovered revenue due to enrolled customers' failure to pay.<sup>77</sup>

Counties receive shares of the state block grant based on a three-factor formula which considers the poverty level, climate, and energy costs of each county. In turn, service providers within each county receive guidance to give higher benefits to households with the greatest home energy need in relation to household income and number of household members. These service providers also target benefits to households with members who are elderly, disabled, and/or young children. The ECIP program spends all of its funding each year, with some local areas running out of funds well before the year ends.<sup>78</sup>

### ***CSD Drought Water Pilots***

The CSD also offered two phases of Drought Water Assistance Pilots (DWAP), in both 2014 and 2015, which most closely models the focus of the water crisis assistance component proposed here. Lessons learned from the DWAP are summarized below.

DWAP providers relied on household eligibility from CSD's energy assistance programs to qualify households for DWAP. Many of the DWAP pilot service providers served as dual local providers—responsible for the local administration of CSD's Energy and Community Service Block Grant (CSBG) funded programs. Two factors challenged DWAP enrollment: the difference in income eligibility between DWAP and CSD's energy programs and DWAP's added eligibility requirements that limited services to households suffering an economic impact from the drought. To remedy this, CSD instructed service providers to broaden their targeting and outreach to include the CSBG program and other programs within the service area oriented to extremely low-income families. In addition, service providers were encouraged to attend community events and pursue relationships with local water systems to further outreach to low-income water customers experiencing financial difficulty in paying their monthly utility bills.

Collaborating with water systems to pay water bills was a new venture for DWAP service providers. For many service providers this was the first time they had worked collaboratively with CWS. For instance, two counties had a total of 38 and 40 different water providers respectively (both regulated and unregulated). Execution of MOUs with so many systems caused delays in implementing services for clients served by these CWS.

In the second DWAP pilot, program design included bundled services and minimum benefit payments. CSD increased DWAP benefits to provide a minimum benefit amount, added levels of financial assistance to clients where water services were bundled with sewer and garbage, and increased the emergency benefit to \$500 for households where termination of water services had occurred or risk of service disruption was imminent due to non-payment.

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<sup>77</sup> Based on discussions with CSD, utilities are generally reimbursed within 1-2 weeks.

<sup>78</sup> Information on ECIP was obtained through public documents and conversations with CSD staff overseeing the program.

**Table 11. Characteristics and features of DWAP 2014 and 2015 programs**

	<b>2014 DWAP</b>	<b>2015 DWAP</b>
Operational Dates	June 1, 2014 – December 31 2014	April 1, 2015 – December 31, 2015
Program Duration	7 months	9 months
Households Assisted	2,793	2,972
Average Water Bill Benefit	\$183	\$201
Serviced Areas	Fresno, Kern, Kings, Madera, Merced, Monterey, San Benito, Santa Cruz, Stanislaus, Tulare	
Pilot Funding	\$60,000 (provided to each agency)	
Number of Administrators	10	
Program Operations	<ul style="list-style-type: none"> <li>-Outreach to inform impacted communities of the program</li> <li>-Intake and eligibility screening of participants</li> <li>-Coordination with local water utilities to facilitate bill payment assistance</li> <li>-Water conservation education to increase efficiency and reduce waste</li> </ul>	
Funding Uses	<ul style="list-style-type: none"> <li>-Direct payment of current bill amount</li> <li>-Offset account arrears</li> <li>-Pay amount necessary to prevent imminent shutoff</li> </ul>	
Program Stipulations	<ul style="list-style-type: none"> <li>-Benefit cannot not exceed 3 months of the participants’ monthly water payment</li> </ul>	<ul style="list-style-type: none"> <li>-Benefits may be applied to customer’s bundled (water/sewer/other) utility bill.</li> <li>-Participants could receive one-time non-emergency benefit of \$150</li> <li>-Emergency assistance maximum of up to \$500</li> </ul>

***Cal-American Monterey Pilot***

Finally, the Monterey County United Way has partnered with Cal-American Water (Cal-Am Water) since 2018 to offer crisis assistance to low-income households to help avoid late payment fees on their water bills or service disconnections. Although much smaller in scale than the above precedents, this example shows the potential of innovative technology use to inform a statewide program. Due to its success, potential expansion is currently under consideration.

The partnership, funded at approximately \$50,000 per year by Cal-Am Water, provides a maximum annual benefit of \$1,000 per customer once per year. Households enroll in the benefit by dialing into United Ways' 2-1-1 hotline where a United Way staff person walks them through an application process that includes a survey, submission of a copy of a water bill, and provision of proof of income. United Way and Cal-Am Water coordinate distribution of the benefit using the HOME app developed by the Community Technology Alliance. When the app receives all required application materials, uploaded by United Way staff, Cal-Am Water receives a signal to prevent the customer account from receiving late payment fees or a service disconnection. United Way staff can confirm the application of a benefit to the customer's bill using the app.

The program faces a current limitation from the once-per-year benefit stipulation. With this cap in place, a household could eliminate their eligibility for relief well before reaching the \$1,000 benefit ceiling. Additionally, the cap could create situations where a customer may receive a smaller amount of assistance (e.g., \$70) and remove themselves from eligibility later in the year when they may need a larger amount of assistance (e.g., \$200). Nonetheless, this program serves as an example of a successful partnership between a water utility and non-profit that builds on the non-profit's established trust and relationships in the community to help prevent service shutoffs for water utility customers.<sup>79</sup>

## **Additional Considerations for Component Design, Implementation and Monitoring**

Designing a new statewide water crisis assistance component involves the consideration of numerous elements, some of which require data not presently available to Board staff. These decisions affect the fundamental determination of component eligibility, benefit amounts, and timing of benefit disbursement and renewal.

One additional design consideration involves how crisis assistance credits offered by this program can be delivered through combined or bundled utility billing systems. Some utilities that provide multiple services beyond drinking water, such as electricity, sewer, or garbage often do not differentiate delinquency by service type. Instead, if a non-payment or partial payment of the bundled bill occurs, all services provided within the bundle are considered past due.

The experience of CSD in operating the ECIP and the DWAP pilots is instructive here. These programs allowed credits to address expenses incurred on bundled bills. For instance, the DWAP defined bundled bills as client water expenses that cannot be paid separately from fees for other local services such as sewer and/or garbage. Providing bundled support through the water shutoff component assists with the broader utility affordability crisis facing low-income households in California, as noted in Chapter 1.

The selection of local service providers which serve as intermediaries between low-income households, utilities, and a potential state program is fundamental to program implementation and requires additional consideration. In the context of the ECIP, these service providers include local governments, non-

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<sup>79</sup> Program overview provided by a Community Impact Director for the Monterey County United Way.

governmental organizations, and private charities authorized by the Department of Community Services and Development. CSD contracts with 40 such service providers.<sup>80</sup>

In the context of the new statewide water shutoff assistance component, some of the existing service providers may not be a good fit, while other non-governmental organizations, such as the Salvation Army and United Way could be added. The Board proposes to work with the Administration, the Legislature, and stakeholders to develop a recommended list of service providers for the proposed water crisis assistance component.

Finally, post-implementation, additional consideration must be given to how the state would review the fiscal stability of systems with high participation rates. This might involve making recommendations for reducing cost of service such as physical or managerial consolidation with a more viable water system, direct financial assistance for source water cost reduction, capital improvements, or additional financial support for the most vulnerable households. This work would occur in conjunction with efforts to ensure water system sustainability envisioned under SB 200.

### ***Potential Downsides of this Component***

There are a few potential downsides of the water crisis assistance component.

Despite the instructive precedents outlined above, the design and implementation of a drinking water crisis assistance component involves a high degree of uncertainty as it requires the potential involvement of a new set of service providers as enrollment intermediaries. In addition, the administration of the ECIP program itself gives a high degree of discretion to local service providers in application processing, although some of this discretion may be attributed to the shortage of funds to serve all applicants. A robust outreach plan would be critical to ensure component awareness and support for the most in-need and marginalized households in the state.

### ***Shutoffs to Households Served by Master-Metered Accounts***

This third component cannot offer support to low-income households renting units in master-metered residential buildings. To address those shutoffs and ensure the Human Right to Water for tenants of master-metered residential buildings, the State Water Board recommends that the Legislature enact a statewide policy prohibiting shutoffs to master-metered residential buildings while providing additional tools, as needed, for water systems to recover delinquent bills from property owners.

Under existing law, a water system may try to enforce payment of a delinquent bill by shutting off service to a residential master-metered building. Data provided to the Board via 2018 Electronic Annual Reporting by roughly 500 of the state's approximately 3,000 CWS suggests that tenants in at least 6,000 multi-family buildings statewide experienced at least one water shutoff.<sup>81</sup> When a water system shuts off water to a residential master-metered account, the burden falls most severely on the tenants who are

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<sup>80</sup> A full list of the contractors can be found here: <https://www.csd.ca.gov/>.

<sup>81</sup> Pending data submitted by water systems to the State Water Board for the 2018 Electronic Annual Report.

deprived of water for drinking, cooking, and sanitation purposes. While tenants of a residential master-metered building are under no financial or legal obligation to the water system for paying water bills, it is the tenants who suffer when the water is shut off. A shutoff, therefore, is a poorly tailored enforcement mechanism for residential master-metered accounts and violates the spirit of California's Human Right to Water.

Shutoffs to residential master-metered accounts are unnecessary when water systems have other means of collecting unpaid water bills from property owners. Some publicly owned water systems are authorized by law to place liens on properties with delinquent accounts and to collect unpaid bills via the county's collection of property taxes. As an example, municipal utility districts are authorized under the Municipal Utility District Act to file with their county auditor a report of delinquent fees and charges, together with interest and penalties, for services provided to residential tenants of properties with master-metered accounts.<sup>82</sup> County tax collectors include those delinquent fees and charges against the respective properties in the same manner as property taxes. East Bay Municipal Utility District has successfully used this authority since 2011 to collect unpaid water bills without shutting off water service to tenants of residential, master-metered buildings.<sup>83</sup> Property-based enforcement of delinquent water bills for multi-family accounts is a more appropriate tool than shutting off water service to tenants because it is focused on the property owners who bear responsibility for payment. Appendix J contains more information about this method of collecting unpaid water bills.

The Board recommends that the Legislature enact a law prohibiting shutoffs to residential master-metered accounts. Recognizing the special circumstances facing non-accountholder tenants, a prohibition on water shutoffs to residential master-metered accounts is a reasonable and measured approach to ensuring tenant access to water for drinking, cooking, and sanitation. This is particularly true when other tools are available to water systems for incentivizing and collecting unpaid water bills. To that end, the Legislature should ensure that all publicly owned water systems are authorized to collect delinquent bills on residential master-metered accounts through the county's collection of property taxes. Appendix J outlines potential options to provide crisis assistance for low-income tenants served by residential master-metered accounts.

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<sup>82</sup> Pub. Util. Code, § 12811.1.

<sup>83</sup> See Appendix J to this report.



# Chapter 5

## Revenue Collection Options

This chapter focuses on how new revenue collection options could independently and sustainably finance a W-LIRA. A range of options to finance the program were considered, including taxes on high personal income earners or businesses via the state income tax system, bottled water taxes, surcharges on non-eligible households' water bills, a soda tax, and other revenue sources (see Appendix G). Appendix G also discusses the broad advantages and disadvantages of each potential revenue source.

The Board recommends that revenue sources be progressive (see Text Box 2) to avoid imposing additional financial burdens on low-income households. Examples of progressive state taxes include Proposition 63 (2004), the Mental Health Services (MHS) Act, and Proposition 39 (2012), the California Clean Energy and Jobs Act.<sup>84</sup> The MHS Act imposed a 1% special tax on personal taxable income in excess of \$1 million to fund mental health services.<sup>85</sup> Proposition 39 closed tax loopholes for out-of-state corporations.<sup>86</sup>

The Board also recommends that revenue sources have a nexus to water use and support consumption of tap water. Taxes on bottled water or soda would fulfill these criteria and provide additional public and environmental health benefits from reduced consumption of sugar and plastic. A water use surcharge would be consistent with the bill surcharges used to fund low-income rate assistance for electricity and gas.

### Text Box 2: Defining Progressive Revenue Sources

Generally, progressive revenue sources include taxes on income, capital gains, and property. Other taxes, such as sales and excise (production) taxes on certain goods, impact economically disadvantaged populations to the extent that they consume these goods and depending on whether the goods or services being taxed are easily substitutable. For example, taxes on food are regressive because everyone needs to eat and there are no substitutes for food. Taxes on luxury goods, on the other hand, generally do not impact low-income households because they are less likely to purchase those goods.

While a personal income tax or business tax similar to Prop 63 and Prop 39 would generate significant revenues, additional funding could be generated from different sources. Tables 12-14 describe a combination of revenue sources to fund a W-LIRA program as detailed in Chapter 2. These table are illustrative. The Legislature could select from any of the revenue sources and levels beyond those presented to fund a W-LIRA program.

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<sup>85</sup> Revenue and Taxation Code sections 17043, 19602, and 19602.5.

<sup>86</sup> [Revenue and Taxation Code sections 23101, 25128, 25128.5, 25128.7, 25136, and 25136.1.](#)

Tables 12-14: Potential Revenue Sources Scenarios

**Table 12. Two revenue sources from personal income tax and bottled water sales tax**

Source	Revenue Estimate
Personal income tax	\$466 million*
Bottled water sales tax	\$153.6 million*
Total	\$619.6 million

\* The estimate for income tax is based on adding a 0.25% tax on all personal income over \$1 million for 2017 tax receipts. The estimate for a bottled water sales tax is based on California Department of Tax and Fee Administration’s estimate for fiscal year 2022-2023, which would be the first full year of tax collection for an initiative passed on the 2020 ballot.

**Table 13. Four revenue sources from a surcharge on water users, business tax, bottled water sales tax and soda tax**

Source	Revenue Estimate
Water user surcharge	\$153.5 million*
Business tax	\$76.7 million*
Bottled water sales tax	\$153.6 million
Soda tax	\$210 million*
Total	\$593.8 million

\* Estimate for the water use surcharge is based on adding \$1.06/month to single-family residential bills and higher amounts for business and institutional customers. The estimate for the business tax is based on a charge of \$79/year on all businesses in the state. The estimate for the soda tax is based on a 5% share of projected revenues of \$4.2 billion. (See Appendix G for detail).

**Table 14. Three revenue sources from personal income tax, a surcharge on water users and a soda tax**

Source	Revenue Estimate
Personal income tax	\$372.8 million*
Water user surcharge	\$122.8 million*
Soda tax	\$105 million*
Total	\$600.6 million

\* In this scenario, a 0.20% tax would be levied on all personal income over \$1 million. The water use surcharge would be \$0.85/month for residential customers, and the soda tax revenue would be 2.5% of the \$4.2 billion in projected revenue.



Passing any new tax or surcharge described above would require a supermajority (2/3) vote in the Legislature or a ballot initiative.<sup>87</sup> Additionally, removing the existing sales tax exemption for bottled water would require voter approval due to the passage of Proposition 163 in 1992.<sup>88</sup> The Board welcomes additional discussion and engagement around revenue sources to support a W-LIRA program.

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<sup>87</sup> Cal. Const., art. XIII A, § 3.

<sup>88</sup> Cal. Const., art. XIII, § 34; Rev. & Tax. Code, § 6359, subd. (b)(3).



## Conclusion

Rising drinking water costs have been outpacing inflation and the multitude of upward cost drivers are likely to intensify, leading to even greater future water rate increases across the state. These rate increases will reduce affordability for low-income households already struggling with numerous rising expenses for housing, food, utilities, and other basic needs. This report offers a set of recommendations for rate assistance programs with statewide coverage and meaningful benefit levels. These recommendations have a significant cost, but these are costs that California should support given the clear need and our already existing financial assistance to low-income households for other basic needs. By creating a strong support system to ensure that everyone has access to affordable drinking water, California would add to the success of SB 200 in making the Human Right to Water a reality.