Options for Implementation of a Statewide

Low-Income Water Rate Assistance Program

State Water Resources Control Board January 3, 2019

Table of Contents

Introduction	
Executive Summary4	
Chapter 1: Why help households pay for drinking water service? The need for Low-Income Rate Assistance in California	
Chapter 2: Program Design Scenarios: Eligibility, Benefit Level, and Total Program Cost	
Chapter 3: Revenue Collection Options	
Chapter 4: Options for Benefit Distribution and Administrative Features of a Statewide Low-Income Ratepayer Assistance Program	
Appendix A: Text of Assembly Bill 401, Dodd. Low-Income Water Rate Assistance Program	
Appendix B: Summary of Public Input Process and Methodology for Program Scenario Analysis	
Appendix C: Features of Existing Low-Income Ratepayer Assistance Programs	
Appendix D: Lack of Federal and State Water Affordability Programs	
Appendix E: Alternate Program Scenarios	
Appendix F: Other Program Scenarios Evaluated	
Appendix G: Analysis of Revenue Collection Options	
Appendix H: Analysis of Benefit Delivery Methods	
Appendix I: CalFresh	
Appendix J: New Electronic Benefits Transfer (EBT) Program	
Appendix K: Community Water Systems	
Appendix L: Options for Improving Affordability That Do Not Include Direct Rate Assistance	
Appendix M: Roles and Responsibilities Under Different Program Scenarios	
Appendix N: Estimate of State Water Board Program Implementation Costs for Electric Benefit Delivery Program Option	
Appendices can be accessed through the State Water Board website at:	

https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/.

Introduction

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 laws¹ aimed at making this policy a reality. There is, however, more to do. In recognition that many Californians may not be able to pay their water bills, AB 401 (Dodd, 2015) enacted the Low-Income Water Rate Assistance Act, 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 draft report, the State Water Board outlines possible components for developing a successful program to help low-income households pay their water bills. Specifically, the report identifies potential program recipients, different mechanisms for delivering benefits to low-income households, and possible funding sources to implement such a W-LIRA program. The purpose of this report is to present ideas for a W-LIRA program for public and stakeholder input, and the options outlined reflect discussions with public interest groups and stakeholders. The Board will use the input gathered in response to this draft to develop a final report to the Legislature in 2019.

In addition to welcoming feedback on this AB 401 draft report, the State Water Board also encourages review of the Office of Environmental Health Hazard Assessment's (OEHHA) draft *Framework and Tool for Evaluating California's Progress in Achieving the Human Right to Water*. Following the adoption of a Human Right to Water Resolution² in 2016, the Board enlisted OEHHA to develop a methodology for evaluating the state's progress in meeting the Human Right to Water policy. OEHHA's draft framework and tool can help evaluate and track our progress towards achieving safe, clean, affordable, and accessible water for all Californians.

While AB 401 is focused on assisting low-income households in paying their water bills, the State Water Board is committed to achieving the Human Right to Water in full. Multiple strategies will be necessary. This includes securing sustainable funding for the long-term operation and maintenance of water systems, consolidation of unsustainable systems, and improving technical, managerial, and financial capacity for systems serving disadvantaged communities. While the state continues to explore options for comprehensive solutions, developing a W-LIRA program will provide a necessary safety net for the most vulnerable Californians.

¹ These laws include: Senate Bill (SB) 88 (2015), SB 552 (2016), SB 1263 (2016), AB 401 (2015), AB 1668 & SB 606 (2018), AB 2501 (2018), and SB 998 (2018).

² State Water Board. Human Right to Water Resolution. Available at URL: <u>http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2016/rs2016_0010.pdf</u>.

Executive Summary

The Growing Water Affordability Challenge

Drinking water is a basic human need. Satisfying this need, however, is becoming more difficult for California's households, 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 was paying around 45% more per month for drinking water service in 2015 than in 2007. The burden of rapidly-rising drinking water costs falls most heavily 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 lead 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 CCF³) for California Households

Source: American Water Works Association Data, 2007-2015

Need for a Statewide Program

Only 46% of California's population is served by a community water system (CWS)⁴ offering some form of a rate assistance program, and many of these programs have low levels of enrollment and limited

 ³ 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 in a month equates to 75 gallons of water per person per day.
 ⁴ Community water systems serve communities with more than 25 people year-round. It is a term the Board's Drinking Water Division uses to distinguish them from other drinking water providers, such as domestic wells, truck stops, camp grounds, etc.

financial support. As a result, less than 20% of the state's low-income population currently receives benefits from a low-income rate assistance program. One reason for the limitation in program offerings is that publicly-owned water systems are constrained by Proposition 218⁵ in the use of their water fees and charges. Systems that do provide low-income rate assistance benefits are able to fund them from non-fee revenues.

There are also administrative obstacles associated with providing a rate assistance program to water users at the system level. Asking approximately 3,000 individual CWS to operate their own standalone rate assistance programs for their individual customer bases is infeasible. 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 systems more than 50% of their customers would be eligible for assistance. To operate a low-income rate assistance program, these systems would likely have to impose outsized cost burdens on higher-income households served by the systems.

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.

⁵ Passed in 1996, Proposition 218 requires certain local government taxes, fees and assessments to go before the voters for approval.

Because developing a comprehensive low-income rate assistance program at the system level is not practical, the Board envisions a statewide program, with benefits distributed through other existing assistance program, such as utility bill credits, tax credits, or direct cash benefits.

The Board recommends progressive revenue sources (i.e. taxes or fees) in order not to burden some of the residents that this program seeks to serve. For example, taxes on personal and business income would provide progressive revenues, while fees on bottled water or alcohol would have a nexus to water use.

Eligibility criteria and benefit levels would influence the total program costs. AB 401 directed the Board to use 200% of the FPL as the primary eligibility criteria in its analysis; however, the Board seeks input on alternate eligibility criteria that can feasibly be implemented across the state (some of which are discussed in Appendix F). Benefit levels could be tied to the cost of water, other assistance programs, or certain affordability criteria. The Board developed the working proposal below to elicit input and inform a robust discussion. The program scenario would offer a three-tiered benefit to all eligible residential households (those with income under 200% of the FPL) in the state.⁶ The program would provide a benefit equivalent to the tiers below. The monetary value of the discounts provided in each tier would be based on a consumption level of 12CCF each month for each of the 3,000 community water systems, rather than each household's actual amount consumed (and actual bills), as explained below in Chapter 2.

Text Box 1: Potential Program Benefit Levels

Tier 1: 20% discount to all households that have incomes below 200% of the federal poverty level (FPL) in water systems where monthly water expenditures (at 12 CCF) are below \$90,

Tier 2: 35% discount to all households that have incomes below 200% of the FPL in water systems where monthly water expenditures (at 12 CCF) are between \$90 and \$120, and

Tier 3: 50% discount to all households that have incomes below 200% of the FPL in water systems where monthly water costs (at 12 CCF) are above \$120.

Because the average monthly water bill is around \$60 per month,⁷ most low-income households would be in Tier 1.

The proposed benefit levels would provide substantial assistance to all low-income households, but also a larger benefit to those in the CWS that have the greatest drinking water expenditure burden. Moreover, both the program eligibility criteria and first two benefit tiers 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. However, CARE benefits relate to customers' actual bill amounts rather the system-wide rates for a set level of consumption, as in this report's working proposal.

This scenario is projected to cost about \$606 million in the first year for benefit distribution and program administration. Costs would adjust over time based on changes in the number of eligible households and

⁶ The Federal Poverty Level is based on household size; so larger households would qualify with higher incomes than smaller households.

⁷ See Chapter 2: Program Design Scenarios: Eligibility, Benefit Level, and Total Program Cost.

water rates. 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 Chapter 4 and the Appendices. Modifications to this scenario would result in different cost projections. For example, shrinking eligibility to households earning up to 150% of the FPL would reduce program costs, while expanding eligibility to households earning up to 250% of the FPL would raise program costs. The same logic applies to the program benefit levels, including the amount of water use upon which calculations are based. In addition, initial program costs would decrease if the program were phased-in overtime, such as if benefits were initially only extended to low-income households in areas with higher water bills.

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

Safe Drinking Water Must Be a Priority

The development of a W-LIRA program and other discussions on water affordability should not delay the urgent need to address the problem of unsafe drinking water. This is an urgent public health crisis and solutions are already well developed. Hundreds of thousands of Californians lack access to safe drinking water. A significant challenge is the lack of a sustainable funding for long-term operations and maintenance for drinking water systems. Over the past two years, the Legislature has proposed a modest surcharge of \$1 per month on certain California households to address the systematic challenges that prevent the delivery of safe drinking water to Californians.⁸ Low-income residents would be exempt from paying such a charge, and community water systems would be allowed to retain a portion of the funding for their expenses of collecting and transmitting the monies to the state.

⁸ SB 623, SB 844 and SB 845.

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 (formally known as the State Board of Equalization) 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 draft report (including its appendices) reflects the analysis from the planning process envisioned by AB 401, while allowing for additional public and stakeholder feedback.

Why help households pay for drinking water service?

Rising income inequality coupled with California's high cost of living means that meeting basic needs, including housing, food, clothing, transportation, healthcare, and utilities is increasingly a struggle for many households. Currently, 34% of Californians, roughly 13 million people, live in households with income under 200% of the federal poverty level (FPL), which in 2018 is \$50,200 for a family of four. When families are unable to pay their bills, they face difficult and highly consequential trade-offs, like skipping meals and going hungry, 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 it was in 2007.⁹ Across the nation more broadly, there has been a 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.¹⁰ At the same time, the largest necessary cost of living – housing costs – have shown rapidly increasing divergence from household income since 2000.¹¹ Low-income households need more support to make ends meet. Providing all low-income 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 1 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.¹²

⁹ Alternatively, the percentages of households under 100% or 200% of the FPL are slightly higher in 2015 than 2005.

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

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

¹² 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

Table 1. Financially Disadvantaged California Households

Designation	% Percent of State Households
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 for low- and median-income households and rising retail drinking water costs.

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



Changes in water rates relative to median household income and the proportion of low income households since 2007

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

for other drinking water system financial assistance programs in California. The 200% FPL threshold is particularly relevant for the purpose of considering the need for a W-LIRA program because these income levels are most commonly used as eligibility criteria for existing low-income rate assistance programs. AB 401 also specifically mentions the 200% FPL threshold.

- 1. The devastating health and livelihood impacts people experience where water is unaffordable,
- 2. The rapidly-rising retail cost of drinking water,
- 3. The general absence of robust low-income rate assistance program or affordability programs, when they are available for many other basic household needs, and
- 4. The inability of many individual water systems to support a rate assistance program on their own.

Each of these motivations for a W-LIRA program is explained in turn below.

#1- 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.¹³ In other words, low-income households face tradeoffs that harm their health and welfare.¹⁴ One example of this is in the City of Detroit, where 156,000 households struggled with increased water rates alongside necessary electricity costs for heating during a frigid winter. Households prioritized the immediate need of electricity over water, and the city experienced a high rate of water shutoffs due to non-payment.¹⁵

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. A recent study by the Henry Ford Hospital examined the public health implications of water shutoffs in the City of 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.¹⁶ For similar reasons, the City of Pittsburgh Water and Sewer Authority recently placed a moratorium on drinking water service shutoffs in the winter season.¹⁷ Moreover, 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 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 state.

http://apps.pittsburghpa.gov/redtail/images/1647_WinterMoratoriumProgram_FINAL.PDF.

¹³ 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.

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

 ¹⁵ Filson, J. and Avery, T. (2017). "Water Shutoffs in Detroit: An Ongoing Crisis." *Food & Water Watch*.
 ¹⁶ Chambers, Jennifer. Experts: Water shutoffs causing public health emergency. *The Detroit News*.
 [Online] July 26, 2017. Available at: <u>http://www.detroitnews.com/story/news/local/detroit-city/2017/07/26/detroit-water-shutoffs-health-study/104016812/.
</u>

¹⁷ The Pittsburgh Water and Sewer Authority (2017). Winter Moratorium Program- Frequently Asked Questions. Available at:

¹⁸ For instance, see California Department of Public Health (2018). "Hepatitis A Outbreak in California". Available at: <u>https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Hepatitis-A-Outbreak.aspx</u>.

Households that cannot pay their water bill in turn face negative impacts to their credit, risk of loss of property, and/or eviction. An example of this is in the City of Baltimore where the water system often sells unpaid water bills as property liens in tax sales. Households that cannot pay back the bill in addition to 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 902.¹⁹ While the Board does not yet have a complete dataset for statewide water shutoffs, shutoff concerns were raised at the public meetings Board staff held around the state, and in the comment letters the Board received.²⁰

#2- The rapidly-rising retail cost of drinking water

Understanding drinking water affordability for households requires consideration of the necessary expenditure for water paid by a household, the income of the household, as well as the costs of other vital goods and services such as housing, utilities, food, transportation, and healthcare.²¹ 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 \$60 per month for 12 CCF of drinking water service. Longer-standing sources of rate data indicate that the retail price of water has risen dramatically above the pace of inflation in California (and the U.S. more broadly) over the last decade.²² Moreover, financial analysts project the retail price of water to rise significantly in California over the coming years.²³

As summarized in Figure 4, rising rates for water service are attributable to a number of factors, two of which are relatively unique to water within basic service sectors.²⁴ First, water has been historically underpriced compared to the true cost of service,²⁵ which has led to many water systems in California now having aging infrastructure that must be replaced. In addition, more stringent water quality standards

¹⁹ 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.

²⁰ See <u>https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/</u> for links to AB 401 comment letters.

²¹ 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 account of 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.

 ²² 2015 California-Nevada Water and Wastewater Rate Survey. American Water Works Association and Raftelis. Available at: <u>http://ca-nvawwa.org/canv/downloads/2016/ CANVRateSurvey2015.pdf.</u>
 ²³ 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.

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

²⁵ 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.

require additional costs for treatment and operator training.²⁶ Second, the percentage of federal support in the total public spending on infrastructure for water utilities has fallen from over 30% in the 1970s to less than 5% in 2015.²⁷ In other words, state agencies and especially local water systems need to finance their own operations to a much greater extent than in the past.



Figure 4. Drivers of Rising Water Rates in California

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 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.²⁸ Numerous studies show these increased temperatures will result in greater residential water demand;²⁹ the most specific urban case study shows an annual per capita increase of 1.6 gallons per 1°F increase, for temperatures above 78°F.³⁰

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, including drought, occurring throughout the state. One widely-recognized challenge is sea level rise, which is expected to increase and inundate

²⁶ 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.

 ²⁷ 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/.

²⁸ CalEPA & CPDH, 2013

²⁹ Pacific Institute, 2012; Wang et al., 2015; Neale et al., 2007

³⁰ Protopapas et al., 2000

groundwater with salts, decreasing groundwater availability for drinking water supplies.³¹ Additionally, the increased prevalence of wildfire burns across California described by Westerling et al. (2011) and Westerling & Bryant (2007) is diminishing watershed health and will likely lead to increases in the costs of drinking water supplies. Lastly, and 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, 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 is different than other basic services in its variability in retail rates across different retail systems. Retail rate divergence by neighboring systems is not unique to California³² but is certainly very common within the state.³³ Again, the average California household paid around \$60 per month for 12 CCF of drinking water service in 2015, but there was tremendous variation in the price paid by households. Many systems (973) charge rates higher than the state average, with some charging one and a half (175), two (28), 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 vary tremendously, and some systems face high costs to obtain and treat water.

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 in Cantua Creek pay roughly \$174 a month.³⁴ Residents in the Lucerne pay roughly \$350 in monthly water bills due to system upgrades.³⁵ Moreover, in the City of Fontana, residents will experience a 30.7% increase in water rates over the next three years.³⁶ Larger cities are not exempt from this trend; the City of San Francisco rates have risen 127% over seven years.³⁷ As more fully discussed in the report, differences in the geographic location, source water quality, regulatory oversight, and socioeconomic profile of systems drive variation in rates across water systems in California.

#3- Comparable programs exist in other sectors

Another justification for the creation of a W-LIRA in California is that statewide programs already operate to subsidize other essential services at the household level. As discussed in more detail in Appendix C, robust, relatively-longstanding mandated programs at the federal and state levels subsidize the

³¹ Hoover, et al., 2017

³² 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 <u>http://graphics.chicagotribune.com/news/lake-michigan-drinking-water-rates/index.html;</u> Jordi Honey-Rosés, David Gill, Claudio Pareja (March 2016), British Columbia Municipal Water Survey 2016.

³³ 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.

 ³⁴ Public comment made by Cantua Creek resident at the AB 401 Public Meeting. (2017). Fresno, CA. Additional information available at: <u>http://www.co.fresno.ca.us/home/showdocument?id=5925</u>.
 ³⁵ Dilling, Audrey. "Why This California Town's Water Costs Way More Than the National Average." (2017). *KQED News*.

³⁶ "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-fontanawater-company-customers-will-go-up/article_af2cb0e4-6d97-11e7-a4e0-eb5fe175579c.html ³⁷ The Price of Water: Water Rates Dashboard-San Francisco. (2017). *Circle of Blue*. Available at http://www.circleofblue.org/waterpricing/.

affordability of basic energy and telephone services for low-income households who apply and are eligible.³⁸

By contrast, no state or federal programs provide affordability assistance directly to households for drinking water services. Similarly, the relative role of federal financial support for water utilities nation-wide has fallen since the mid-1970s, as compared to local and state government financial support for water utilities. Figure 6 shows that the federal government supported over 30% of total spending on water utility infrastructure through the 1970s, but less than 5% by 2014.³⁹





Similarly, nationwide, programs addressing water affordability have traditionally been left up to individual CWS. This holds true in California except for large investor-owned utility systems, which are regulated by the California Public Utilities Commission (CPUC) to provide LIRA programs.

The State Water Board estimates that approximately 46% of the entire Californian population is served by a water system offering some type of rate assistance. Unfortunately, however, the presence of a rate

³⁹ 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.

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 extent and inability to support those households that are most in need, because many low-income households do not pay a water bill directly, and because the existing programs have low enrollment levels and provide insufficient support. In addition, except for the investor-owned water systems, these existing rate assistance programs are funded by non-rate revenues to comply with Proposition 218, and therefore their funding is insufficient to provide benefits to all eligible households in their jurisdiction. Table 2 shows annual rate assistance programs expenditure data for drinking water systems serving 31% of the state's population in 2015. These systems all offered rate assistance programs and were most likely to have high enrollment rates as compared to other water systems.

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

Table 2. W-LIRA Program Expenditure for Sample Water Systems in California (2015)

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

#4: The limitations of standalone system rate assistance programs

The final justification for a W-LIRA program is the fact that many individual water systems in California economically cannot support a rate assistance program on their own. Although there are about 3,000 CWS operating in California, over 80% of the population is served by the 400 largest systems. While the most intuitive solution would seem to be to allow or enable the 3,000 individual CWS to operate their own standalone rate assistance programs for their customer base, the Board's research shows that individual CWS would bear vastly different cost burdens to provide assistance to eligible customers. Ultimately, this means that customers ineligible for assistance in one system (i.e., higher-income customers) might pay much more to support affordability for eligible customers in their system than ineligible customers would in another system. Although most of the systems with the highest eligibility burdens are classified as small or very small, more than 22% of systems throughout the state would have eligibility burdens of more than 50% of their residential customers.

On the other hand, large, more sophisticated systems also see high eligibility rates. Figure 2 illustrates that even among some systems which serve 3,000 or more customers, imposing a requirement to run a standalone rate assistance program would likely cause outsized affordability burdens as well. To operate a W-LIRA program in these systems, outsized cost burdens would need to be passed on to ineligible households within each CWS. Even if a CWS were willing to raise revenue for a rate assistance program in this way, it could face legal challenges from ratepayers arguing that the system's use of water rate revenues for rate assistance program benefits may be subject to Proposition 218. The likely result of encouraging or mandating affordability assistance in systems with high eligibility burdens would be that a sizeable number of CWS would simply not be able to operate a sustainable rate assistance program that would meet the goals envisioned by the Human Right to Water and the Low-Income Water Rate

Assistance Act. Given the challenges facing the many water systems with high eligibility burdens, a W-LIRA appears more feasible to address the statewide mandate of the Human Right to Water.

Chapter 2: Program Design Scenarios: Eligibility, Benefit Level, and Total Program Cost

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

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

Table 4. Example W-LIRA Program Scenario Calculation

*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.

Appendix E discusses the advantages and disadvantages of several alternative program designs with different eligibility and benefit criteria (and thus total costs) to the proposed scenario which were fully considered in the process of plan development and stakeholder engagement. Using the data and methods described in Appendix B, more than 70 program scenarios were evaluated and empirically estimated over the past three years.

The proposed program scenario would offer three-tiered benefit levels to all eligible residential households in the state, as described in Assembly Bill (AB) 401. In the context of a statewide water assistance program, there is no administratively feasible way to provide an individual percentage discount on each household level consumption,⁴⁰ unless there are verified data on household consumption reported to the program administrator of the assistance program.⁴¹ Therefore, this scenario would provide a benefit based on the cost of consuming 12 CCF as described below:

Tier 1: 20% discount to all households that have incomes below 200% of the federal poverty level (FPL) in water systems where monthly water expenditures (at 12 CCF) are below \$90,

Tier 2: 35% discount to all households that have incomes below 200% of the FPL in water systems where monthly water expenditures (at 12 CCF) are between \$90 and \$120, and

⁴⁰ This is how the four large energy investor-owned utilities operate the California Alternative Rates for Energy (CARE) program.

⁴¹ 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).

Tier 3: 50% discount to all households that have incomes below 200% of the FPL in water systems where monthly water costs (at 12 CCF) are above \$120.

The estimated total annual cost of such a program, and thus the annual revenue target for program operation, in its first year is \$606.4 million. Changes to the proportion of the state's households eligible for the program (those with incomes under 200% of the FPL) could raise or lower the cost of the program. Moreover, the annual cost of the program would rise if residential water rates at the 12 CCF consumption level continue to increase.

Proposed Program Scenario Factors

Eligibility: Baseline eligibility as 200% of the FPL

Most assistance scenarios used in the Board's analysis have a common eligibility criteria of household income equal to or below 200% of the FPL. There are several reasons for the establishment of this common eligibility criteria. 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 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.

Benefit Type: Percentage of total bill benefit

Water systems across the state charge vastly different total dollar amounts for the same volume of water consumed (i.e. 12 CCF), even within the same customer class (residential customers using the same sized pipe). Since all water systems— except those regulated by the CPUC— have discretion over rate design and levels consistent with cost of service requirements, there is wide variability in rate structure design, as further discussed in Chapter 1. (Chapter 1 also explains why some systems face much higher source water costs than others). Consequently, the Board faced the challenge of developing proposals for providing eligible households with equitable benefits based on a certain component of the bill.

Given the complexity in 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 to 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, an example of the affordability support experienced by households served by different community water systems with different rate levels and structures (but the same consumption level, 12 CCF) is shown in Table 6 below.

Three Tier Structure

The tiered benefit structure was developed from the average statewide water expenditure of about \$60 a month for 12 CCF. Low-income households that pay more than 150% (Tier 2) and 200% (Tier 3) of the state average water bill 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 Proposed Program Scenario has the collective advantage of providing not only substantial affordability assistance to all low-income households, but also a larger benefit to those who face the

greatest drinking water cost burdens.⁴² The biggest disadvantage of this program scenario is that it would require verification of rate data at the system level, and, for newly enrolling households, verification of income data, raising the cost of program administration. The Board would need to verify the cost of 12 CCF for residential customers (for Tier 2 and 3 purposes), and households not already enrolled in the CARE program would need to document their eligibility status (income).

The 20% discount is equivalent to the CARE discount for natural gas service, as well as the high end of discounts currently offered by existing low-income rate assistance programs in California. A discount of 35%, also offered to CARE customers for electricity service, helps households that face water bills exceeding the state average by more than 150% to 200% of the bill average. Finally, the 50% discount tier accounts for the small number of water systems charging more than 200% of the state average for 12 CCF water bills and has a precedent in California Water Service where 50% is the benefit level for households served in very high cost areas.⁴³ Following annual updates to the Board's record of drinking water costs, information used to determine eligibility and benefit would be adjusted.

Consumption: 12 CCF of water monthly

This program scenario 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. Moreover, both the eligibility criteria and the first two benefit tiers correspond to the criteria laid out by the statewide CARE program for electricity and natural gas affordability. The 12 CCF consumption level accounts for indoor use for large households or a modest amount of outdoor use. As shown in Table 5, the benefit also allows the average California household to afford above 55 gallons/person/day, the current standard for indoor set by AB 1668 (2018) and provides for some outdoor use for a family of four.

Daily Water Use Category	Amount Allocated
Indoor Use	220 gallons (55 gallons x 4)
Outdoor Use	75 gallons
Total Use	295 gallons

Table 5. Daily Water Use Available to a Family of Four at 12 CCF Monthly

12 CCF = 8977 gallons. 8977 gallons = 295 gallons × 30.42 (365/12) days in average month.

For the statewide W-LIRA program, a benefit associated with a percentage of a fixed volume like 12 CCF, would be provided regardless of whether an individual household is consuming more or less than this level. A shortcoming of this approach occurs when necessary household level consumption exceeds 12 CCF, as no additional assistance would be provided compared to what the same household would receive if its necessary consumption was lower than 12 CCF. However, as described above, the 12 CCF consumption level addresses situations where more than four people reside in a household and where households can use modest amounts of water for outdoor irrigation. An additional benefit of using a fixed consumption level is that the W-LIRA program is less exposed to risk of manipulation and does not subsidize or incentivize over-use.⁴⁴ In addition, since most low-income households do not pay a water bill

⁴² 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.

⁴³ Available at: <u>https://www.calwater.com/docs/rates/rates_tariffs/all/20180101-Low-</u> Income_Ratepayer_Assistance_-_Schedule_LIRA.pdf.

⁴⁴ On the other hand, using a benefit calculation which is untied to consumption but is set based on the

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. 12 CCF) for calculating a benefit level.

To illustrate how a benefit based on a fixed consumption level would work, an example comparing two eligible low-income households is shown below in Table 6. The two households are served by the same community water system but have different consumption levels. The monthly water bill for 12 CCF in this system is \$60, and thus the benefit distributed to each household will be \$12 (20% of \$60). Therefore, when allotting a percent discount to 12 CCF in the various billing tiers, households receive a positive conservation signal to the households that are able to consume less water, while reducing their water bill simultaneously.

Table 6. Illustration of Benefit for Fixed Volume	Provi	ided to	Households	with	Different \	Nater
Consumption Levels						

	Household A	Household B
Water Consumption Level	12 CCF	6 CCF
	\$	\$
Initial Monthly Water Bill Amount	60	40
	\$	\$
Monthly Benefit Received	12	12
Remainder of Bill to be paid by	\$	\$
Household	48	28

Another reason that 12 CCF was chosen as the primary option for analysis is due to access to robust real data at that consumption level. As described in Appendix B, the independent analysis for this report was undertaken using self-reported, system-level expenditure at three consumption levels: 6, 12, and 24 CCF. Both 6 CCF and 24 CCF were also considered but not evaluated. In light of the state's water conservation priorities and public health goals, 24 CCF was considered too high of a level to subsidize. Conversely, 6 CCF was generally considered too low of a level of supply to support households, considering that many low-income households are larger than the state average.⁴⁵ Some organizations have provided a recommendation that the Board use a lower consumption level, such as 9 CCF, which more closely tracks basic indoor use.⁴⁶ The Board notes that besides the above stated reasons for using 12 CCF, the fundamental question relates to a value judgment about the types of uses and activities that should be subsidized. In the electric sector, the CARE program provides discounts for use up to 400% of the "baseline," demonstrating a willingness to subsidize consumption over basic levels.⁴⁷

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 12 CCF, and thus elevate the benefit for eligible households. This type of strategic rate setting would harm a system's non-eligible households who consume less than 12 CCF of water and dampen the conservation signal to all households, and thus the net incentive to a given system to alter rates is unclear. In stakeholder meetings, water system representatives have also stated that they would not or could not practically engage in this type of strategic rate setting. If the W-LIRA program is established, the Board will monitor this potential for rate setting response to the program going forward. ⁴⁵ Using 2016 American Community Survey data, the average household under 225% of the FPL in California has 10% more members than the average household above 225% of the FPL.

⁴⁶ See for example, the Association of California Water Agencies comment letters.

⁴⁷ See <u>Public Utilities Code Section 739.1</u> h(i)(1).

Enrollment and Administrative Cost Assumptions

To calculate the annual program cost for any W-LIRA scenario, the plan assumes an 84% enrollment of program-eligible households. This is the enrollment rate achieved by the CARE program, and 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 a statewide W-LIRA program. 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, there are 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 34% of the state's households would be income-eligible for this program. Of this 34%, only a small proportion of households will be eligible for the higher tier benefits, 2% and <1% for Tiers 2 and 3 respectively. Building on these high-end estimates for eligibility and enrollment, the Board calculates the initial total annual cost of such a program, and thus the revenue target for program operation, to be \$606.4 million annually.⁴⁸

Tier Criterion (Cumulative) 200% FPL	Tier 1 Paying up to \$90	Tier 2 Paying at \$90- \$120	Tier 3 Paying Above \$120	Total
Estimated Number of Eligible				
Households*	4,045,564	198,040	106,041	4,349,645
	20% of Water	35% of Water	50% of Water	
Benefit Level per Household	Bill	Bill	Bill	
Maximum Total Benefits to be				
Distributed	\$ 493.9	\$82.6	\$79.8	\$656.3
Accounting for an Expected				
Enrollment of 84%**	\$414.9	\$69.4	\$67.0	\$551.3
Total Program Operating Costs				
(in millions)***	\$456.40	\$76.3	\$73.7	\$606.4

Table 7. Primary Scenario Breakdown of Eligibility and Cost by Tier

*Accounting for all households in the state (including those not captured by the Board's 2015 rate data (2%) and those not served by CWS (6%)).

**This enrollment value reflects of CARE's enrollment estimation of 84%.

*** Assuming 10% administrative costs to operate this program.

⁴⁸ This figure is generated based on a \$656.3 million annual program cost at 100% enrollment. At a more feasible 84% enrollment target with 10% administrative overhead, the total cost is \$606.4 million.

Chapter 3: Revenue Collection Options

This chapter focuses on how a W-LIRA could be independently and sustainably financed through new revenue collection options. 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, and other revenue sources (see Appendix G). The broad advantages and disadvantages of each potential revenue source are also discussed in Appendix G. 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) also known as the California Clean Energy and Jobs Act.⁴⁹ The MHS Act imposed a 1% special tax on personal taxable income in excess of \$1 million to fund MHS.⁵⁰ Prop 39 closed tax loopholes for out-of-state corporations.⁵¹

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 similar to Prop 63 and Prop 39 would generate significant revenues, additional funding would be needed to support a W-LIRA program as outlined in this document. Table 8 (below) describes a combination of revenue sources to fund a W-LIRA program as detailed in Chapter 2 scenario. A quarter percent tax increase on personal income above \$1 million, combined with sales tax revenues from bottled water sales is estimated to generate \$ 619.6 million.⁵²

Table 8: Potential Revenue Sources Scenario

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

* Estimate for income tax is based on 2017 tax receipts. Estimate for bottled water sales tax is based on California Department of Tax and Finance Administration estimate for fiscal year 2022-2023, which would be the first full year of tax collection for an initiative passed on the 2020 ballot.

⁴⁹ California Department of Education Website. California Clean Energy Jobs Act (Proposition 39). Available at: <u>https://www.cde.ca.gov/ls/fa/ce/</u>.

⁵⁰ 2004 Cal. Legis. Serv. Prop. 63; CAL. REV. & TAX CODE §§17043(a), 19602.5.

⁵¹ Available at: <u>https://lao.ca.gov/ballot/2012/39_11_2012.aspx.</u>

⁵² This figure is generated based on a \$656.3 million annual program cost at 100% enrollment. At a more attainable 84% enrollment target with 10% administrative overhead, the total cost is \$606.4 million.

The Board notes that the feasibility of passing any new tax or fee for this purpose, as required by Proposition 26⁵³, would require a supermajority vote in the state Legislature to come into effect. Additionally, the bottled water sales tax would require a ballot referendum.

The Board invites input on feasible and sustainable revenue sources for a W-LIRA program.

⁵³ Proposition 26 was passed in 2010 requiring a supermajority vote of the Legislature to pass fees, levies, charges and taxes.

Chapter 4: Options for Benefit Distribution and Administrative Features of a Statewide Low-Income Ratepayer Assistance Program

Administrative considerations

The administrative mechanics of a W-LIRA would be vastly different depending on the method of the benefit delivery model (energy utility bill credit vs. tax credit vs. Electronic Benefits Transfer (EBT)). For a benefit delivered via the electric or gas bill, the CPUC and the Board would have administrative and oversight responsibilities, while the electric utilities (both publicly-owned and investor-owned) would be responsible for implementation to low-income customers. For a tax credit, the California Franchise Tax Board (FTB) would be responsible for implementation. In an EBT scenario, counties would have the bulk of the implementation and management responsibilities while the California Department of Social Services would likely have oversight responsibilities. Regardless of program design, revenue collection would be handled by the FTB and Department of Tax and Fee Administration (formally known as the Board of Equalization) depending on the revenue sources used for the program.

The administrative and management needs under any program design include tracking and delivering benefits, marketing, education, outreach, fund management, and designing and evaluating metrics for program effectiveness. The administrative costs would differ, however, between the program designs. For a tax credit, tax forms (and tax preparation software) would have to be modified. Under a community water system benefit distribution program, the system would be responsible for delivering benefits via bills, which would entail modifications to billing systems (and would have the previously-discussed other drawbacks). For an electric or gas program, the utilities would also require new accounting procedures to track W-LIRA funds apart from ratepayer contributions. For a benefit delivered via the California Department of Social Services' CalFresh program, counties would need new procedures to ensure each CalFresh recipient's EBT card was loaded with the appropriate dollar value. In independent EBT programs, a new set of administrative procedures, personnel, and information technology resources would be necessary.

The section below describes the challenges associated with each of the program scenarios. This is not meant to be an exhaustive list (see Appendix F for more detail), but rather provides additional factors that merit consideration in selecting a preferred program design.

The Board welcomes input on program design and administrative elements that should be included in the final report.

Benefit distribution via electric or gas bills

There are 65 electric and gas utilities in the state and each would need to modify its billing system to add the monthly W-LIRA credit. In addition, each utility would need to bill the state for its expenditures for delivering the W-LIRA credit along with applicable administrative costs. Those costs might include training for customer service personnel about the W-LIRA program, modifications to marketing, and education, and outreach programs. The utilities would have to work closely with the State Water Board to provide the appropriate benefit to each customer based upon water system rates and to modify benefit levels when recipients move from one water system to another within their service area. The CPUC, the State Water Board, the Legislature, and potentially the Commission on State Mandates would each have a role in determining which administrative costs and costs to maintain data privacy would be recoverable from the W-LIRA fund. In addition, some publicly-owned electric utilities would need to modify their LIRA enrollment criteria and take significant steps to increase overall enrollment levels.

Benefit distribution via CalFresh

Each of the 58 counties would need to modify its CalFresh program to incorporate the new W-LIRA benefit. They would have to work closely with the State Water Board to load the appropriate monthly benefit onto recipient EBT cards based upon water system rates and modify benefit levels when recipients move from one water system to another within the county. As with electric utilities, the counties would also face administrative costs associated with marketing, education and outreach, and billing the state for the costs of running the program. (Even if revenues were sent directly to the counties, they would still have to develop accounting mechanisms to ensure that revenues were aligned with expenditures). Furthermore, enrollment in CalFresh is limited to citizens, and any additional federal changes to the program such as additional eligibility verification requirements could impact enrollment levels and reduce the number of households that would benefit from the W-LIRA. (See Appendix I).

Benefit distribution via a new EBT program

As described above, creating a new program to deliver monthly benefits via EBT cards would involve start-up and ongoing administrative costs, including costs to ensure data privacy, for the counties. The counties would have to work closely with the State Water Board to provide the appropriate benefit onto recipient EBT cards based upon water system rates and modify benefit levels when recipients move from one water system to another within the county. Also, while a new stand-alone program could be clearly marketed as a water benefit and be extended to all low-income households regardless of citizenship status. Data management, including confidentiality and privacy protections, would need to be addressed. (See Appendix J).

Benefit distribution via tax credits

The FTB could apply the credits on individual tax filings annually based upon whether a filer met program eligibility criteria. The FTB would have to work closely with the State Water Board to provide the appropriate benefit to each taxpayer based upon water system rates and modify benefit levels when recipients move from one water system to another within the State. The Legislature or FTB would also have to determine how to calculate a benefit for a household that moved one or more times during the year.

Benefit distribution via water bills

As with the energy utilities, each of the nearly 3,000 CWS would need to modify its billing system to add the monthly W-LIRA credit and each 3,000 CWS would need to bill the state for its expenditures for delivering the W-LIRA credit along with applicable administrative costs (not to exceed 10%). Those costs might include training for customer service personnel about the W-LIRA program, and modifications to marketing, education, and outreach programs. In addition, low-income households would have to demonstrate their eligibility to their CWS, making the CWS responsible for verifying the income eligibility and distributing the benefits authorized by the Board.

Reasons to consider providing water benefits through other programs

Many low-income households pay for water indirectly through rent because they do not have individual water meters. Estimates vary as there is no perfect source for this information, but at least 29% to as

much as 46% of households in the state do not pay a water bill directly or are master-metered.⁵⁴ Table 9 below shows how water meters are much less prevalent than electric and gas meters.

Table 9. Californian Households Reporting That They Do Not Pay a Direct Bill for Utility Service

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

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

As illustrated in Figure 8, there are households with incomes under 200% federal poverty level (FPL) and living in multi-family housing, an estimated 72% (or 1.4 million households) do not directly receive a water bill and thus cannot access benefits from water affordability assistance programs.⁵⁵ In the water sector, master-metering has effectively meant that no affordability benefit has been delivered to eligible households. ⁵⁶

Figure 8: Low-Income Households That Do Not Receive a Water Bill



⁵⁴ Varying estimates derived from 2015 Census, American Community Survey data for California, the Water Research Foundation's national 2017 report *Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers* and from the 2015 American Housing Survey to refine our assumptions of the number of master-metered accounts and the number of households each account serves.

⁵⁵ This estimate was made using data on the percentage of low-income (below 200% of FPL) tenants in different housing types who were master-metered and sub-metered from the 2015 American Housing Survey, which was then mapped onto the number of low-income households across the state derived from the from the 2010-2014 American Community Survey.

⁵⁶ While some drinking water systems maintain in their official documents that they allow income eligible master-metered households to apply for drinking water affordability programs in conjunction with their landlords, we have yet to identify a system which actually delivered a benefit to a non-metered customer.

Master-metering is particularly problematic for water affordability programs because eligible low-income households are much more likely to live in multi-unit dwellings. Each of the options discussed above and in Appendix M would allow low-income households to receive a benefit regardless of whether they pay a water bill directly or indirectly.

Conclusion

Drinking water costs have been rising much more quickly than inflation and the multitude of upward cost drivers are likely to intensify, leading to even greater water rate increases across the state. These rate increases will reduce affordability for low-income households already struggling with rising expenses for housing, food, other utilities, and other basic needs. This report offers a set of options for rate assistance programs with statewide coverage and meaningful benefit levels. These options have a significant cost, but these are costs that California can afford given our existing financial assistance to low-income households for other basic needs. The Board urges stakeholders to provide constructive feedback on this report so that the Legislature can act on water affordability.