

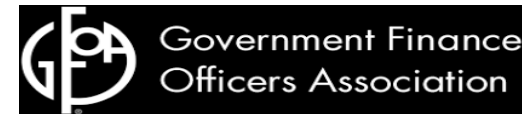


Smart Management for
Small Water Systems

Financial Management for Small Water Systems: How to Plan for the Next Five Years and Secure Funding

June 5, 2018 | Baton Rouge, Louisiana

www.efcnetwork.org



This program is made possible under a cooperative agreement with the U.S. EPA.



Current Debates Around Customer Assistance Programs (CAPs)

- What metrics should be used:
 - To convey general concern
 - For regulatory relief
 - To qualify for funding assistance as a community
 - For assisting individual customers
- How should customer level assistance be funded and administered?
 - What legal framework changes are needed
 - How do you reach “hard to reach”



Designing *CAPs* to address affordability concerns

CAPS = Customer Assistance Programs



Some Elements of Designing a CAP

- Deciding **who** gets assistance
- Deciding what **types** of assistance to provide
- Planning for program outreach and monitoring
- Determining how much the CAP will cost
- **Devising a plan to fund the CAP**



Who Gets Assistance? - Common Practices in Eligibility Verification

- Partnering with another organization that focuses on low-income
- Proof of eligibility in related programs, such as:
 - LIHEAP (Low Income Home Energy Assistance Program)
 - AFDC (Aid to Families with Dependent Children)
 - SSI (Supplemental Social Security Income)
 - Medicaid
 - SNAP (Supplemental Nutrition Assistance Program)
 - Local property tax assistance; and
 - Other utilities (electric, natural gas, telephone, offer discount programs based on income)



Everyone Gets Assistance? - Concept of Lifeline Rates

- *“Providing a minimal amount of water, at a reduced cost to all customers, regardless of income level or ability to pay”*
 - Source: AWWA Manual M1
- Often some consumption is included in the base charge

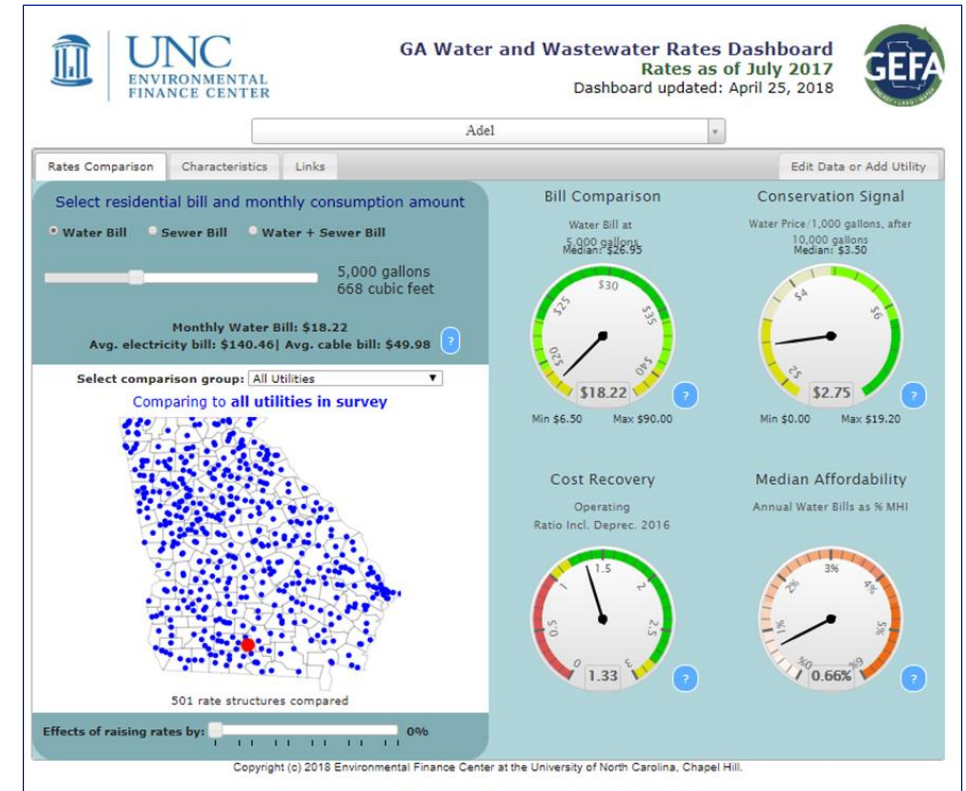


Business Case for Creating Affordability Programs or “Customer Assistance Programs” (CAPs)

- When customers have trouble paying utility bills, costs to the utility include:
 - increased arrearages
 - late payments
 - disconnection notices, and
 - service terminations
- Buyers of utility bonds also get nervous

Downsides of “percent MHI”...

- Most used and most critiqued metric
- Historic focus on what the “median” person pays for water as a percent of income
- Metric has been used beyond what it was meant to be used for....





Looking Beyond Median Household Income (MHI) ... A Tale of 3 Communities

Community 1

MHI: \$34,582

Unemployment Rate	8.4%
Not in labor force	35.5%
With Social Security	24.4%
With SSI	14.9%
With Cash Assistance	7.0%
With SNAP Benefits	42.0%
Percentage below poverty line	28.4%

Community 2

MHI: \$29,483

Unemployment Rate	10.8%
Not in labor force	42.9%
With Social Security	20.4%
With SSI	16.5%
With Cash Assistance	15.6%
With SNAP Benefits	22.9%
Percentage below poverty line	35.9%

Community 3

MHI: \$29,679

Unemployment Rate	4.2%
Not in labor force	59.9%
With Social Security	52.5%
With SSI	11.7%
With Cash Assistance	5.5%
With SNAP Benefits	20.8%
Percentage below poverty line	26.1%

Water and Wastewater Residential Rates Affordability Assessment Tool

On the EFC Website
Go to
<http://efc.sog.unc.edu>
and search for
“Affordability Assessment
Tool”

Free, simplified Excel tool allowing
you to examine several metrics to
assess how affordable your rates
are in your community



Example: Affordability in Birmingham, AL

The table below shows key socioeconomic indicators for *Birmingham*, with the state and national averages available for comparison. Values in red indicate that the indicator is “most stressed,” as compared to both the state and national average.

	Birmingham, AL in 2016	Alabama in 2016	United States in 2016
Median Household Income	\$46,346	\$44,758	\$55,322
% Unemployment	7.0%	4.8%	4.7%
% Not in the labor force	40.2%	42.1%	36.5%
% of all people with income below poverty	29.4%	18.4%	15.1%
% with Social Security income	31.6%	35.0%	30.2%
% with Supplemental Security income	10.3%	6.7%	5.4%
% with cash public assistance income	2.7%	1.8%	2.7%
% with Food Stamp/SNAP benefits	25.2%	15.6%	13.0%

To access the tool that generated this chart and table see: <http://www.efc.sog.unc.edu/reslib/item/water-wastewater-residential-rates-affordability-assessment-tool>

Affordability of Water & Wastewater Rates Assessed at 3000 Gallons/Month and the 2016 Income Levels

Example: Birmingham Water Works

Under CURRENT Rates

■ % Annually Spent on Bills

■ % of Population

40%

30%

20%

10%

0%

25.8% of homeowners are estimated to have incomes below \$25,000.

9.04%

6.03%

3.62%

2.58%

1.81%

1.21%

0.90%

0.60%

0.45%

Less than \$10k

\$10k - \$14.9k

\$15k - \$24.9k

\$25k - \$34.9k

\$35k - \$49.9k

\$50k - \$74.9k

\$75k - \$99.9k

\$100k - \$149.9k

At least \$150k

☒ Current rates

☐ Alternative rates

☐ All households

☒ Homeowners only

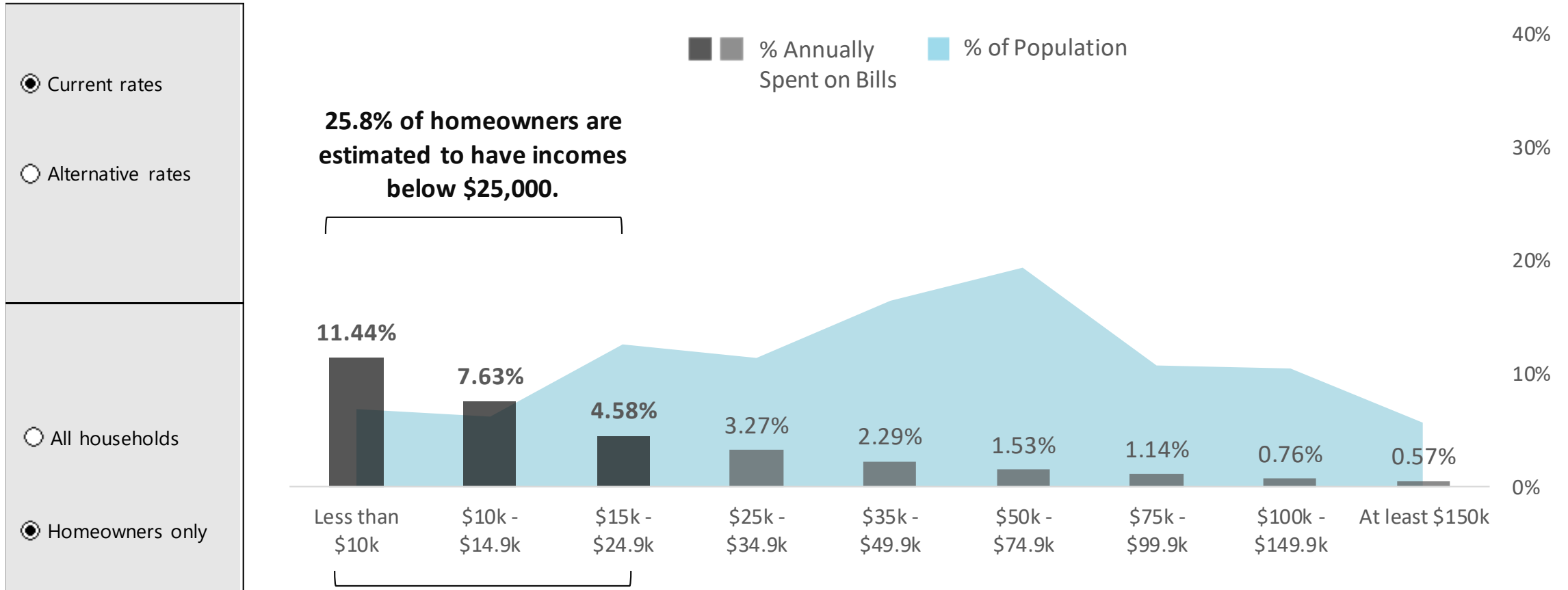
Excluding households living in rental homes or apartments, which may or may not have water & wastewater services included in their rent, 25.8% of homeowners (assumed to be paying the utility directly) are estimated to have had less than \$25,000 in annual income. These homeowners will have spent more than 3.62% of their income under the current rates for water & wastewater bills at 3000 gallons/month. 6.9% of homeowners will have spent more than 9.04% of their income.



Affordability of Water & Wastewater Rates Assessed at 5000 Gallons/Month and the 2016 Income Levels

Example: Birmingham Water Works

Under CURRENT Rates



Excluding households living in rental homes or apartments, which may or may not have water & wastewater services included in their rent, 25.8% of homeowners (assumed to be paying the utility directly) are estimated to have had less than \$25,000 in annual income. These homeowners will have spent more than 4.58% of their income under the current rates for water & wastewater bills at 5000 gallons/month. 6.9% of homeowners will have spent more than 11.44% of their income.



How to Fund an Affordability Program

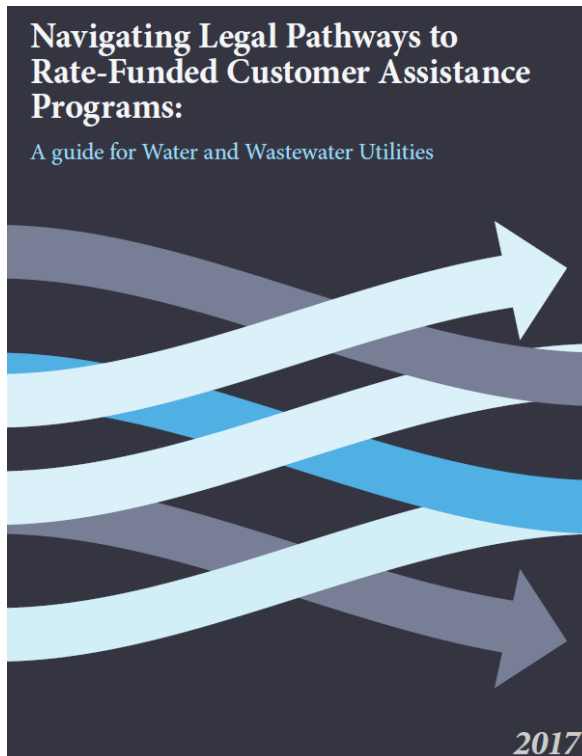
- What if Your Community Does Not Like the Results Above?
- How can you fund a new (or enhanced) Customer Affordability Program?



Funding Sources for Affordability Programs

- Revenue generated directly from customer rates (not an option in some states) <https://efc.sog.unc.edu/project/navigating-legal-pathways-rate-funded-customer-assistance-programs>
- Voluntary contributions (e.g. bill round-up)
- Rental income from cell phone and internet providers that rent use of the water utility's towers/tanks
- Service line protection programs

Navigating Legal Pathways to Rate-Funded Customer Assistance Programs



Alabama

Commission-regulated utilities
Noncommission-regulated utilities



Water and wastewater utilities in Alabama fall under several rate setting regulatory systems.

Commission-Regulated Utilities

The Alabama Public Service Commission (APSC) regulates private water and wastewater companies in Alabama.²¹ Under Ala. Code § 37-1-34, the APSC does not have the authority to regulate government-owned utilities. Furthermore, per Ala. Code § 37-4-2.1, utilities serving less than 1,000 customers and purchasing water from a noncommission-regulated utility²² can choose to be exempt from APSC regulation and instead fall under that utility's municipal authority.

Ala. Code § 37-1-81 states that commission-regulated utilities need to file rate schedules with the APSC before changing rates. In addition, Ala. Code § 37-1-80 states that commission-regulated utilities must charge "reasonable and just" rates. Alabama follows the "rate base theory" when determining what is just and reasonable, with the rate base (to determine the fair rate of return) being "the valuation placed on the utility property."²³ Ala. Code § 37-1-124 considers rates set by the APSC to be *prima facie* just and reasonable.²⁴ Furthermore, when the APSC finds rates to be unjust and unreasonable, Ala. Code § 37-1-97 gives it the power to adjust them to be just and reasonable.

Thus, commission-regulated utilities would likely need specific approval, in the form of an APSC order, to charge rates to be used to fund a low-income customer assistance program (CAP).

Noncommission-Regulated Utilities

Municipalities, including cities and towns, have the right to operate and maintain rates for water utilities.²⁵ They are not subject to APSC regulation and thus can set their own water and wastewater rates.²⁶ For wastewater rates, under Ala. Code § 11-50-121, "all such charges shall be uniform for the same type, class, and amount of use or service by or from the sewer system." This code also lists factors that can be used to set rates, but does not mention socio-economic factors.²⁷

State Population (2016): 4,863,300
Median Annual Household Income (2015): \$43,623
Poverty Rate (2015): 18.8%
Typical Annual Household Water and Wastewater Expenditures (2016): \$775

Alabama has 516 community water systems (CWS), of which 17 are privately-owned and 406 serve populations of 10,000 or fewer people. Alabama has 291 publicly owned treatment works facilities (POTWs), of which 204 treat 1 MGD or less. 58,937 people are served by privately-owned CWS; 5,548,854 are served by government-owned CWS; and 2,420,993 are served by POTWs.

Estimated Long-Term Water and Wastewater Infrastructure Needs: \$11.0 billion

Sources: U.S. Census Bureau 2016 Population Estimate & 2011-2015 American Community Survey 5-Year Estimates, 2016 EPC Rate Survey, U.S. Environmental Protection Agency's 2016 Safe Drinking Water Information System, 2011 Drinking Water Infrastructure Needs Survey & 2012 Clean Watersheds Needs Survey. See Appendix 1 for more details.

Based on the limits laid out above, noncommission-regulated water utilities appear to have very broad rate-setting authority that could be used to implement low-income CAPs funded by rate revenues. On the other hand, because of the aforementioned specific statutory limitation, wastewater utilities might face legal challenges if using rate revenues to fund low-income CAPs, but such programs would face fewer obstacles than programs using income-indexed rates or discounts.

<https://efc.sog.unc.edu/pathways-to-rate-funded-customer-assistance>



Funders/Steering Committee



Research Team



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Can a Utility Use its Primary Revenue Source (Rate Revenue) to Fund a Customer Assistance Program?

- 52 state/territory legal snapshots
- Nine case studies of well-funded customer assistance programs
- Analysis of other sector approaches
- Analysis of international approaches



Low-Income Rate Assistance (LIRA)

LIRA offers a service-charge discount to qualifying low-income customers.









Can the Utility Use its Primary Revenue Source to Fund a CAP?

- Silence, ambiguous or restrictive language leave many utilities unsure if they can use their rate revenues
- **Without the use of rate revenues, most of the CAPs across the country are small and can't address the total customer need**





Podcast: <http://thewatervalues.com/2017/10/17/customer-assistance-programs-expanding-importance-stacey-isaac-berahzer/>

Categorizing States by Level of Authorization for Affordability Programs Using Rate Revenue

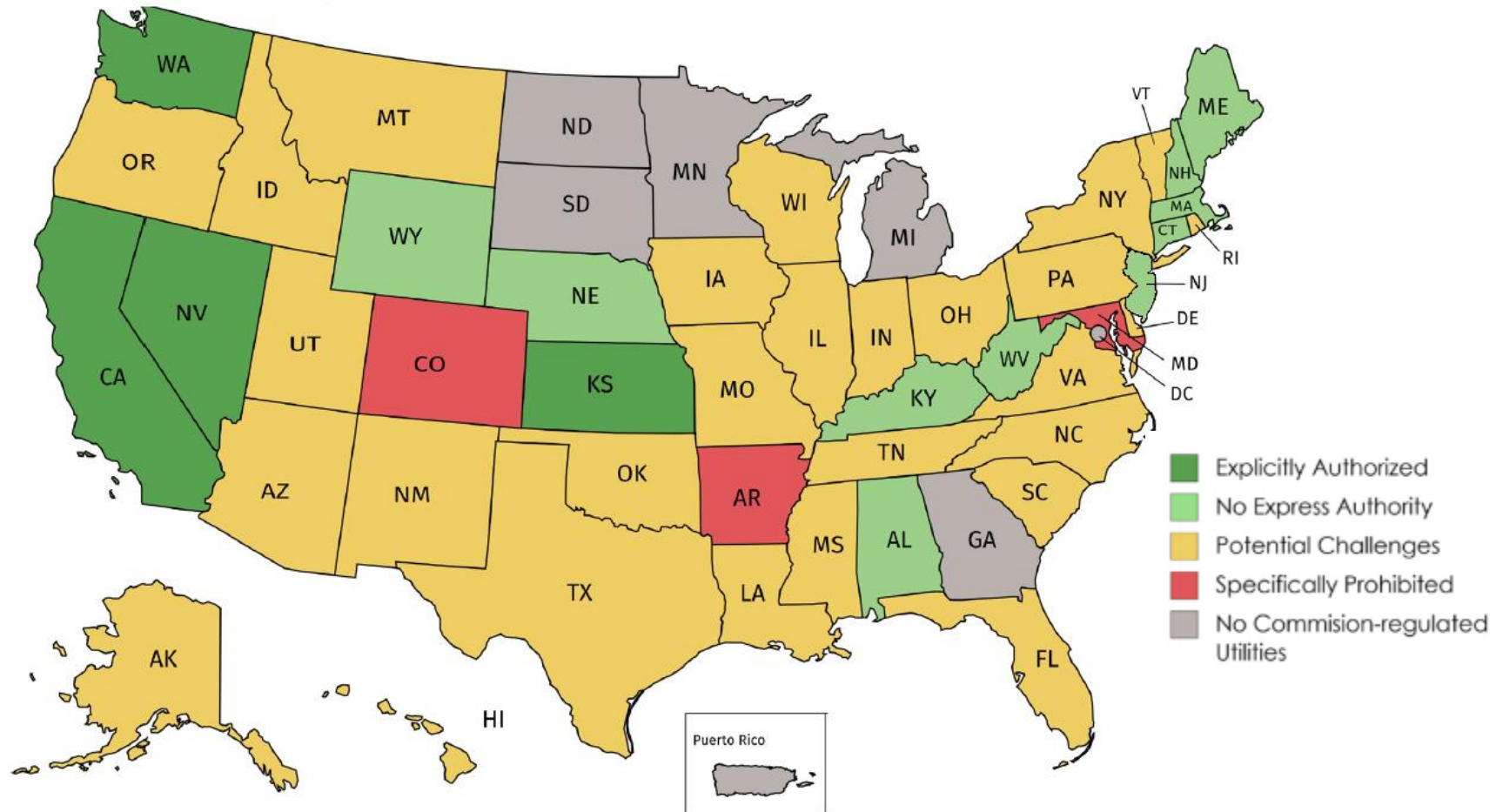
	
	Explicitly Authorized
	No Express Authority
	Potential for Challenges
	Specifically Prohibited



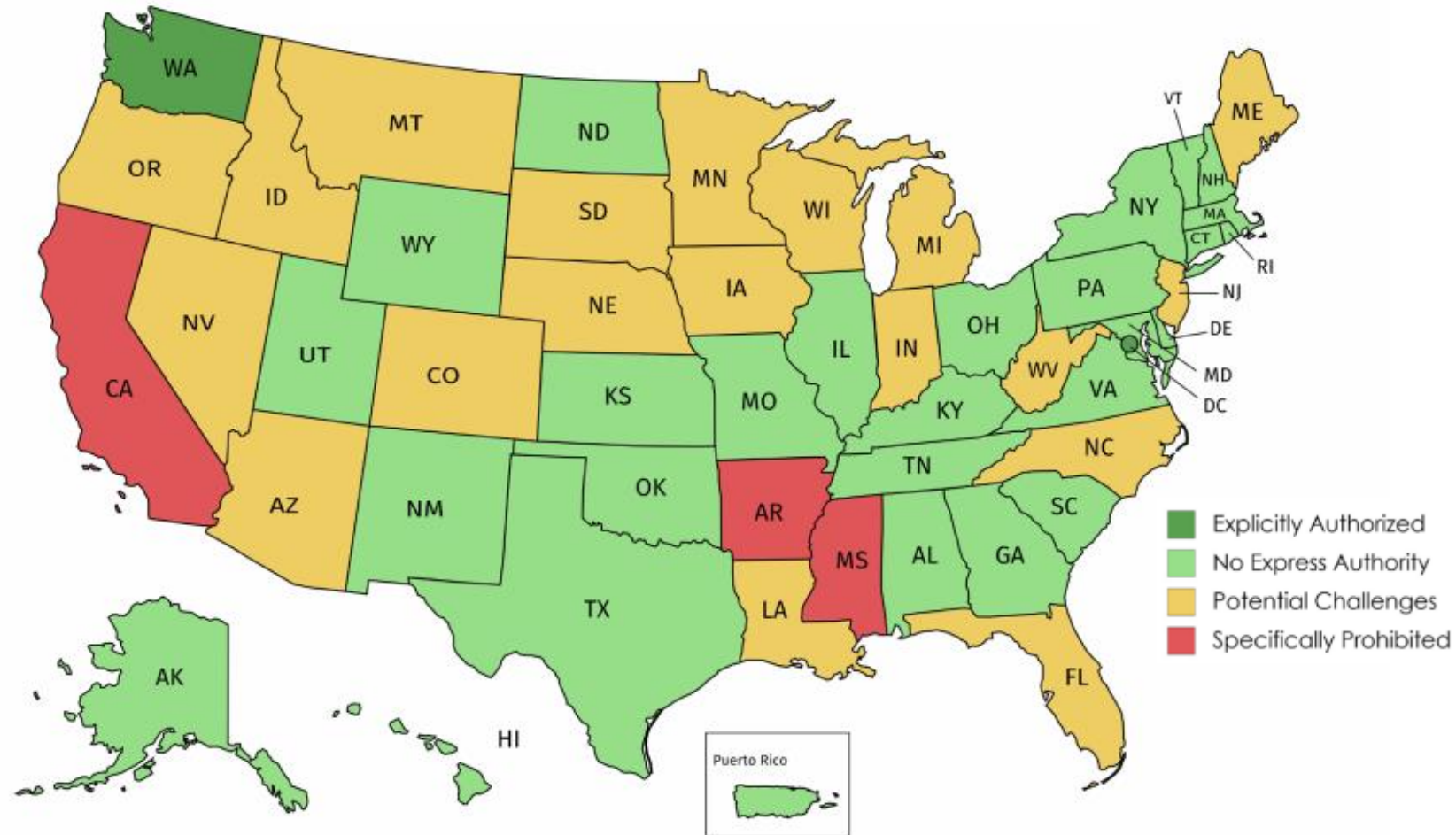
Authorization to Create Affordability Programs Using Rate Revenues

		Commission Regulated Utilities	Non Commission Regulated Utilities
	Explicitly Authorized	4	2
	No expressed authority, but nothing in the statutes or case law seems to limit an entity from implementing a program	9	28
	Something in the statutes or case law, such as ambiguous language, limiting terminology, cost of service requirements, etc., suggests the potential for challenges	28	19
	Specifically prohibited	4	3

Commission Regulated Utilities: Ability to Implement CAPS Funded by Ratepayer Revenues by State



Non Commission Regulated Utilities: Ability to Implement CAPS Funded by Ratepayer Revenues by State





When State Law is Ambiguous: Options for Implementing CAPs Successfully

- **Option 1.** At the state level, introduce statutory language that addresses affordability programs in clear, unambiguous terms
- **Option 2.** Develop an argument for why a CAP conforms to existing statutes and is not affected by perceived limitations
- **Option 3.** Develop an alternative program that does not rely on direct customer rate revenue to fund the assistance to low-income individuals



Example: Washington State

[Wash. Rev. Code § 80.28.068](#)

- Utilities can request approval from the Commission to provide reduced rates to “**low-income senior customers and low-income customers.**” Under the same provision, “**expenses and lost revenues as a result of these discounts shall be included in the company’s cost of service and recovered in rates to other customers.**”



Example: Indiana (2017 Amendment)

SECTION 9. IC 8-1-2-46

- (c) Upon request by a water or wastewater utility in a general rate case, **the commission may allow, but may not require, a water or wastewater utility to establish a customer assistance program that:**
 - (1) uses state or federal infrastructure funds; or (2) provides financial relief to residential customers who qualify for income related assistance.
- **A customer assistance program established under this subsection that affects rates and charges for service is not discriminatory for purposes of this chapter or any other law regulating rates and charges for service.** In considering whether to approve a water or wastewater utility's proposed customer assistance program, the commission shall determine that a customer assistance program established under this subsection furthers the interests set forth in section 0.5 of this chapter and is in the public interest.

The Final Hurdle: Hard to Reach (H2R)

- Many households do not have relationship with their service provider
- Multi-family tenants
- Providing them direct assistance requires different strategies

Table 1.1
H2R households by household type

Household type	Households (Millions)	Pay bill directly to utility ^{1,2}	Pay bill through rent or fee (%)	Do not pay for water (self- supply)
Single-family homes (attached and detached)	80.4	81%	4%	14%
Multi-family, 2-unit building	4.3	42%	41%	18%
Multi-family, 3–9 units	10.7	28%	57%	16%
Multi-family, 10–19 units	5.1	30%	57%	13%
Multi-family, 20 or more units	9.9	19%	62%	19%
Mobile home or trailer	6.7	55%	17%	29%
Total households (Millions)	117.1	77.0	21.6	18.6

Source: Data from PUMS 2014



What are the Available Options for H2R Customers?

- Work **DIRECTLY** with the H2R and their landlords
 - Discounts to landlords
 - Vouchers
 - Discounts through energy utility
 - Discounts for affordable housing
 - Conservation
 - Target housing units rather than households
 - **Shrink the H2R population**
 - Sub-metering
 - Make single-family renters establish an account
- Provide **INDIRECT** assistance
 - Raise awareness/support existing assistance programs
 - Partner with community organizations to support low-income households



Other EFC Resources on Affordability

- Blog:
 - <http://efc.web.unc.edu/tag/water-affordability/>
 - 9 posts, and counting, on this topic
- Compilation of Affordability Resources:
<http://www.efc.sog.unc.edu/water-affordability-tools>, examples:
 - Tool - Water Utility Customer Assistance Program Cost Estimation Tool
 - Water Research Foundation report - [**Defining a Resilient Business Model for Water Utilities**](#) – Chapter 4
- Rates dashboards – affordability dial