

Strategies for Addressing Affordability

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<http://efc.sog.unc.edu>

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Topics

1. Framing affordability
 2. New and emerging
 3. What's a State to do?
 4. Open discussion
- Pull out your cell phones
 - Text UNCEFC to 22333
 - Response will be that you “You’ve joined Jeff Hughes’s session.....

Framing the Discussion

- System/Community Financial Capability (CSO)
 - Is a system financially capable of meeting regulatory requirements?
- System/Community Affordability (Funding)
 - If additional subsidies and public funds are limited, which systems should get assistance?
- Customer/Household Affordability (Local)
 - If households have trouble paying their bill, which households should get assistance?

Is there a problem?

Table 1. Most expensive and least expensive drinking water systems in LA County

System Name (Population served)	Annualized Cost for 18 CCF
Five Most Expensive Systems	
1. CA Water Service Co.- Lake Hughes (711)	\$2,244
2. CA Water Service Co.- Leona Valley (1296)	\$1,834
3. LA County Waterworks Dist. #21- Kagel Canyon (991)	\$1,658
4. Park Water Company- Bellflower/Norwalk (67,200)	\$1,539
5. Park Water Company- Lynnwood/Compton (45,400)	\$1,502
Five Least Expensive Systems	
1. Maywood Mutual Water Co. #1 (5,500)	\$145
2. Pico Rivera Municipal Water (39,000)	\$192
3. Lomita Municipal Water (20,256)	\$235
4. City of Industry Waterworks System (7,000)	\$278
5. LA County Waterworks Dist. #40- Antelope Valley (9,822)	\$282

Slide/Graphic Source: Greg Pierce, UCLA Luskin Center for Innovation.
Presented at Water and Health Conference October 19th, 2017

General Types of Affordability Strategies

- Reduce cost of projects for a system (grants, loans, project delivery mechanisms)
- Reduce costs of providing service to all customers (asset management, consolidation etc.)
- Reduce amount of water that is used
- Reduce bill payment for subset of customers (Customer Assistance Programs)

What scares me the most (e.g. zombies, clowns, EPA audits)?



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“North Korea”

2 days ago

“Uncertainty”

2 days ago

“Clowns”

2 days ago

“Retirement”

2 days ago

“Eagles choking”

2 days ago

“Clowns”

2 days ago

“Future prospects of Kids”

2 days ago

“Bad candy”

2 days ago

“Being promoted.”

2 days ago

“War”

2 days ago

“Spiders”

2 days ago

“Donald Trump”

2 days ago

“Zombies”

2 days ago

“Tar Heels in March”

2 days ago

“New fiscal year”

2 days ago

“Being fired.”

2 days ago

“Stupid people”

2 days ago

“Auditors”

2 days ago


“living a life with out meaning”

2 days ago

“Loan defaults”

2 days ago

What scares me more?

 Respond at **PollEv.com/uncefc**  Text **UNCEFC** to **22333** once to join, then **A or B**

Not being paid back by a borrower due to community financial distress

A

32%

A major news story that highlights the legitimate financial distress of households due to increased rates linked to a SRF loan

B

68%

0% 10% 20% 30% 40% 50% 60%

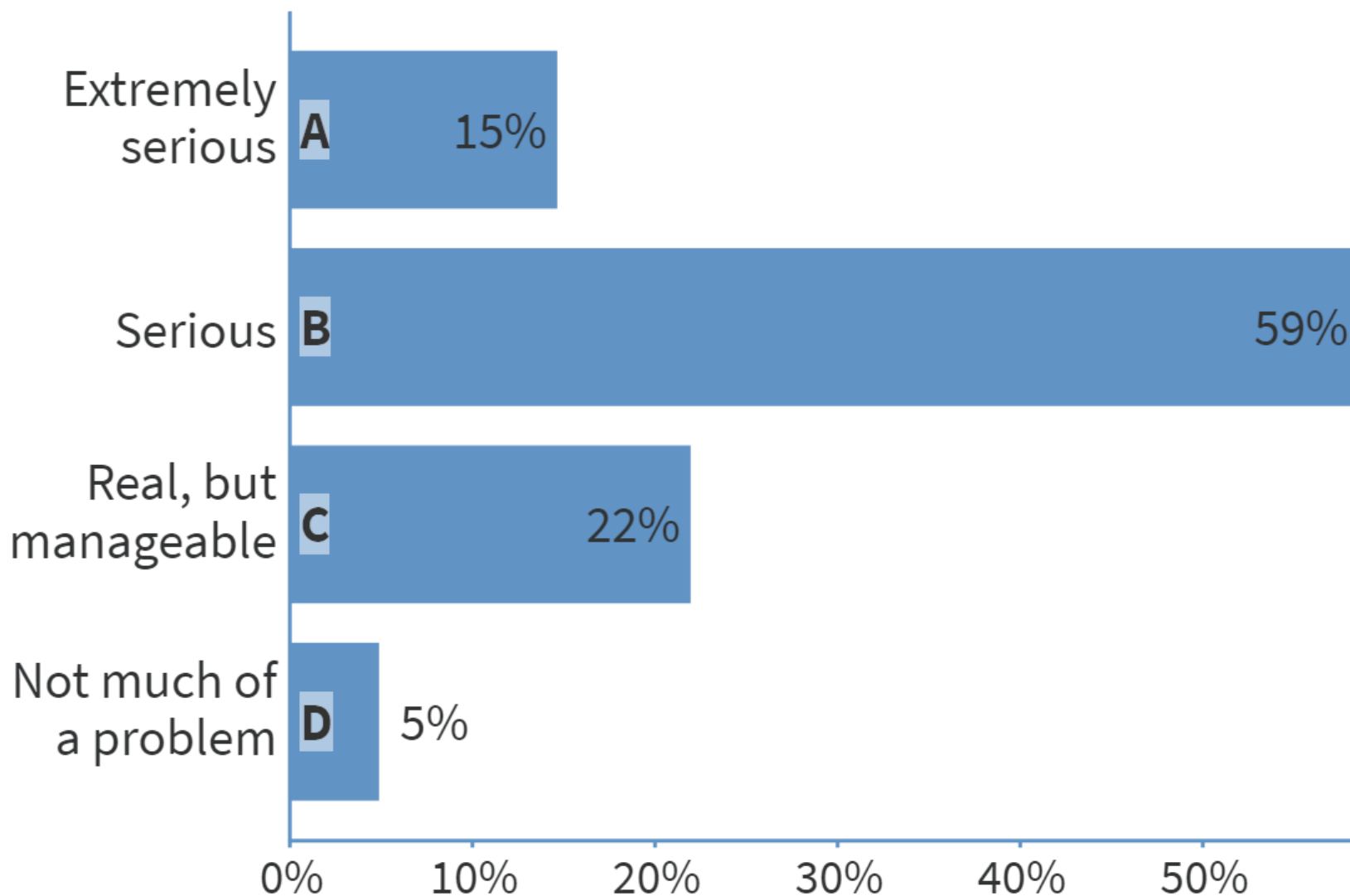
Affordability issues among SRF borrowers in our state are?



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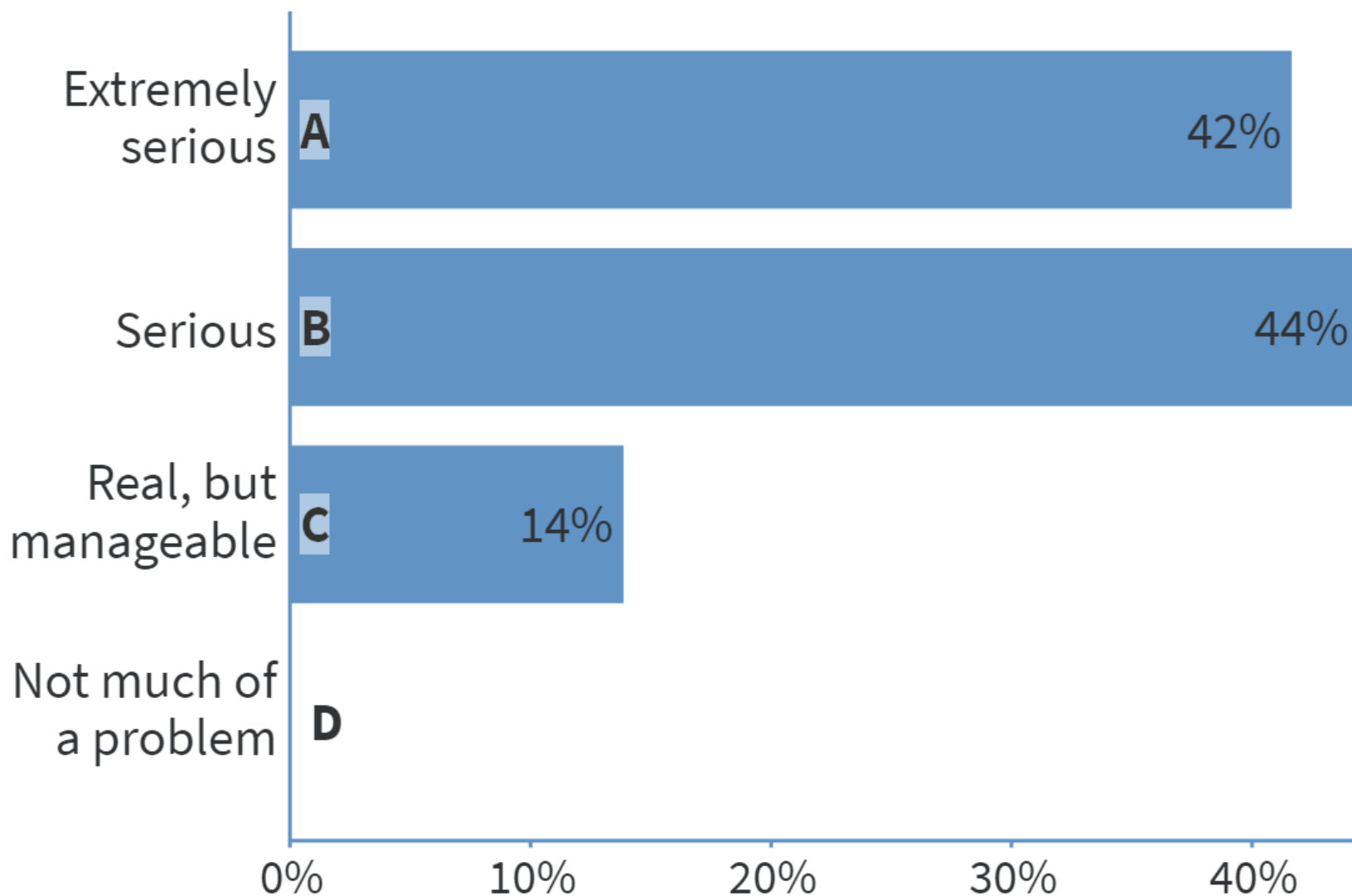
Affordability issues among SRF borrowers in 5 to 10 years will be?



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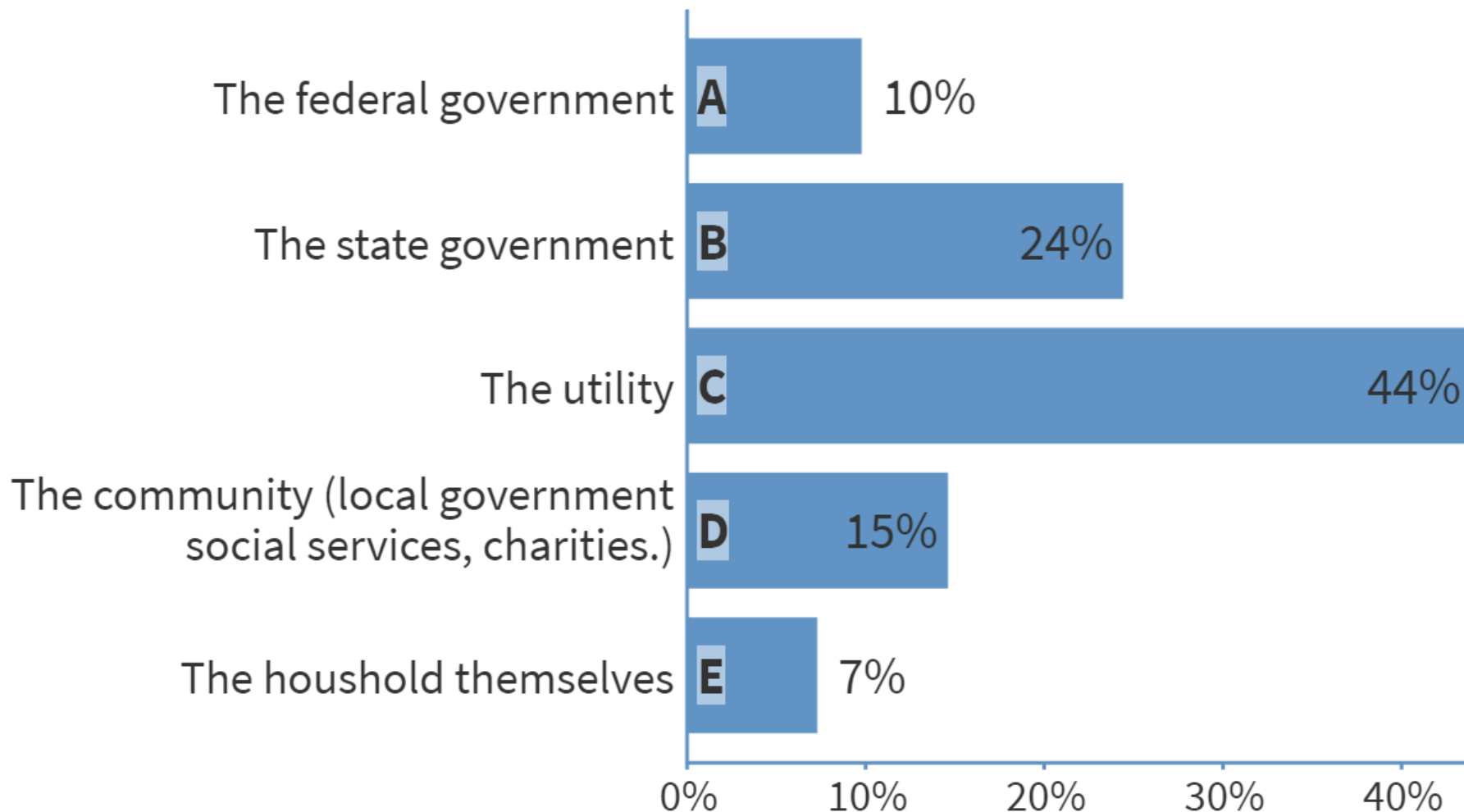
My personal view is household affordability should be addressed primarily by



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New and Emerging

- National Academy of Public Administration
Affordability EPA Study
- Navigating legal obstacles to rate funded
customer assistance programs (National)
- Report on Reaching hard to reach populations
(National)
- Rates based on income not volume
(Philadelphia)
- Delaware's customer assistance program
- California's initiatives
- Reports, articles galore.....



Work-in-Progress

Environmental Protection Agency

**A Study to Create a Definition and Framework for Community Affordability
Focused on Wastewater and Stormwater Programs**

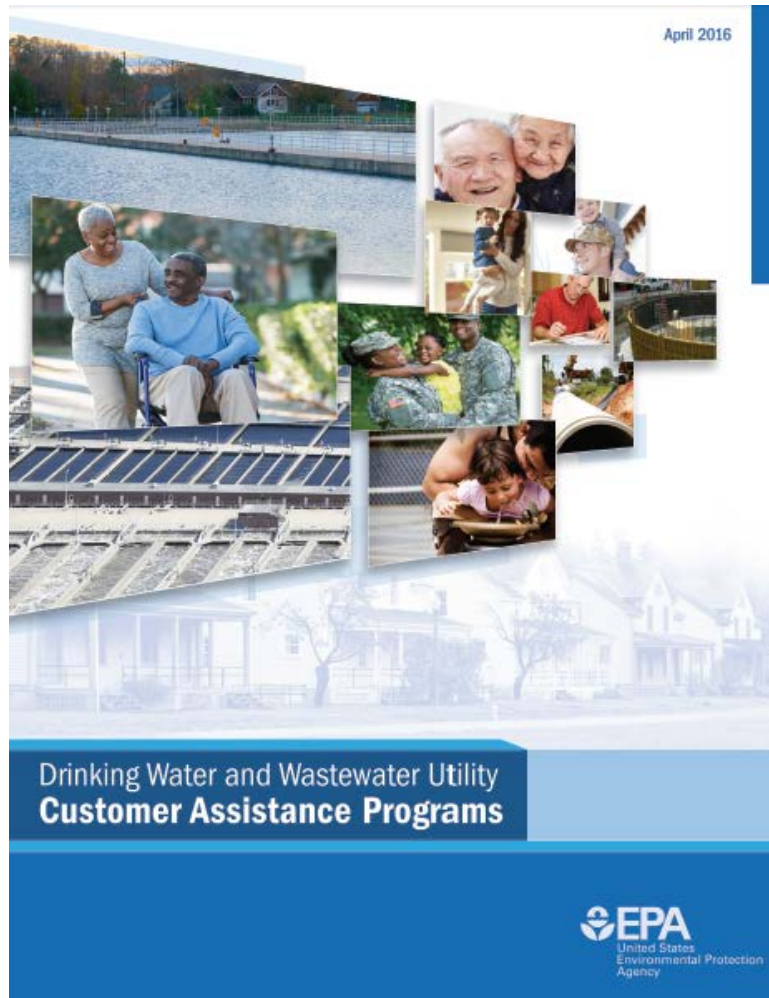
ABOUT THE NATIONAL ACADEMY

The National Academy of Public Administration is a non-profit, independent organization of top public management and organizational leaders who tackle the nation's most

BACKGROUND

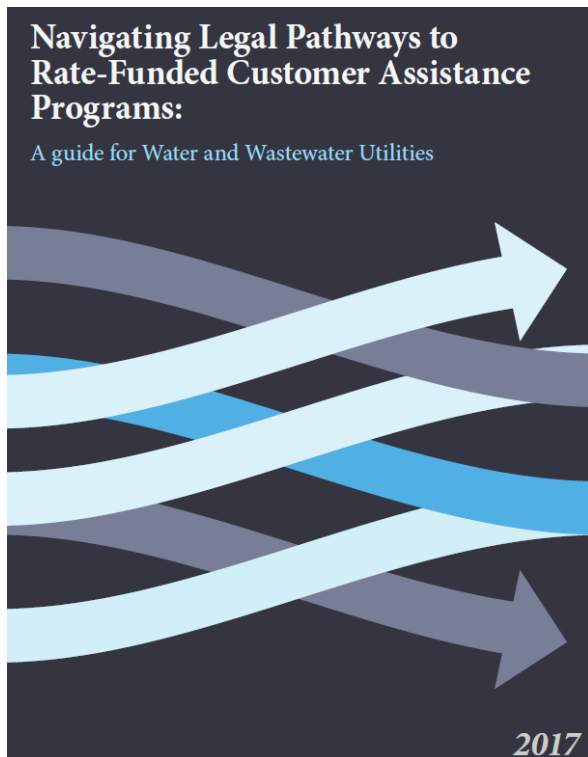
Congress has had a continued interest in community affordability, particularly for wastewater and stormwater programs, and has conducted several hearings on this issue. The 2016 Consolidated Appropriations Act, Public Law 114-113, directs the Environmental Protection Agency (EPA) to contract with the Academy "to conduct an independent study to create a definition and framework for community affordability."

DW/WW Utility Customer Assistance Programs



Compendium available at:
<http://ow.ly/4nvSyO>

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

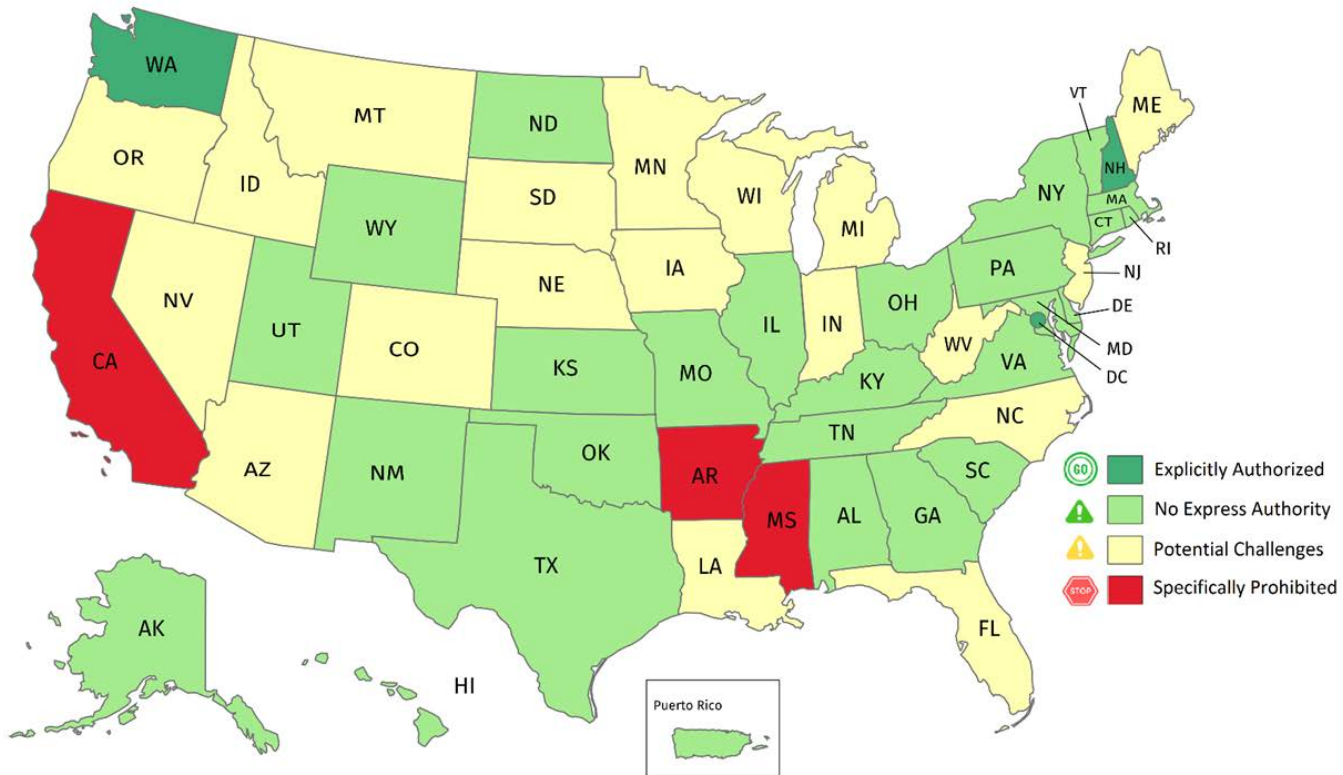
Sources: U.S. Census Bureau 2016 Population Estimate & 2011-2015 American Community Survey 5-Year Estimates, 2016 EPC Rate Survey, U.S. Environmental Protection Agency's 2016 Safe Drinking Water Information System, 2011 Drinking Water Infrastructure Needs Survey & 2012 Clean Watersheds Needs Survey.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



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



Many systems have high eligibility and can't implement a CAP

County	Water System Name	% of Households Below 200 % Federal Poverty Line
TULARE	DUTLER PUD	87%
FRESNO	MENDOTA, CITY OF	83%
TULARE	EARL MART PUD	81%
SUTTER	CITY OF YUBA CITY	81%
FRESNO	SAN JOAQUIN, CITY OF	81%
TULARE	FOXLEY PUBLIC UTIL DIST	81%
SAN BERNARDINO	CITY OF ADELANTO	80%
KERN	CITY OF MCFARLAND	77%
KERN	ARVIN COMMUNITY SERVICES DIST	78%
TULARE	TERRA BELLA IRRIGATION DISTRICT	76%
SANTA BARBARA	GUADALUPE WATER DEPARTMENT	75%

- In 22% of systems, which represents 10% of state's population, more than half of households would be eligible

Slide/Graphic Source: Greg Pierce, UCLA Luskin Center for Innovation.
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The Final Hurdle: Hard to Reach

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

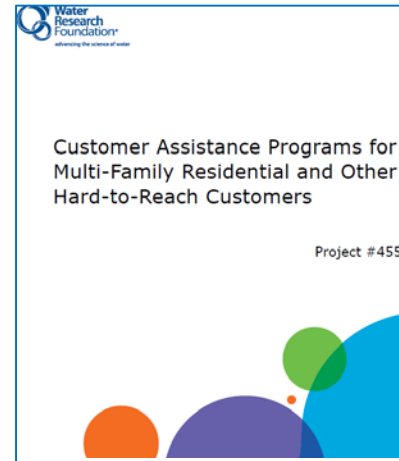


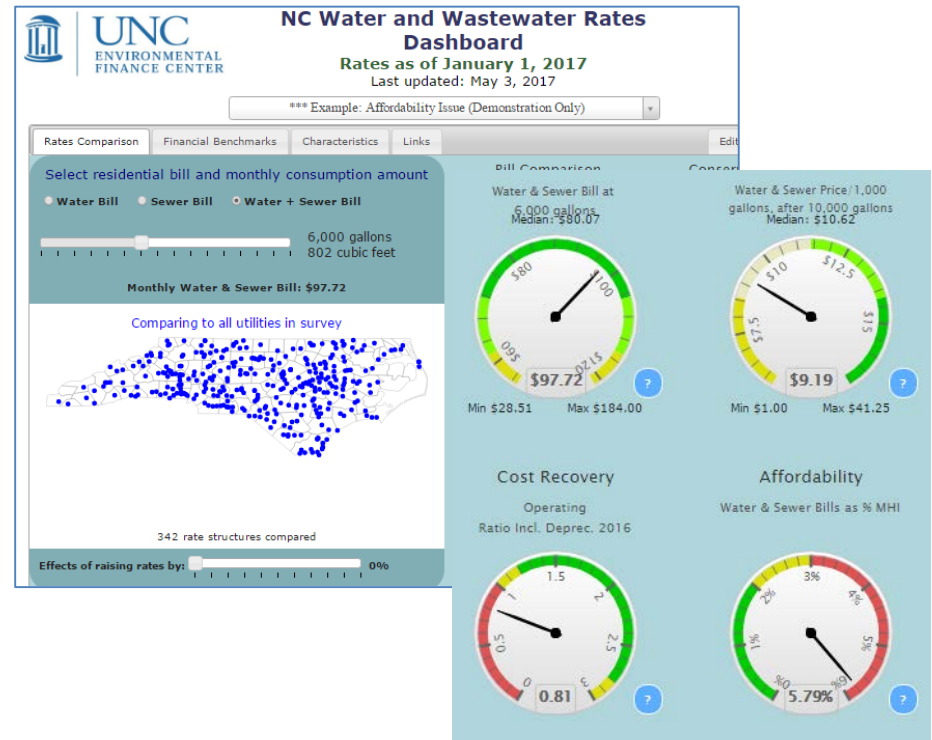
Table 1.1
H2R households by household type

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

Moving beyond “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....



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



State and Federal Initiatives

- National customer assistance program ??
- California statewide program



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State Examples

- Indiana
- Delaware
- California

NoPollute12!



Indiana Finance Authority

State Revolving Fund Loan Program



CIFA

Strategies for Addressing Affordability

October 30, 2017

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Indiana Finance Authority State Revolving Fund Loan Program



Strategies for Addressing Affordability

1. Interest Rates
 - a. Low Interest Rates
 - b. Incentives:
 - i. Lead Line Replacement
 - ii. Green Project Reserve
 - iii. Nonpoint Source
2. Additional Subsidy
3. Restructure Loans
4. ETF

Indiana Finance Authority

State Revolving Fund Loan Program

Low Interest Rates

SRF Rates October 1, 2017 to December 31, 2017

Wastewater SRF Interest Rates	User Rates (Over \$50)	User Rates (\$30 to \$50)	User Rates (Under \$30)
Tier III (MHI: under \$39,404)	2.00%	2.00%	2.00%
Tier II (MHI: \$39,405 to \$49,254)	2.00%	2.00%	2.06%
Tier I (MHI over \$49,255)	2.00%	2.00%	2.31%

Drinking Water SRF Interest Rates	User Rates (Over \$45)	User Rates (\$25 to \$45)	User Rates (Under \$25)
Tier III (MHI: under \$39,404)	2.00%	2.00%	2.00%
Tier II (MHI: \$39,405 to \$49,254)	2.00%	2.00%	2.06%
Tier I (MHI over \$49,255)	2.00%	2.00%	2.31%



Indiana Finance Authority

State Revolving Fund Loan Program



Illustration of SRF Cost Savings

Lead Line Replacement Incentive

Utility ABC's Financing Cost

	Original Loan	Loan Structured with Lead Line Rate Reduction Debt Service
New SRF Loan	\$10,000,000	\$ 12,500,000
Interest Rate	2.25%	0.00%
Debt Service	\$12,500,000	\$12,500,000
Amount available for lead line project		\$ 2,500,000

- Interest rate savings will allow Utility to apply \$2,500,000 towards costs associated with lead line replacement project at no additional costs to rate payers.
- Similar methodology is applied to GPR projects.

Indiana Finance Authority

State Revolving Fund Loan Program

Additional Subsidization Policy

CW Affordability Criteria	DW Disadvantaged Community
<p>Median Household Income (MHI) – applicants with a lower MHI may receive additional subsidization in advance of applicants with a high MHI</p> <p>User rates – applicants that have high post-project user rates may receive additional subsidization in advance of applicants with lower-post project user rates</p> <p>Unemployment data – unemployment data will be considered</p> <p>Population trends – population trends will be considered</p> <p>Other factors/data deemed relevant by the CWSRF Loan Program may be considered, including but not limited to, projects that have a regional solution.</p>	<ul style="list-style-type: none"> • A project area with an MHI below \$38,990 (80% of the State MHI), as established by 2010-2014 American Community Five Year Survey; • An estimated post project user rate greater than \$45.00 per month; • An average annual residential post project user rate that would exceed 1 percent of the community's Median Household Income (MHI).

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State Revolving Fund Loan Program

Interest Rate for Extended Term Financing

An SRF project with an extended loan term will experience a slightly higher interest rate as shown:

<u>Loan Term</u>	<u>Interest Rate Increase</u>
21-25	+0.1%
26-30	+0.2%
30-35	+0.3%

Indiana Finance Authority State Revolving Fund Loan Program

Questions?

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Director

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Delaware Water Pollution Control Revolving Fund Safe Drinking Water State Revolving Fund

Additional Subsidization Assistance Program for Low-Income Subgroups

Terry L. Deputy, CEcD
Chief of Administration, Environmental Finance
DNREC, Office of the Secretary

Additional Subsidization Program for Low-Income Subgroups

- **Affordability Criteria** – Delaware has established affordability criteria to assist in identifying municipalities that may experience a significant hardship raising the revenue necessary to finance wastewater projects.

Income – 1.5% of Median Household Income (MHI) is considered affordable for wastewater and drinking water residential user rates separately; 2.0% of MHI is considered affordable for combined wastewater and drinking water residential user rates

Unemployment Data – Non payment of residential wastewater and drinking water utility bills are normally directly associated with insufficient income and unemployment

- Residential utility bill delinquency rates are used as a proxy measure for unemployment
- 5% residential utility delinquency rate is assumed for both wastewater and drinking water when evaluating CWSRF loan applications for assistance
- Loan applicants are required to provide additional documentation to support a residential delinquency rate above 5%

Population Trends – Loan applicants can be negatively impacted by decreasing Equivalent Dwelling Units (EDUs; 1 household = 1 EDU) served in relation a proposed project. Applicants are required to provide documentation to receive a systems revenue credit that cannot exceed the difference in the number of EDUs served over the past 5 years

NEW – Additional Subsidization for Low-Income Subgroups

- Additional financial assistance is available for low-income subgroups within new wastewater and drinking water project areas financed by the CWSRF and DWSRF programs.
- Municipalities that have existing CWSRF and DWSRF loans that were closed after August 19, 2015 are eligible to apply for additional assistance. A grant application must be submitted to DNREC for review and consideration by the Water Infrastructure Advisory Council (WIAC).
- Approved municipal grantees must agree to administer the Additional Financial Assistance Program (Assistance Program) for low-income residential wastewater and/or drinking water users within identified project areas.

PROGRAM REQUIREMENTS

- Approved municipal grantees must sign a five-year grant agreement that will include but not limited to the following program requirements.
 - Inform residential wastewater and/or drinking water users regarding the availability of the Assistance Program to assist low-income households with paying utility bills;

NEW – Additional Subsidization for Low-Income Subgroups

PROGRAM REQUIREMENTS

- Offer, process, and approve grant assistance applications for residential utility users
- Establish and maintain necessary administrative and accounting procedures for program implementation and reporting;
- Submit grant reimbursement requests (no more than monthly) to DNREC for approved residential utility users;
- Agree to safeguard and ensure the confidentiality of personal information submitted by residential utility users applying for and receiving grant assistance; and
- Agree to periodic meetings and program audits of all records and accounts associated with the Assistance Program.

NEW – Additional Subsidization for Low-Income Subgroups

PROGRAM ASSISTANCE GRANTS

- Assistance Program Grants, regardless of the size of a low-income subgroup population cannot exceed \$200,000 for drinking water, or \$200,000 for wastewater services, respectively.
- Approved municipal grantees must ensure allocated Assistance Program Grants will last for at least 5 years, regardless of the addition or deletion of assistance accounts for eligible residential utility users.
- Average Number of Assistance Account Per Year: 200 or 400 accounts (combined – drinking water and wastewater services) that can be supported over 5 years
- Amount of Annual Assistance Per Household: \$200 or \$400 (combined – drinking water and wastewater services) that can be supported over 5 years

NEW – Additional Subsidization for Low-Income Subgroups

RESIDENTIAL UTILITY USER ELIGIBILITY

- Eligibility for the Assistance Program is based on the Federal Department of Housing and Urban Development (HUD), Community Development Block Grant (CDBG) State Low-Income levels shown below subject to annual revision:

<u>Family Size</u>	<u>State Income Limits</u>
1	41,650
2	47,600
3	53,550
4	59,500
5	64,300
6	69,050
7	73,800
8	78,550

NEW – Additional Subsidization for Low-Income Subgroups

RESIDENTIAL UTILITY USER ELIGIBILITY

- In addition, residential utility user households must meet the following criteria:
 - Applicant must be year-round resident of the home;
 - Liquid assets and real estate, other than owner-occupied home must be less than \$15,000;
 - No delinquent Taxes (municipal, county, or state);
 - No delinquent drinking water or wastewater service bills

FUNDING LIMITATIONS, SUBMISSION DATES, PRIORITY, AND APPROVAL

- There is no guarantee of additional funding beyond initial grant awards
- Insurance Requirements apply to the program

CWSRF – DWSRF

**Additional Subsidization Program for
Low-Income Subgroups**

Questions

Diverse Initiatives in California

- “Traditional” SRF programs
- State Low Income Water Assistance (AB 401)
- Safe and Affordable Drinking Water Fund (SB 623 Proposed)

California's prospective statewide program

September 2012: Human Right to Water (HRW) bill passes

- CA Assembly Bill 685
- Water must be “safe, clean, affordable and accessible”
- Requires state agencies to consider the right when adopting new policies or giving grants to water systems

October 2015: Low-income Water Rate Assistance (LIRA) program study passes

- CA Assembly Bill 401
- Report to the legislature on feasible plan designs due by February 2018

IF SRFs Want to Support Customer Assistance Program.....

- ‘(ii) does not meet the affordability criteria of the State if the recipient— “(I) seeks additional subsidization to benefit individual ratepayers in the residential user rate class; “(II) demonstrates to the State that such ratepayers will experience a significant hardship from the increase in rates necessary to finance the project or activity for which assistance is sought; and “(III) ensures, as part of an assistance agreement between the State and the recipient, that the additional subsidization provided under this paragraph is directed through a user charge rate system (or other appropriate method) to such ratepayers (WRRDA)

Modified Sponsorship Model

- Base Loan: \$4,145,000, 1.75%, 20 years
- **Reduced interest rate to allow for modest recurring expenditures:** \$4,145,000, 0.9%, 20 years plus an agreement that borrower will establish and fund a CAP program for X dollars for the first 10 years of loan.
- **Replace portion of loan with additional subsidization:** \$3,820,000 1.75% 20 year loan plus additional subsidization of \$325,000 with agreement that borrower will seed a customer assistance fund with \$325,000



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