

## **Water Affordability**

Affordability Study and System Assessment Eric Rothstein, Galardi Rothstein Group January 18, 2024

#### **Presentation Outline**

- 1. Introduction / Scope
- 2. Water Affordability: Issues & Industry Trends
- 3. Preliminary Research
- 4. Next Steps

## Water Affordability 1. Introduction / Scope

## Introduction: Eric Rothstein, MA, CPA

- Education / Expertise
  - Ripon College (BA Economics, History)
  - University of California, Davis (MA Economics)
  - AWWA / WEF Ratemaking Manuals of Practice
  - Financial Capability Assessments Consent Decree negotiation
  - Water system capital financing bond feasibility studies
  - Water affordability assessment / Customer Assistance Program design
- Notable Projects / Clients
  - Jefferson County, AL
  - Detroit, MI
  - State of Michigan: Flint Water Advisory Task Force
  - City of Atlanta
  - Industry associations: AWWA-NACWA-WEF



Affordability Study and System Assessment:

Scope

Project Orientation / Stakeholder
 Engagement

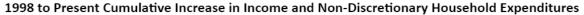
 Water Affordability / Financial Capability Assessment

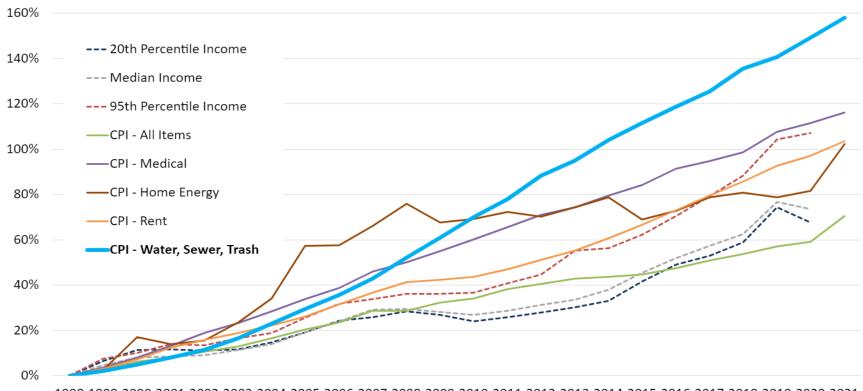
Customer Assistance Program Design



## Water Affordability 2. Issues and Trends

#### Water Service Cost Trends





1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

2023 Low Income Water Customer Assistance Program Assessment Study, February 2023, p. 3-2 Source data: Federal Reserve Economic Data and U.S. Census

## Five Pillars of Affordability\*

- 1.Quality
- 2. Efficiency
- 3. Rate Design
- 4.Income-Qualified Assistance
- 5. Delinquency Management

- See Manny Teodoro, Pillars of Affordability, May 31, 2023
- https://mannyteodoro.com/?p=3988#

## Water Bill Affordability Measurement

- Residential Indicator
  - Bill (or calculated Cost Per Household) as % of Median Household
     Income
- Lowest Quintile Residential Indicator
  - Bill (or calculated CPH) as % of Lowest Quintile Income
- Affordability Ratio at the 20th income percentile (AR<sub>20</sub>)
  - Basic water and sewer costs\* as a share of disposable income
- Hours at Minimum Wage
  - Basic water and sewer costs converted to hours at min. wage
- No. or Percent of Accounts Disconnected for Non-Payment

<sup>\*</sup> Basic water usage frequently set at 50 gallons per capita per day (gpcd)

## Customer Assistance Program Design

- Eligibility criteria
  - Income screening vs categorical
- Forms of Assistance
  - Bill assistance
    - Regular or one-time (for emergency / hardship)
  - Delinquency management
    - see next slide
  - Plumbing assistance
  - Education







# Water Affordability 3. Preliminary Research

#### **Preliminary Research**

## U.S. Census Data: Quickfacts Prichard & Chickasaw AL

		U.S.	Chickasaw, AL	Prichard, AL
Population Estimates		333 M	6,310	18,870
	% Black or African American	13.6%	49.2%	90.1%
	% White	75.5%	44.6%	8.8%
Housing				
	Owner Occupied Housing Unit Rate	64.8%	47.7%	56.1%
	Median Value	\$281,900	\$89,300	\$76,200
Income and Poverty				
	Median Household Income	\$75,149	\$39,985	\$36,110
	% Persons in Poverty	11.5%	31.5%	31.6%

#### **Preliminary Research**

### Water and Sewer Bill Burdens

Water and Sewer Bills		Bill as % of MHI	Bill as a % of LQI	Bill as Hours at Minimum Wage		
W & S Bill for ¾" Meter, 2kgal minimum (\$62.48/mo = \$749.76/year)						
	Chickasaw, AL	1.88%	5.27%	8.62		
	Prichard, AL	2.07%	4.77%			
W & S Bill for ¾" Meter, 2kgal minimum, 5kgal/month (\$106.97/mo = \$1,283.64/year)						
	Chickasaw, AL	3.21%	9.02%	14.75		
	Prichard, AL	3.54%	8.17%	14.75		
W & S Bill for ¾" Meter, 3.5 kgal minimum,3.5kgal/month (\$140.56/mo = \$1,686.72/year)						
	Chickasaw, AL	4.22%	11.85%	10.20		
	Prichard, AL	4.66%	10.74%	19.39		

# Water Affordability 4. Next Steps

#### Next Steps

## **Analysis and Assessment**

- Data Collection / Analysis
  - EPA Financial Capability Assessment methods
  - Low-income customer bill burden
    - Alternative measures
    - Geographical / spatial distribution
  - Customer assistance program design option review
    - Eligibility / outreach / participation rates
    - Options for coordination with other poverty relief programs
- Policy Regulatory Issues
  - Utility revenue funding of affordability measures
  - Customer service policies / practices
    - Collection-related fees, disconnections

#### **Next Steps**

## Stakeholder Engagement

- Advisory Council
- Community Organizations
  - Potential CAP implementation partners
- PWWSB Staff
  - Executive team
  - Customer service personnel
- PWWSB Board