



Affordability's Hidden Price Tag

How Long-Term Vision, Planning, and Coordination can Provide Water Security and Affordability to Millions of Californians



Retail

Wholesale

Affordability

State

Federal

Today's Panel



- Sophia Skoda, EBMUD (Retail)
- California Sen. Bill Dodd (State/Regulatory)
- Pierce Rossum, SDCWA (Wholesale)

Immediate Challenges

- Economic | Inflation | Recession Fears
- Steep Decline of Federal Funding
- Water Conservation | Drought
- Stakeholder (User) Diversity
- Regulatory Hurdles
- Defining “Affordable”

ASCE
Executive
Director
Thomas Smith

“We have not made significant enough investments to maintain infrastructure that in some cases was built more than 50 years ago. As this study shows, we risk significant economic losses, higher costs to consumers, businesses and manufacturers – and our quality of life – if we don’t act urgently. When we fail to invest in infrastructure, we pay the price.”

American Society
of Civil Engineers
2021 Infrastructure
Report Card

- Drinking Water: C-
- Wastewater: D+
- Storm Water: D

The Big Question

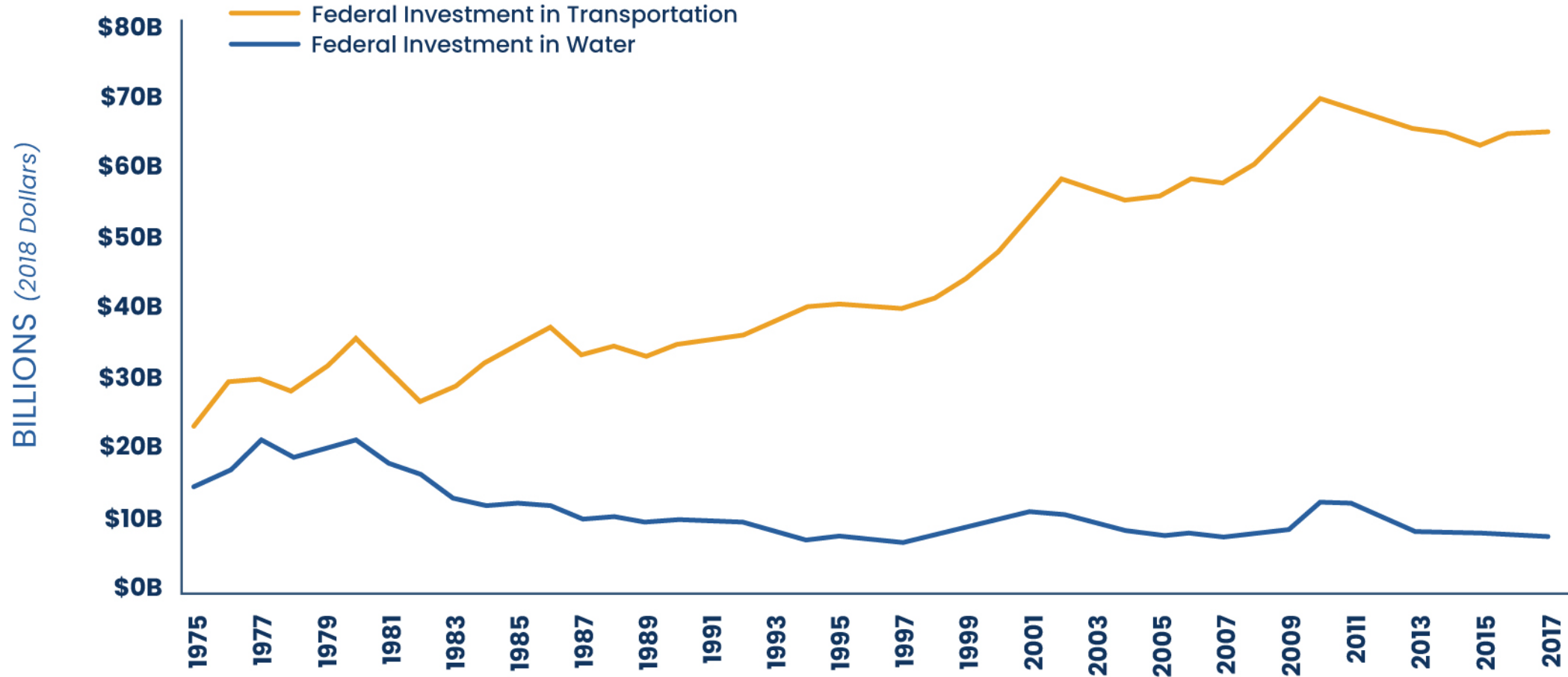
How can we adequately invest and renew failing infrastructure if we are paralyzed by immediate rate impacts?



Failure of Funding

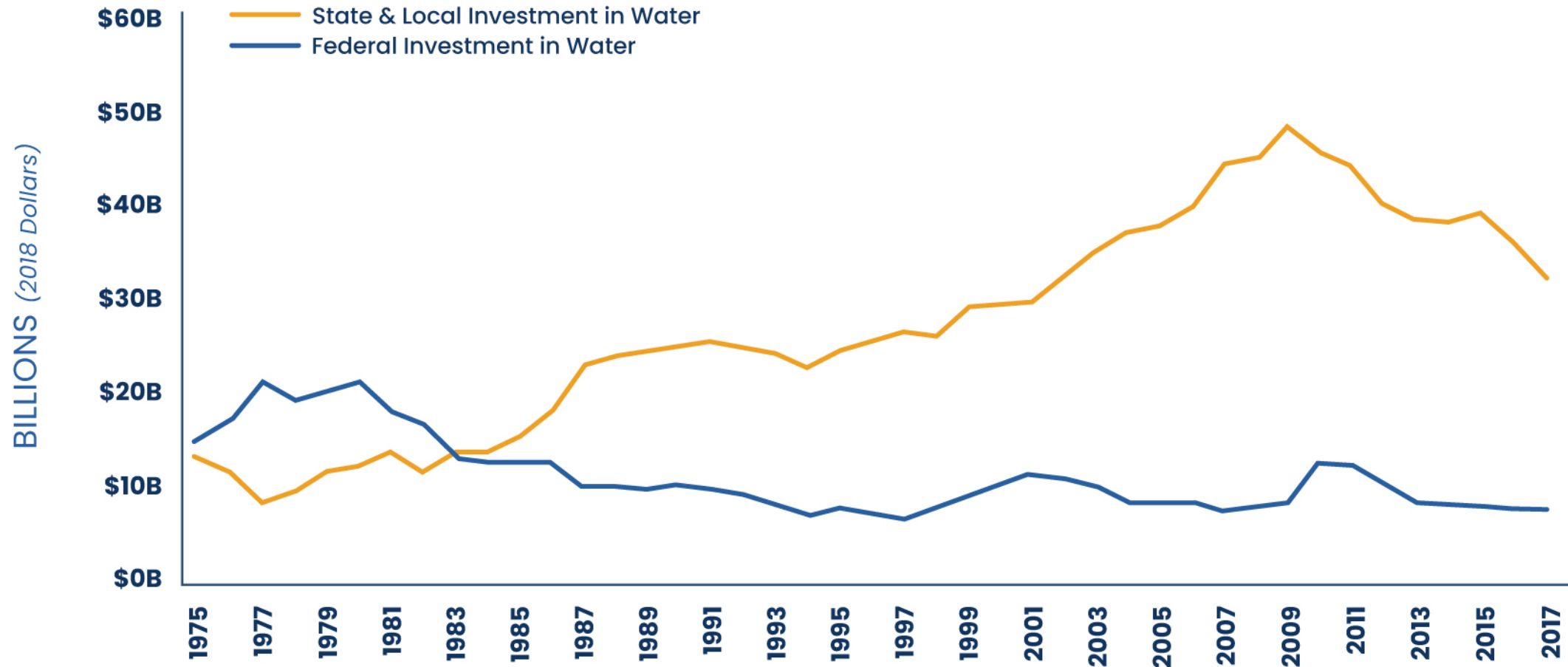
- The federal government's share of capital spending in the water sector **fell from 63% in 1977 to 9%** of total capital spending in 2017.
- Since 2008, California has adopted **over a dozen unfunded regulatory mandates** that cost water agencies hundreds of thousands of dollars to comply with.
- Although water rates have increased, utilities are still facing funding gaps; **only 21% of all U.S. utilities report being able to fully cover the cost** of providing drinking water services.

Federal Investment Prioritizes Transportation Infrastructure over Water Infrastructure



San Diego County Water Authority
And Its 24 Member Agencies

State, Local Spending on Water Infrastructure Outpaces Federal Investment



San Diego County Water Authority
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Human Right to Water

- Assembly Bill 685 declared that every person in the state has a right to clean, safe, and affordable drinking water.
- SB 200 provided funding to achieve the goal to “provide safe drinking water in every California community, for every Californian.”
- SB 998 supports HR2W by increasing protections to residents associated with discontinuation of water service due to nonpayment,

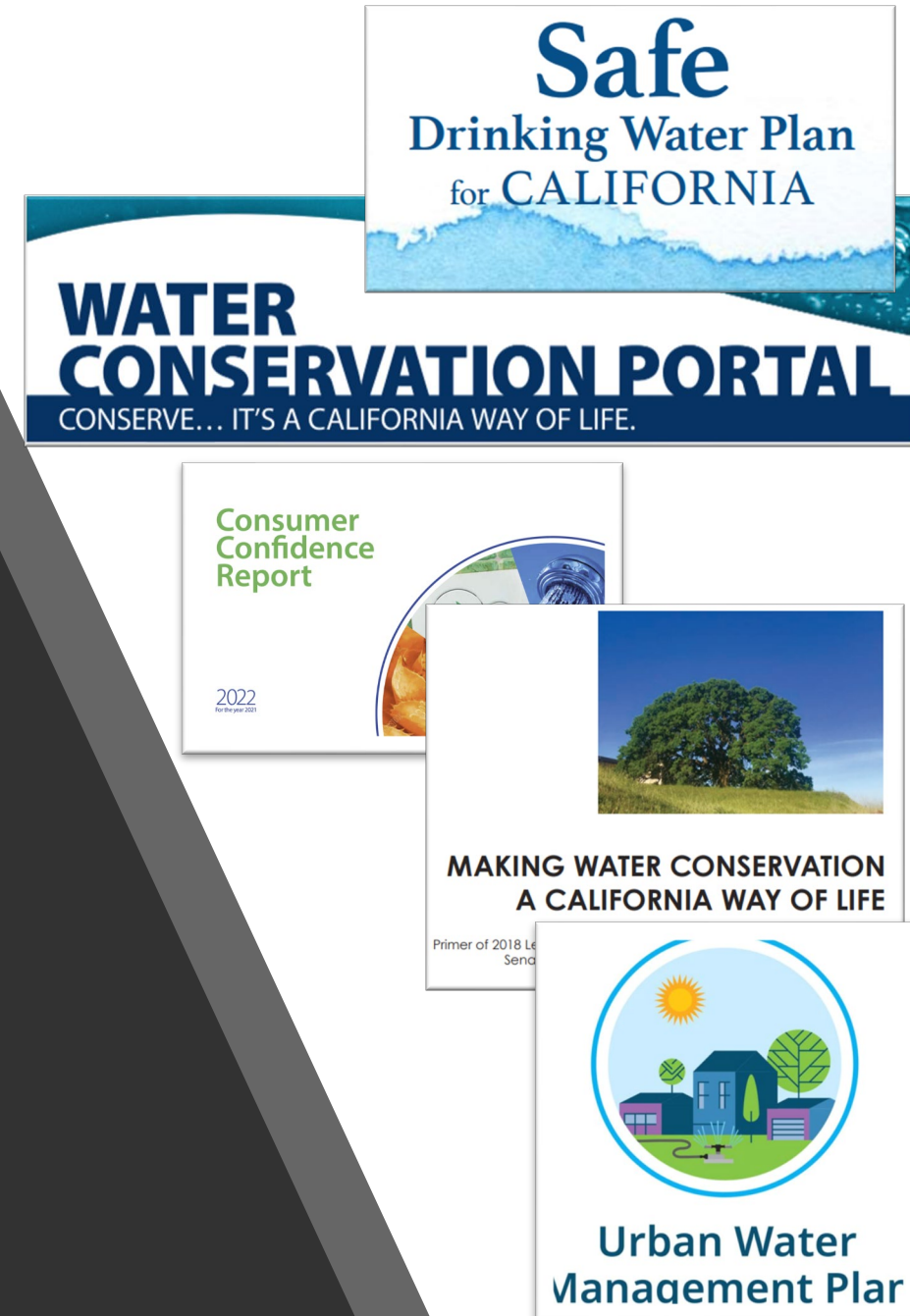


Failing Water Systems: The Human Right to Water (HR2W) List Criteria

April 2021

Costly Compliance

- California Water Code compliance requires water agencies to support the unfunded costs of frequent and extensive reporting to the State.
- Compliance with indirect regulations such as Advance Clean Fleet regulations, CARB regulations for emergency generators, and the updated lead and copper regulation are also unfunded.



Water Affordability Component

The Water Affordability Composite Score ranges from 0 to 4, with higher scores indicating worse outcomes. The composite score is based on a household-weighted average of three affordability ratios:

- Affordability Ratio for Median Household Income (AR_{MHI})
- Affordability Ratio for County Poverty Threshold (AR_{CPT})
- Affordability Ratio for Deep Poverty Threshold (AR_{DP})

[Click here for more information on the composite scoring approach](#)

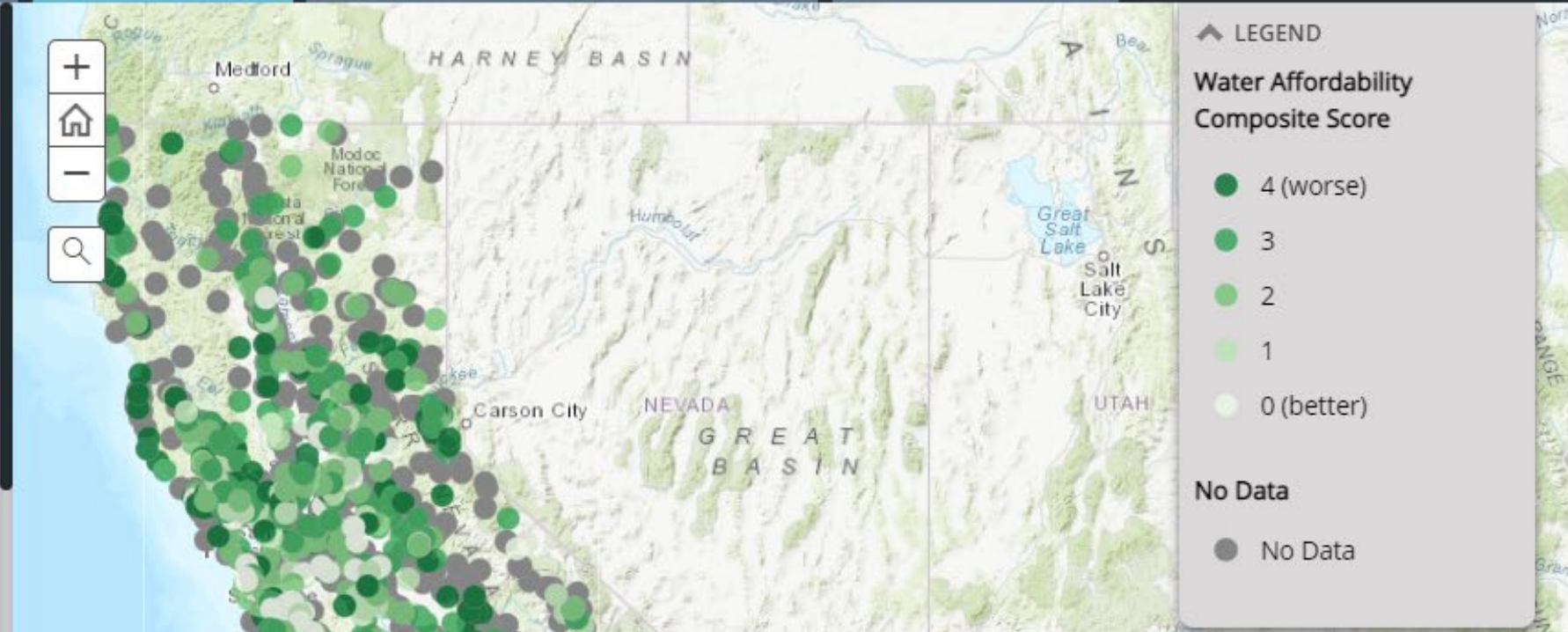
[Click here to interactively explore the composite score results](#)

The Human Right to Water in California

Affordability Indicators

1. **Affordability Income**
 - In developing the Human Right to Water Framework and Data Tool, California became the first state in the country to develop a tool for measuring the progressive realization of the human right to water.
 - This tool alongside other key statewide efforts signals California's leadership and commitment in providing safe, affordable and accessible water to all.
 - Dashboard presents a baseline assessment that evaluates the degree to which individual water systems deliver clean, safe, affordable and reliable water to their customers.

Measures the annual system-wide average water bill for 6 hundred cubic feet relative to the annual median household income of the water system.



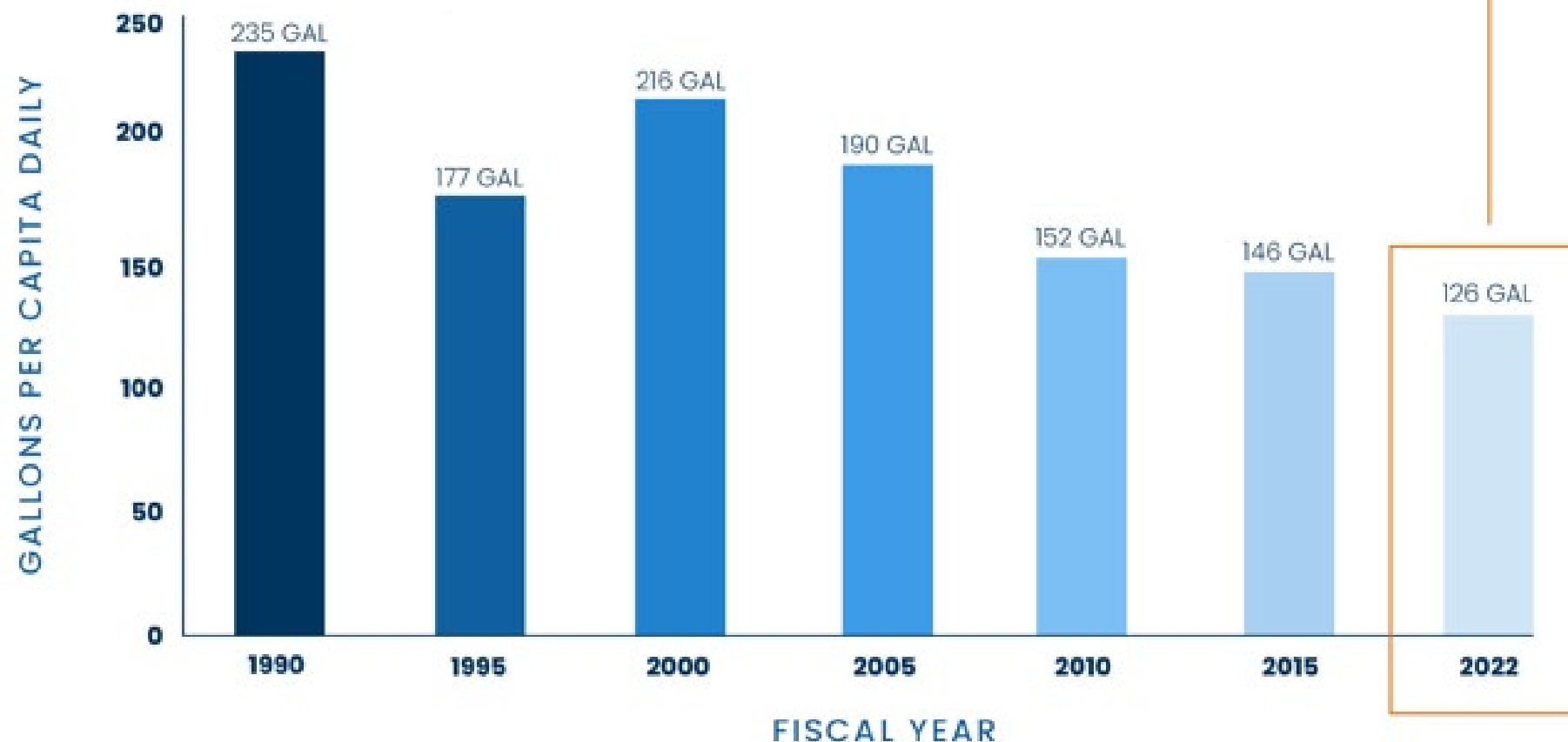


Things we want to avoid....

Pipeline Relining Cost Comparison



Per capita water use in San Diego region has declined more than 40% since 1990



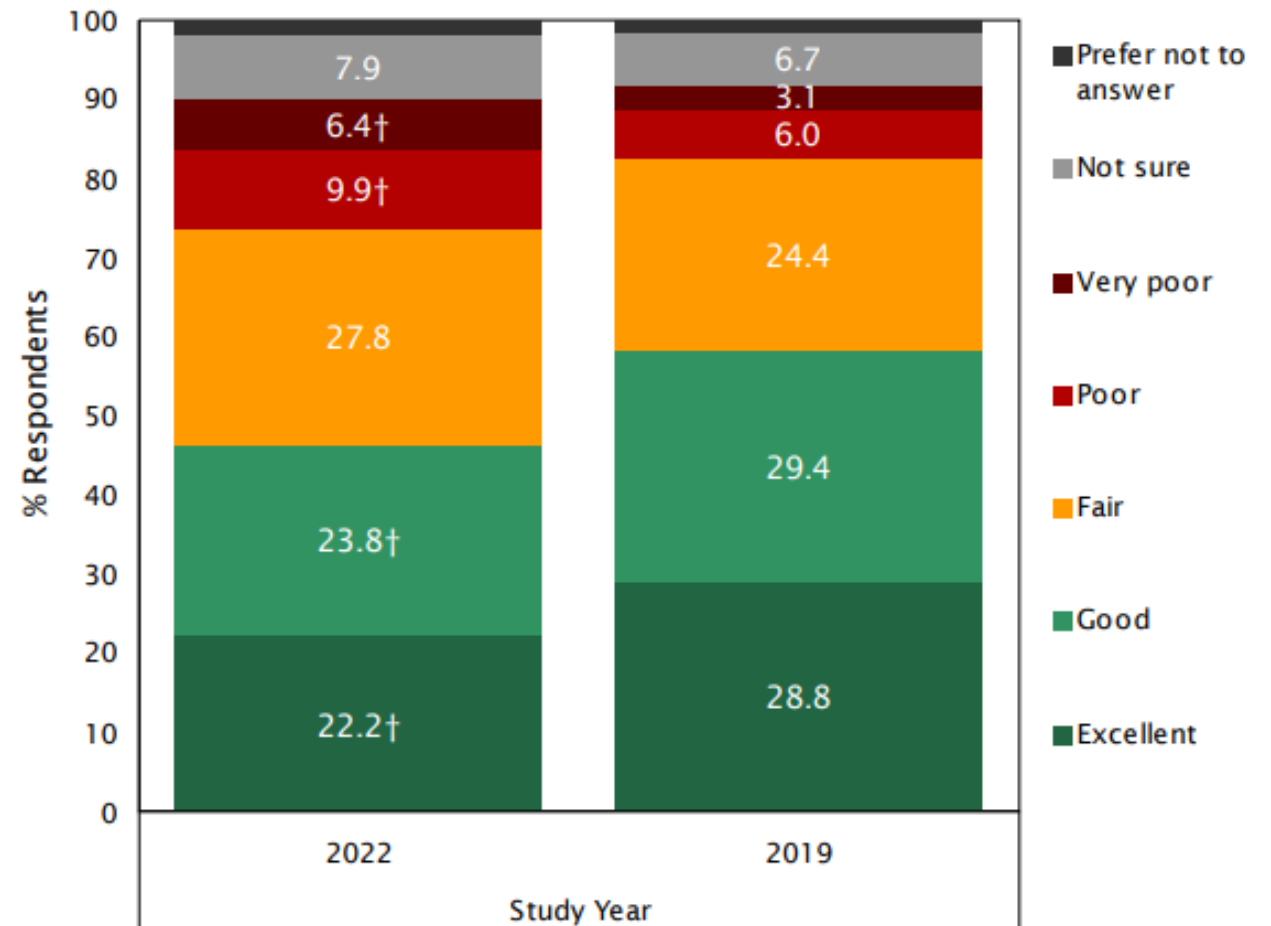
San Diego County Water Authority
And Its 24 Member Agencies

Affordability Concerns

- Up to 36% of households will not be able to afford drinking water by 2024.

Water Retains Fair to Excellent Value

OPINION OF WATER VALUE BY STUDY YEAR



How is affordability currently defined?

- “Community-level affordability” => % of median household income
 - State Water Board recently used a threshold of 1.5%
 - EPA has historically used 2.5% of median income
 - United Nations uses 3% of median income
- “Household Affordability” => Hours of Minimum Wage
 - Cost >8 hours of minimum wage may begin to severely constrain the welfare and economic opportunities of low-income households.
- “Threshold to determine when water is deemed affordable and when it is not depends ultimately on a political assessment.”
 - Financial Sustainability | Environmental Sustainability | Social Equity

What is “basic” or “necessary” consumption?

- State of California: 6 CCF/Month¹
 - Aligns with statewide conservation goals of 55 gpcd and an average 3-person household (6.7 CCF)
 - 6CCF would be just under 50 gpcd
- DWR² reports that the current statewide median indoor residential water use is 48 gpcd.
- 9 CCF/month = 4 pph * 55 gpcd

1) 2021 Drinking Water Needs Assessment (ca.gov)

2) Results of the Indoor Residential Water Use Study (ca.gov)

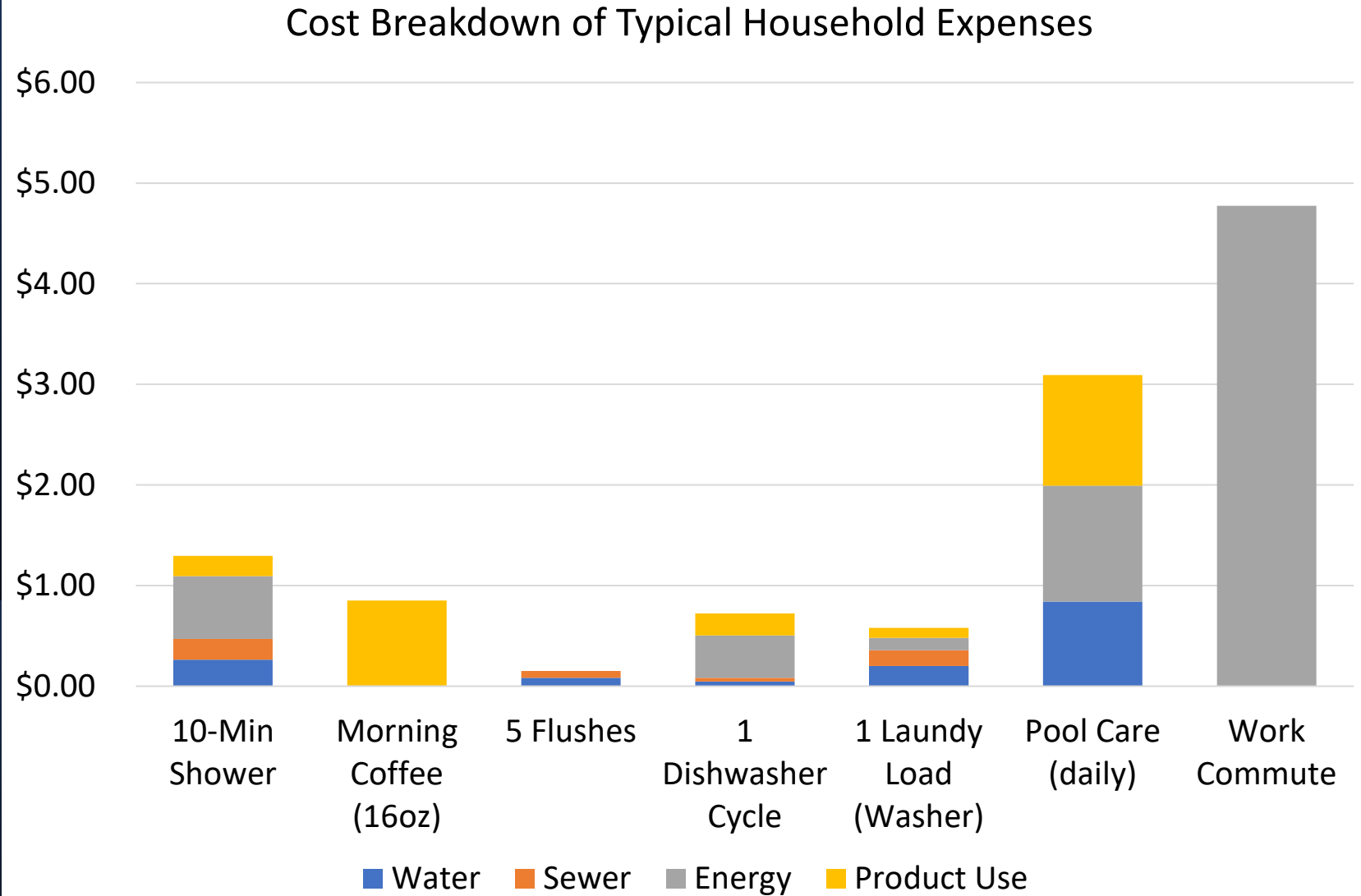
Framing Affordability

Avg. Monthly Expenses (U.S.)

- \$1,468 – Rent
- \$660 – Groceries & Dining
- \$414 – Healthcare
- \$391 – Used Car Payment
- \$237 – Subscription Services
- \$176 – Gasoline & Fuel
- \$155 – Clothing & Shoes
- \$119 – Car Insurance
- \$94 – Cell Phone
- **\$77 – Water Service**
- \$59 – Sewer Service
- \$58 – Gym Membership

** What Are Average Household Monthly Expenses in the US? (bankofamerica.com)*

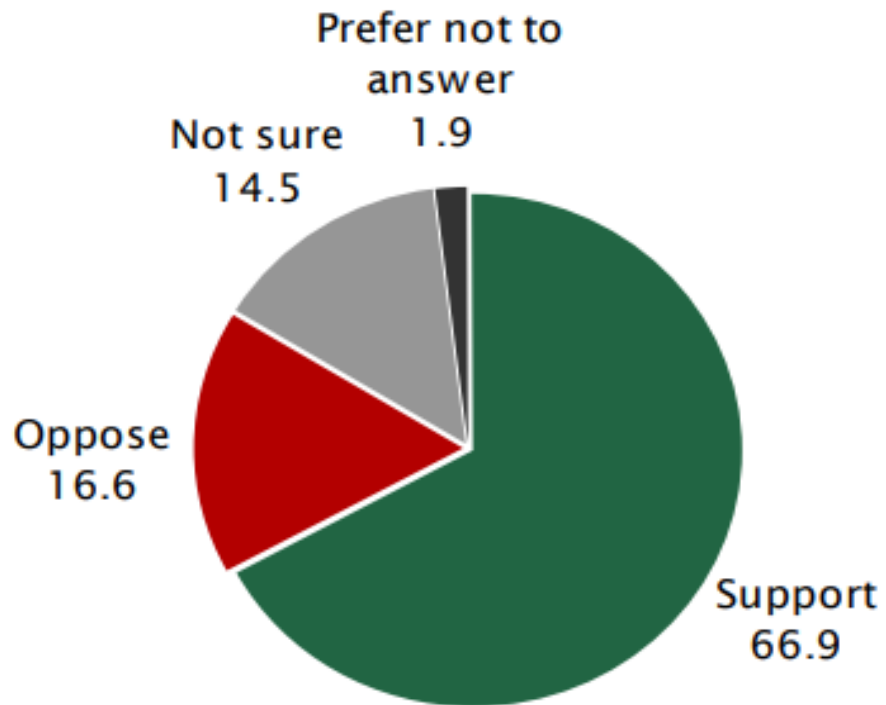
Cost of Daily Household Activities



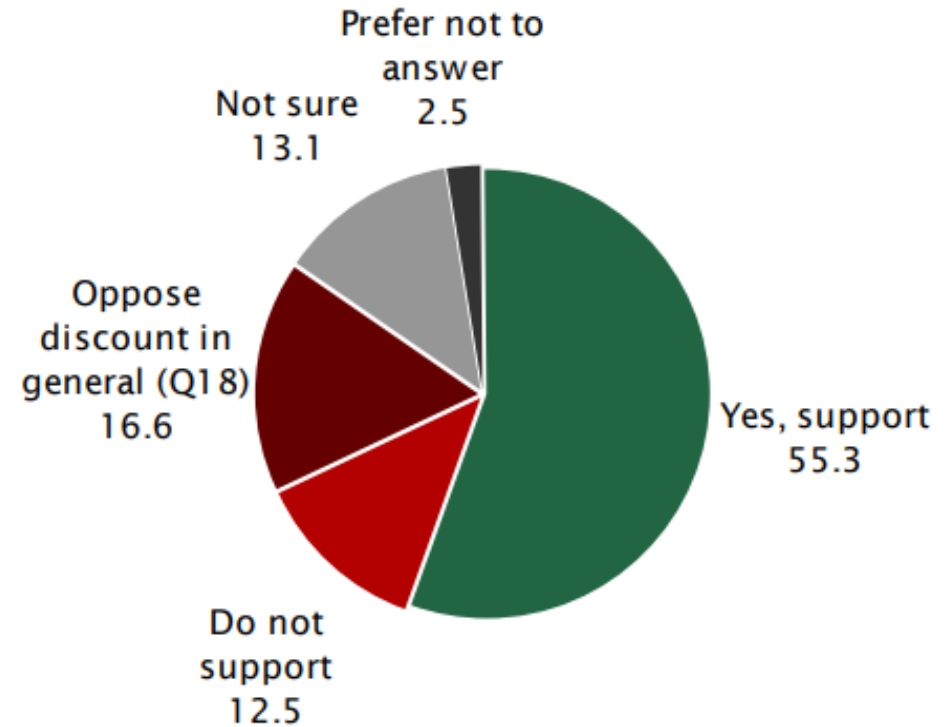
Source: SDCWA, 2022

Support for Low-Income Assistance

General Support



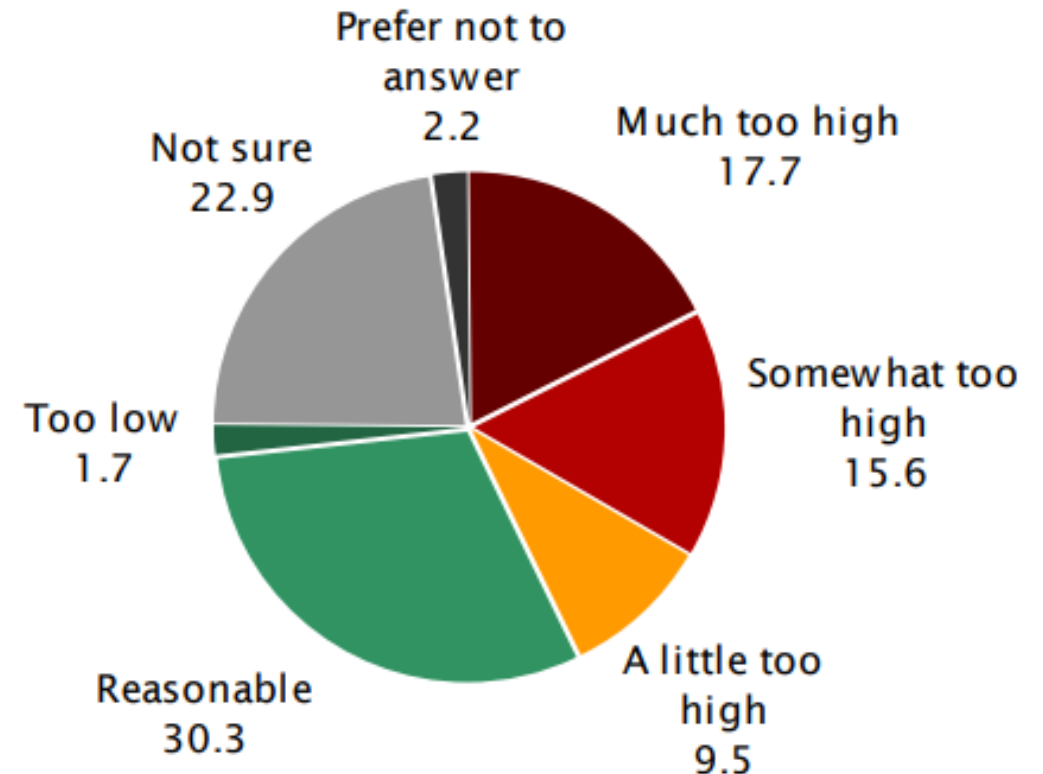
Support at cost of \$1-\$3/month



Communication Efforts & Challenges

- Tap water affordability isn't a new topic – but it is a complex and challenging one that's likely to become more prominent.
- Historically, there's been a sense that water is “free” – and that creates false expectations.
- Water is paid monthly or bi-monthly, sometimes in combination with sewer or other fees, and that tends to skew people's perspectives about the cost.

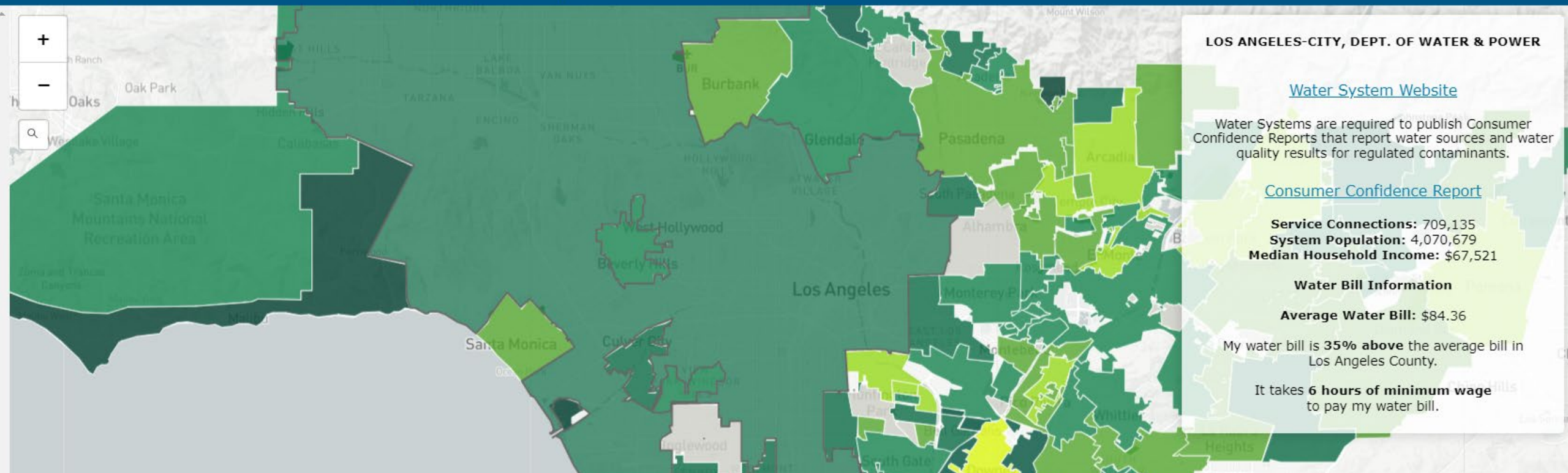
Opinion of Water Bill



Source: SDCWA, 2022

Communication Efforts & Challenges



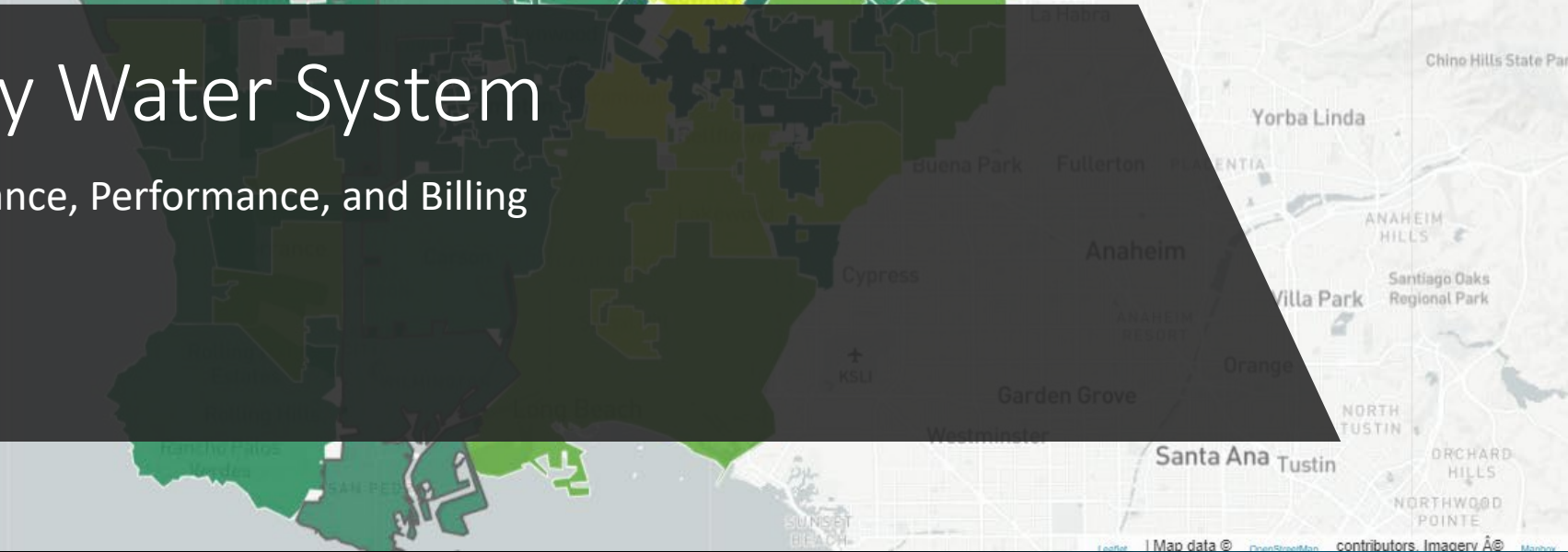



Los Angeles County Water System

- Analysis of Water System Governance, Performance, and Billing

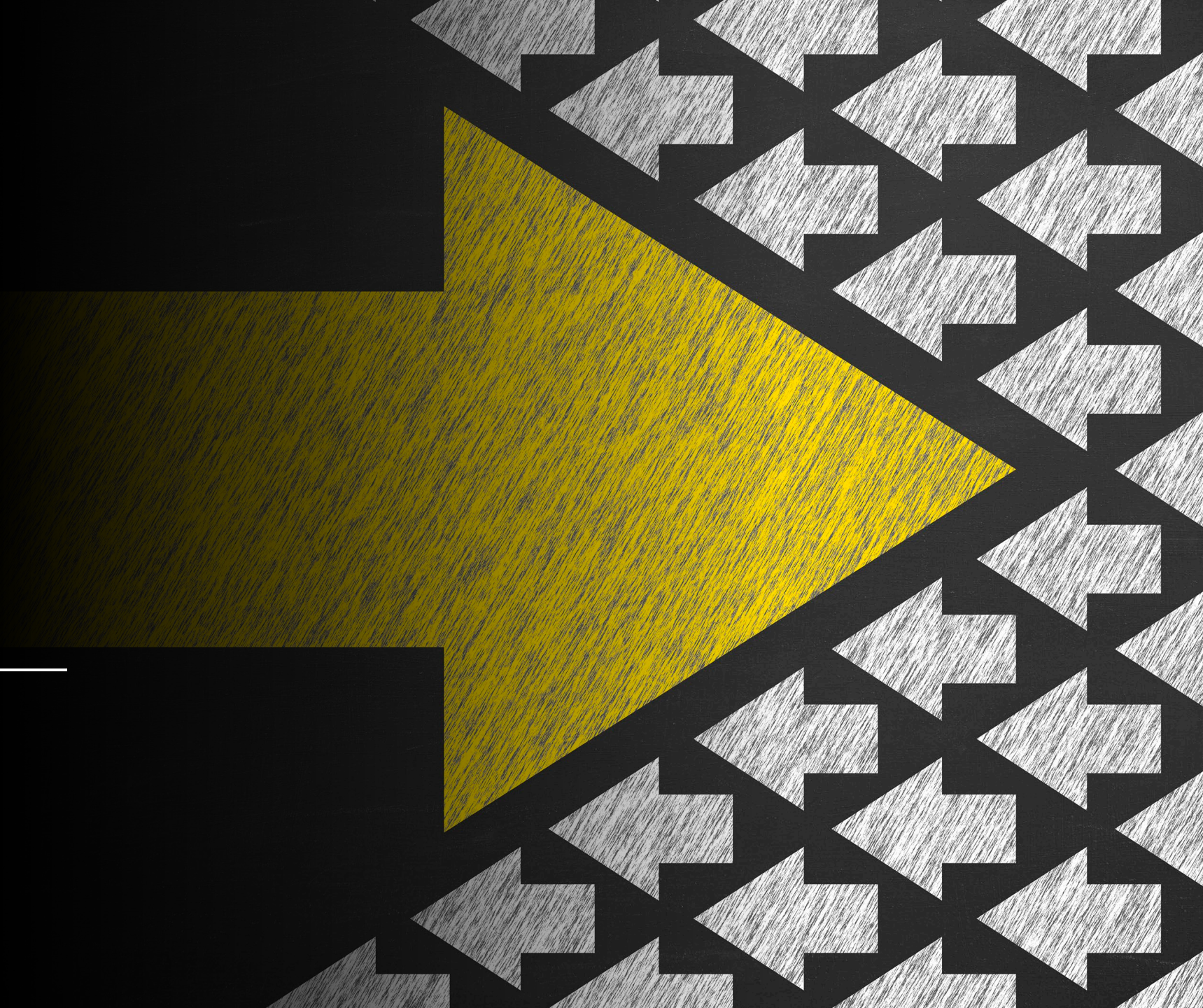
Minimum Wage Hours

No Data
1 Hour
2 Hours
3 Hours
4 Hours
5 Hours
6 Hours
7 Hours
8 Hours





The common
perception is that
infrastructure
funding and
affordability are in
conflict.





In reality, they
are aligned.





How will
affordability be
achieved?



2023 CSMFO ANNUAL CONFERENCE

BACK TO THE CAPITAL SACRAMENTO

JANUARY 31 - FEBRUARY 3, 2023

Thank You