

Water Affordability Needs Assessment Listening Session Summary

Nonprofits, NGOs, & CBOs

Session 2 - Data and Analysis | April 18th, 2024

Background and Introduction

In the [Infrastructure Investment and Jobs Act of 2021 \(IIJA\)](#), Section 50108, [42 U.S.C. 300j-19a], Congress directed the U.S. EPA to produce a Water Affordability Needs Assessment Report to Congress. In producing the report and as directed in Section 50108 of the IIJA, EPA gathered stakeholder input from a diverse group of experts in the water affordability field, including utilities, associations, academia, nonprofits, community-based organizations (CBOs), advocacy groups, and the public. These stakeholders included experts who have spent decades working to address water affordability challenges across the U.S.

In March and April 2024, EPA hosted two series of targeted Stakeholder Listening Sessions, each series consisting of three sessions. One series focused on gaining perspectives from water associations and utilities, while the other focused on feedback from nonprofit and advocacy communities. EPA invited participants from water utilities and associations, including rural advocacy associations, as well as select nonprofits, non-governmental organizations (NGOs), and CBOs, to participate in these sessions. EPA provided the stakeholders with background on this report, solicited feedback from stakeholders on proposed data sources and EPA's data analysis approach, enlisted stakeholder assistance in case study development and review, and discussed recommendations for addressing affordability challenges nationwide.

This document summarizes the second listening session for invited participants from select nonprofits, NGOs, and CBOs which was held on April 18, 2024.

EPA's objectives for the listening session included:

- Share the data analysis approach for the report.
- Provide an overview of datasets planned for inclusion in the report.
- Highlight data gaps that currently exist.
- Provide a preview of the Session 3 topic: Recommendations.

Qualifying Households

Ellen Tarquinio provided an overview of the direction that Congress has given EPA to create the Water Affordability Needs Assessment and Report and explained the criteria laid out in legislation that defines qualifying households. Key highlights from her presentation are as follows.

- In the report, EPA is tasked to (1) provide the prevalence of utilities that service a disproportionate number of households in need (this is measured by the criteria of a ‘qualifying household,’ which is provided in the legislation) and (2) provide an estimate for utilities that have taken on an unsustainable level of debt due to customer non-payments.
- Legislation dictates four specific criteria used to determine “qualifying households”:
 - Customers eligible for assistance through a utility low-income ratepayer assistance program.
 - Determination of low-income based on State Revolving Fund affordability criteria established by the State under the Safe Drinking Water Act.
 - Customers that experience drinking water or wastewater service costs that exceed the most recent EPA Financial Capability Assessment Guidance.
 - For rural service providers (serving 10,000 people or less), households whose income is less than the greater of [-150% of the poverty level of the State] or [60% of the State median income].

Facilitators invited participants to share thoughts on ways to document utilities taking on an unsustainable amount of debt due to customer nonpayment and qualifying households. Highlights of the participant discussion are as follows.

- *Congressional Language.* Some participants expressed that the Congressional language, “utilities taking on unsustainable levels of debt due to customer nonpayment,” does not reflect the reality of how utilities make use of debt financing. Utilities take on debt for multiple reasons, and then customer nonpayment can cause other problems (like unacceptable levels of service and unaffordable rates). EPA staff expressed that, while working within the limitations of the Congressional language, they are seeking to understand more about the impacts of unpaid arrearages and the scale of past-due bills for utilities.
- *Focus on Meaning and Assessment of Water Affordability.* A participant urged that the Report to Congress should focus most heavily on articulating definitions of affordable access to water and lack thereof, and assessment of prevalence of lack of affordable access.

Data Approach

Jean Ray (U.S. EPA) provided an overview of EPA’s data analysis. Key highlights from her presentation are as follows.

- The base analysis for water affordability will include water rates, income data from the U.S. Census Bureau, and actual service areas or some approximation of service areas to geographically link the water rates to income. The cost of water will be compared to one or multiple affordability definitions. The generated value would reflect an annually required estimate to support a permanent low-income water program.

- Based on additional Congressional direction, EPA will also need to include information on arrearages, disconnections, and information on property tax liens. These represent separate analyses that could be combined with the water rates affordability analysis to provide a more comprehensive picture of need. There are some decision points that must be made for this analysis, like volumetric water use and household size. EPA is strongly leaning towards utilizing a hygienic level of water use in these calculations.

Facilitators then invited participants to share thoughts on EPA's data approach. Highlights of the participant discussion are as follows.

- *Community Input.* A participant encouraged EPA to focus on including community-based responses and recommendations in the analysis and report.

Dataset Sources and Data Gaps

Jean Ray provided an overview of gaps that currently exist in the available data. Key highlights from her presentation are as follows.

- Datasets that EPA currently plans to use include Duke University and University of North Carolina Environmental Finance Center (UNC EFC) Dashboards, AWWA/Raftelis Water Rates Surveys, and state-specific water data. For state-specific water datasets, some are posted on state governmental websites while others are available from university sources or consultants. EPA aims to highlight publicly available data to aid in the Water Affordability Needs Assessment data-gathering effort.
- There are some stakeholders in this space looking into data coming (e.g., data as a result of a new law in New Jersey) that EPA anticipates receiving. Stakeholders can help EPA keep aware of these sorts of changes and information on the horizon.

Facilitators invited participants to share thoughts on EPA's data approach. Highlights of the participant discussion are as follows.

- *Small Systems.* A participant suggested that one way to acquire data from small systems would be to look at filings of large investor-owned systems that have recently acquired smaller systems.
- *Public versus Municipal Systems.* EPA should consider distinguishing between systems that are regulated by public service commissions versus municipal systems.
- *Rate-Setting Transparency.* One participant shared that there can be challenges in discovering how utilities are setting rates, and how household impact is considered when those decisions are made. EPA responded that there will be an effort to capture impact on households and what lack of affordability means to an individual home.

EPA also invited participants to share their suggestions for other data sources to investigate. Data sources that participants shared in the meeting chat are listed below.

- The State of Wisconsin collects information on disconnections, arrearages by quarter and amounts that roll onto the tax roll each year. See [page W-30 of utilities' annual reports](#).
- [Western Kentucky University Stormwater Utility Survey 2023](#) (Western Kentucky University)
- [Water Affordability Reports](#) (Elevate)

- [Much More Than a Drop in the Bucket](#) (Elevate)
- [2021 50 Largest Cities Water and Wastewater Report](#) (Black & Veatch)
- [State Action on Water Affordability](#) (River Network)
- [Turning Off the Tap: Massachusetts' Looming Water Affordability Crisis](#) (Massachusetts Advisory Committee to the U.S. Commission on Civil Rights)

Affordability Metrics

Jean Ray provided an overview of the many ways that affordability can be defined. Key highlights from her presentation are as follows.

- EPA must come up with a definition for “affordable access to water services” and “lack of affordable access to water services.” How these are defined in the report will directly affect the cost estimates for methods of increasing access to water services, including the cost estimate for a permanent federal low-income water program.
- Affordability has been defined in various ways over the years and in different programs. The following table shows some affordability definitions that have been used previously.

Name	Abbreviation	Source
State Revolving Fund Affordability Criteria and Disadvantaged Community Definitions		CWA and SDWA; State defined
Percentage of Lowest Quintile Income	% LQI	Raucher et al. 2019
Poverty Prevalence Indicator	PPI	Raucher et al. 2019
Affordability Ratio	AR	Teodoro 2018
Hours of Labor at Minimum Wage	HM	Teodoro 2018
Expanded Financial Capability Assessment Matrix	Expanded FCA	EPA 2023
Percentage of Median Household Income	% MHI	EPA 1997
Residential Indicator	RI	EPA 1997
Financial Capability Indicator	FCI	EPA 1997

Facilitators invited participants to share thoughts on affordability metrics. Highlights of the participant discussion are as follows.

- *Ability to Pay for Other Necessities.* One definition of affordability describes whether the ratepayer is able to pay their water bill without sacrificing the ability to pay for other basic household necessities. The Pacific Institute frames this as, “[The] cost of essential water and sanitation should be inexpensive enough that cost does not prevent access, nor interfere with other essential expenditures.” ([Pacific Institute](#)). Such a qualitative definition could be integrated alongside a more quantitative definition, such as the percentage of LQI noted above.

- *Deferred Maintenance Impact on Rates.* According to a participant, there is very little granular data that allows a close look into the effects of deferred maintenance on the quality of service and billing rates. Some ideas are age of system and water loss or main break data, and how high rates in these areas coincide with nonpayment and other types of affordability data. This relationship could be considered in the report.
- *Non-payments and Service Quality.* While some non-payment instances do occur due to inadequate customer income, some households also choose not to pay if they observe that the wastewater system is not adequately maintained to provide appropriate levels of service. There was a loss of trust in water systems during the COVID-19 pandemic that resulted in non-payments for that reason. The report should include an analysis of this phenomenon.

Ellen Tarquinio ended the session by thanking participants for attending and inviting them to return for the third listening session.