GOVERNMENT FINANCE RESEARCH CENTER

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Water Affordability in Northwestern, Central, & Southern Illinois

Policy Bite

The Illinois General Assembly commissioned the Government Finance Research Center to conduct a "Water Rate Setting Study." This brief is based on the second report from the study, which focuses on Northwestern, Central, and Southern Illinois (NCSI). Residential water affordability is emerging as an increasingly urgent problem, as the U.S. Environmental Protection Agency (EPA) estimates 12.1 million to 19.2 million households in the U.S. lack access to affordable water.

- Of the 595 municipalities in NCSI for which the GFRC researchers collected water rate data, only three have a standardized water bill that exceeds 2.5% of median household income. However, 122 municipalities (over 20%) have a standardized water bill that exceeds 2.5% of income at the 20th percentile.
- Examining 365 municipal ordinances representative of the NCSI regions, the share of municipalities with an ordinance that describes payment assistance plans is relatively low at 7%.
- Regression analysis reveals that higher water bills are associated with higher required deposit amounts and stricter payment schedules, illustrating the compounding effect of barriers to affordable water access.
- While there is no universally accepted definition of water affordability, municipalities often benchmark against other communities' rates. Many municipalities try to minimize the water bill burden for customers and recognize the need to support vulnerable populations.

Research Brief

Where infrastructure outlays, water scarcity, or treatment costs are high, water pricing that guarantees a system's sustainability might be difficult to achieve while maintaining affordability. This challenge is particularly acute for small, rural systems, where shrinking and high-poverty populations must support relatively fixed operational and infrastructure costs. Since smaller systems do not benefit from economies of scale like larger systems, they are burdened with higher per-capita costs.

Although water affordability is a growing concern, there is no universal definition or metric for measuring and comparing affordability across communities. Most measures of affordability depend on a system's customer base. The most common affordability threshold sets water bills at no more than 2.5% of a community's median household income (MHI). However, affordability measures that examine the water burden for the median or average household have several shortcomings. Metrics that focus on sub-populations that may be facing affordability issues, which are often masked by central tendency metrics, are preferred, such as targeted metrics using income quintiles.

Of the 595 NCSI municipalities for which the GFRC researchers collected water rates, only three have a standardized water bill that exceeds the EPA's 2.5% threshold: Buncombe Village at 2.7%, Cahokia Heights City at 3.5%, and Lawrenceville City at 3.6%. However, 122 (over 20%) have a standardized water bill above 2.5% of income at the 20th percentile.

A total of 365 municipal ordinances were analyzed to evaluate fees, penalties, and payment assistance plans across NCSI. Seeking to prevent at-risk customers from facing undue burdens with water bills, some municipalities offer payment assistance plans to segments of their customer base. The number of municipalities stipulating a process to access payment assistance plans in their ordinances is relatively low at 26, representing 7.16% of the ordinances sampled. In the event of overdue or unpaid water bills, municipal water providers take steps to recoup lost revenue (see Figure 1).

To hedge against the risk of water bill non-payment, water providers often require deposits before service is initiated for new customers. Among the representative sample of NCSI ordinances collected, 308 (84%) mention a deposit requirement for initiating water services, with

the majority (95%) of municipalities charging the same dollar amount to all customers. However, 15 municipalities (5%) have deposit requirements that vary by specific types of customers, e.g., ones previously delinquent on bills. Required deposit amounts range from $15 to $350, with an average deposit value of $76.11.

When a resident fails to pay their water bill on time, a municipal water provider often issues a penalty charge once the bill is past due or delinquent. The overwhelming majority of NCSI municipalities charge 10% of the outstanding amount. However, these delinquency penalties range from 5% to 175%. Among the 365 ordinances collected, 42 (or 11.5%) list a dollar-value delinquency penalty rather than a percentage of outstanding charges.

The time frame before residential water bills are due also varies by municipality. A shorter time to pay bills is generally considered a stricter policy than a longer payment duration. On average, NCSI customers have approximately 19 days until a penalty is applied to their account. However, this ranges from 7 to 50 days to pay their bills before being considered delinquent. A deadline for bill payment is not stipulated for 30 municipalities, representing 8% of ordinances analyzed.

Several municipalities across the region offer repayment plans if a property owner fails to pay their water bill after the final delinquency notice. Some municipalities offer informal repayment plans on a case-by-case basis. In NCSI, 325 municipalities (89.04%) list a fee for restoration of services after shutoff, ranging from $10 to $90. Shut-off procedures are commonly included in municipal ordinances, with 320 (87.67%) municipalities stipulating the number of days after a bill is issued that water services may legally be suspended. These numbers range from 11 to 105 days. Most municipalities (279 or 76.44%) include language about issuing a lien on real estate for homeowners with outstanding bill balances.

Regression analysis of the sampled municipal ordinances reveals that:

- A municipality's poverty rate is associated with a higher required deposit value. In addition, higher water and sewer bills are associated with a shorter time to pay before property lien procedures are initiated. These trends represent a compounding effect, increasing barriers to clean and affordable water for residents.
- A similar compounding trend exists for residents who are required to pay a higher deposit value while also having fewer days to pay their water bills before delinquency.
- Municipalities that include procedures to dispute or correct water bills provide a shorter window for payment before shut-offs may occur, by 4 days.

Interviews with municipal water system representatives reveal that:

- Across NCSI, system operations are often considered alongside customers' abilities to pay.
- While there is no universally accepted definition of water affordability, many municipalities emphasize benchmarking against other communities' rates as a guiding principle.
- Although many municipalities do not have clear definitions of water affordability, most pointed out that they try to minimize the burden for customers regarding water bills.

Read the full report HERE.

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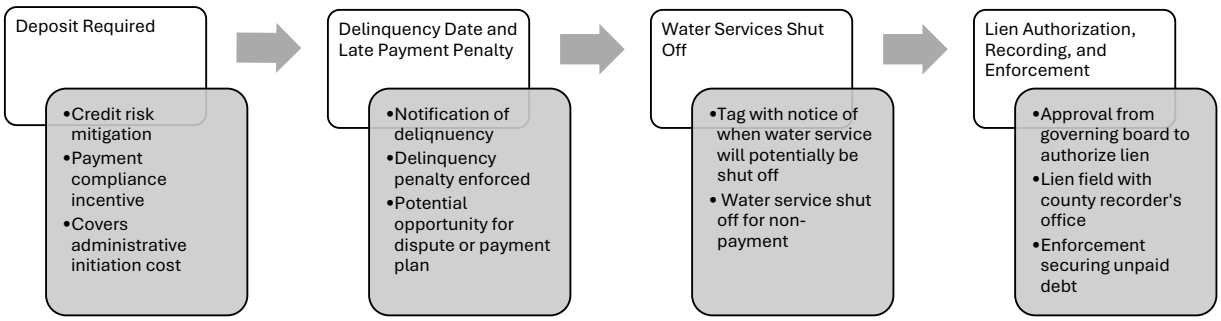
Figure 1. Typical Procedures for Non-Payment of Residential Water Bills