GOVERNMENT FINANCE RESEARCH CENTER

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Government Policies & Rate Setting 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). Municipal water providers exercise significant autonomy in setting water rates and tailoring their policies to meet the financial needs and priorities of their system. However, federal and state policies play a crucial role in shaping water provision and pricing, exerting both direct and indirect influence.

- Less than 10% of Illinois' lead service lines are located in NCSI. However, incomplete records and limited capacity create disparities in meeting requirements to identify and report lead service lines for lower-income communities.
- Between April 2023 and July 2024, there were 943 boil orders in NCSI, averaging 63 orders per month. However, data collection efforts reveal substantial non-compliance in required reporting.
- Lead service line inventories, replacement costs, and compliance with guidelines for per- and polyfluoroalkyl substances present challenges for setting water rates. Even water systems with newer infrastructure struggle to comply with recent mandates.
- Privatization has some advantages, including infrastructure improvements and municipal debt relief. However, it can adversely impact water affordability for residents.

Research Brief

Federal policies related to water provision, such as the Clean Water Act (CWA) of 1972 and the Safe Drinking Water Act (SDWA) of 1974, are largely geared towards ensuring quality standards for drinking water. The CWA and SDWA remain the cornerstone pieces of federal legislation governing water quality, with new and emerging contaminants frequently added to regulatory standards. For example, national drinking water standards for per- and polyfluoroalkyl substances (PFAS) were recently established as these chemicals are associated with various negative health and developmental effects. Lead service lines (LSLs) are also emerging as a significant concern nationally, and especially in Illinois, with the second-highest number of LSLs in the nation at an estimated 1,043,294. The state of Illinois works in close partnership with federal agencies to enforce compliance with federal standards and regulations such as the CWA and SDWA.

Drinking water systems across the country are required to identify and replace lead service lines within 10 years. According to the 2022 IEPA Service Line Material Inventory Reports, 128 municipalities in NCSI reported lead service lines reflecting less than 10% of Illinois' total lead service lines. For these communities, the proportion of their total service lines needing replacement due to lead averages about 8%. However, the lead service line replacement burden reaches about 90% for some communities. Disparities in identifying and reporting lead service lines exist for disadvantaged communities (DACs) that face challenges of incomplete records and limited capacity.

The federal government also allocates funding for low-cost State Revolving Funds (SRFs) to aid in financing infrastructure improvement and replacement initiatives. The Illinois Environmental Protection Agency (IEPA) manages and administers federal programs like SRF and distributes federal funds, such as those from the lead service line replacement program. SRFs directly influence how local utilities structure their rates, often requiring that utilities demonstrate sound fiscal health, such as ensuring rates are sufficient to cover the cost of sustaining water operations. Consequently, utilities seeking these funds may be required to adjust their rate structures, potentially leading to higher consumer costs.

When water infrastructure failures occur, boil orders are required to notify at-risk residents in accordance with

IEPA regulations. Though the State plays a crucial role in funding, compliance enforcement, and program administration, municipalities retain significant autonomy in notifying customers of system failures and potential health hazards.

Based on boil order notices collected from April 2023 to July 2024, municipal water operators in NCSI reported a total of 943 boil orders to the IEPA or Illinois Emergency Management Agency (IEMA), averaging 62.87 orders per month. However, identifying boil orders issued through a process of scraping public data reveals a substantial level of reporting non-compliance, indicating that notices reported to IEPA and IEMA offer only a partial view of the actual frequency of boil orders in the region.

Of the 250 municipalities sampled, 38% had at least one boil order posted online, despite none reporting such orders to the IEPA/IEMA during the period. Municipalities that reported orders to the IEPA/IEMA are clustered in the northwestern and central parts of NCSI. However, web scraping revealed boil orders issued in all parts of NCSI, indicating that the clustering of IEPA/IEMA reporting is likely a reflection of reporting practices and municipalities' relationships with these agencies rather than a reflection of the actual incidence of boil orders.

Most boil orders average 2 days. However, there are exceptions to this trend: 20 boil orders extend beyond a week, indicating more prolonged or complex issues. For boil orders specifying an underlying reason, a "break" in the water distribution system is the leading cause (47.6%), followed by repair (25.5%). Most breaks, 89.5%, are water main breaks.

At least one boil order is identified for 20% of municipal utilities serving populations of 500 or fewer. The percentages of municipal utilities with at least one boil order notice increase consistently as the size of the population served increases, culminating in 52.3% of utilities serving populations over 10,000 having one or more boil orders. Smaller municipalities are less likely to maintain websites and social media, suggesting that these differences are influenced by communication limitations rather than actual boil order frequency.

Regarding local policies, municipal utilities often maintain reserve funds and manage their own debt levels. While some utilities adopt a pay-as-you-go approach, which avoids debt by funding operations through rates or other current revenues, others incur debt by borrowing or issuing bonds that will be repaid over time. Similarly, there are no statewide policies governing water shut-offs by municipal providers. Instead, policies are determined at the municipal level but may be guided by state recommendations and consumer protection standards.

Interviews with representatives of municipal water systems reveal:

- Lead service line inventories and replacement costs can be a challenge for setting water rates, especially when the scope of these projects is still being investigated.
- Even some systems with newer infrastructure struggle with the capacity to comply with mandates, like those issued for communities to document the prevalence of lead service lines.
- Privatization can come with some advantages, including infrastructure improvements and municipal debt relief. On the other hand, one of the most pressing concerns regarding privatization is the potential for increased consumer costs.

Read the full report HERE.

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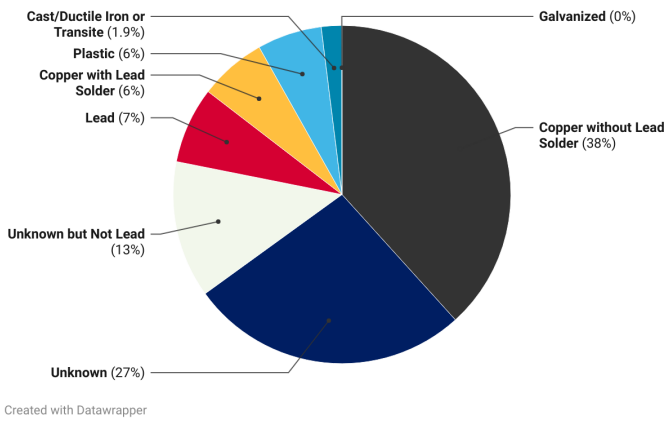
Figure 1. NCSI Reported Service Lines by Material