

U.S. Water and Sewer Outlook 2023

Inflationary Pressures Mounting

Fitch's Sector Outlook: Deteriorating

Fitch Ratings' deteriorating outlook for the Water and Sewer sector reflects its expectation that economic and business conditions will create a more challenging operating environment in 2023 relative to 2022. Strong headwinds related to general inflationary pressures, notably higher chemical, labor and power costs, and weaker economic growth are expected to contribute to weaker financial performance. This could lead to a weakening in credit quality across the sector, if not offset with commensurate rate adjustments to keep pace with the higher cost environment. Despite these pressures, the distribution of Rating Outlooks across the portfolio is predominantly Stable, as most utilities still have headroom for absorbing higher costs.

Rating Outlook Distribution

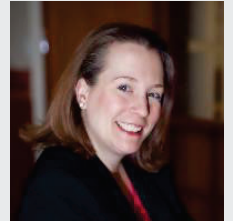
Fitch expects limited rating changes in 2023, yet a narrowing of financial margins is likely. As of November 10, 2022, 84% of the water and sewer ratings assigned by Fitch maintained a Stable Rating Outlook. Approximately 14% have a Positive Rating Outlook or are on Rating Watch Positive, and 3% have a Negative Rating Outlook or are on Rating Watch Negative. Ratings trending positive are dominated by utilities with improving leverage profiles despite incorporating higher capex and operating costs. Conversely, ratings trending negative are predominantly driven by utilities with rising leverage as a result of increasing operating or capital expenses without offsetting rate support.

What to Watch

- Utilities budgeting for sustained higher operating expenses.
- Capital spending to continue rising in light of higher costs and to address various sector needs.
- Impact of federal funding.
- Trends in service affordability.
- The regulatory environment and effects on capital programs and operations.

Audra Dickinson, Senior Director

'More acutely than any time over the last decade, the sector's outlook is deteriorating, largely based on our expectations that 2023 will represent a second consecutive year of cost and capital pressures. The operating environment will remain challenging in the upcoming year, and could worsen further if high inflation is prolonged or supply chains experience additional disruption.'

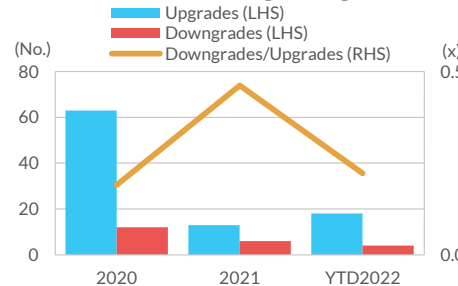


Core Credit Drivers: Water & Sewer

Subsectors	Revenues			Expenditures			Financial			
	Personal income/affordability	Real-estate values	Demand/volumes	Labor costs	Labor availability	Non-labor operating costs	Capital input costs	Leverage	Cost of debt	Financial reserves & liquidity
Water & Sewer	↘	N.A.	↔	↘	↔	↘	↘	↘	↘	↔

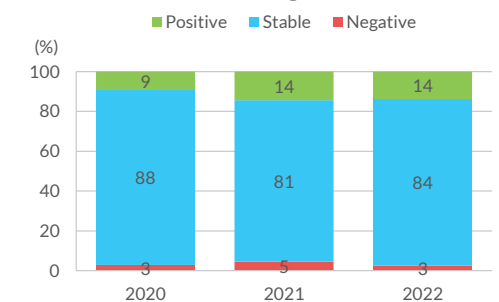
Note: N.A. not a material driver of credit quality in sector; ↑ Improving: high relevance. ↗ Improving: moderate relevance. ↔ Neutral. ↘ Deteriorating: moderate relevance. ↓ Deteriorating: high relevance.
Source: Fitch Ratings

Water & Sewer – Rating Changes



Note: 2020 is a criteria change year.
Source: Fitch Ratings.

Water & Sewer – Rating Outlooks



Source: Fitch Ratings.

Operating Cost Burden

Operating Budgets Include Higher Rates of Expense Increases

Inflationary pressures alone pushed costs roughly 7% higher in 2022 and are expected to continue at nearly 4% in 2023. Utilities operating budgets for 2023 reflect these compounded increased costs associated with chemicals, labor, supplies and power. If not balanced with commensurate revenue generation, financial performance in 2023 is expected to weaken. Additionally, demand across the sector is generally flat to declining and an increase in operating expenses could result in a sustained upward trend of per unit costs and an increased operating risk. The potential challenge to credit quality is mitigated somewhat by utilities' strong cash balances and ability to institute cost-saving measures, such as not filling all available FTEs as budgeted, or scaling back capital expenditures to free up cash flow for operations.

Borrowing Costs Face Upward Pressure

While interest rates remain low by historical standards and access to the capital markets remains robust for the capital-intensive Water and Sewer sector, upward pressure on interest rates is expected to increase financing costs and revenue requirements, and significantly reduce the benefits of refunding. Fitch expects this trend to continue as the 10-year U.S. Treasury yield rises gradually through 2023 to 4.50% and Fed policy rates are increased to 5%.

What to Watch – Sustained higher operating expenses

Operating costs are expected to remain elevated over the near term as a result of inflationary pressures and the rising interest rate environment, but should moderate toward the end of 2023. While a sudden, more favorable operating cost environment in 2023 could shift the sector outlook to neutral, a more protracted high inflationary environment would likely pressure the sector beyond what is currently envisioned.

Capital Investment

Capital Spending Adding to Leverage Pressures

Fitch expects capital spending to remain robust in fiscal 2023 and above recent spending levels based on utilities' current plans, which, if realized, will contribute to leverage pressures as debt is added to the balance sheet and cash levels are drawn down. Outlays are increasing as a result of inflation, growth pressures, the need to address aging infrastructure and regulatory mandates that

Additional Key Sector Issues

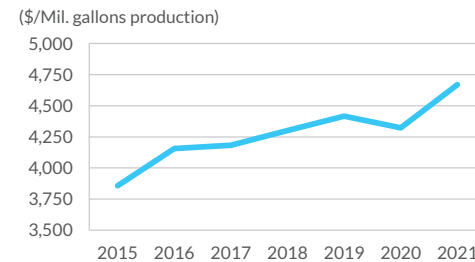
- The increased frequency and worsening severity of extreme weather events will continue to be a threat to the sector as utilities work to expand and improve resiliency of water supply and contend with unforeseen expenses that can arise in the aftermath of severe weather events.
- A breach of critical utility assets from cyberattacks that halts service or requires ransomware payments could negatively affect utility financial performance and could result in widespread public and private sector shutdowns.

U.S. Economic Forecast

(%)	2021	2022F	2023F	2024F
GDP Growth	5.9	1.9	0.2	1.6
CPI Inflation (Year-End)	7.0	7.0	3.6	2.7
Policy Interest Rate (Year-End)	0.25	4.50	5.00	3.50
U.S. 10-Year Yield	1.51	4.00	4.50	4.00

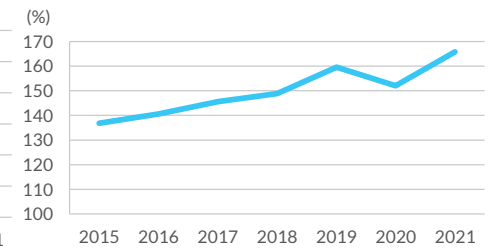
F – Forecast.
Source: Fitch Ratings.

Operating Cost Burden



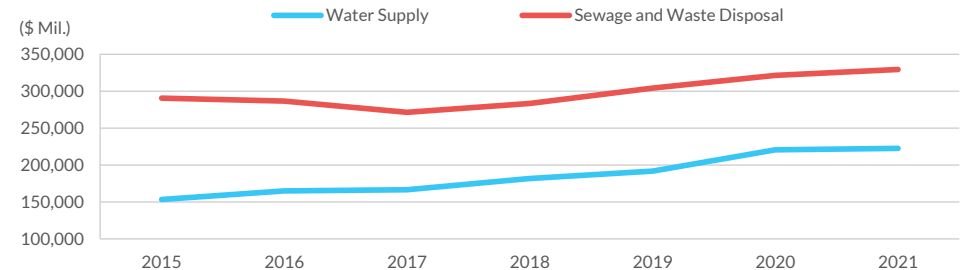
Source: Fitch Ratings.

5-Yr Avg Capital Expenditures/Depreciation



Source: Fitch Ratings.

National Public-Sector Annual Construction Spending



Source: US Census Bureau.

have been and will be impacting the sector over the coming years. The higher interest rate environment could also contribute to declining cash balances as higher payments are made.

Many utilities maintain flexibility within their capital programs to defer projects. Yet, project deferral would only accelerate the rate at which the sector's life cycle ratio increases and contribute to potentially weaker operating risk profiles. The impact of federal and infrastructure funding is still expected to provide relief and reduce the amount of debt incurred, but from the time the funding was announced in 2021 projects' costs have ballooned and any awarded funding would now cover fewer projects and/or a narrower scope. Utilities have reported with regularity the need to rebid contracts as cost increases have grown well beyond contingency budgets.

What to Watch – Increased Capital Spending

Capital spending across the sector is expected to continue rising in 2023, reflecting higher commodity prices and labor costs, as well as continued system investment. Lower commodity prices and more widespread labor availability through 2023, however, could contribute to an improved outlook. The increased spending will continue a trend already demonstrated the last several years.

What to Watch – Impact of Federal Funding

Sustained high inflation through 2023 is having a dampening effect on how far federal and infrastructure funding will stretch. Any awarded funding is expected to cover fewer projects and a smaller scope of projects as contractor bids have increased over the last year--in some cases more than doubling--causing projects to be rebid. A more rapid return to lower inflation could shift the outlook to neutral.

Affordability of Service

Affordability Likely to Weaken, Longer Term Pressures Remain

The Fitch-rated portfolio as a whole maintains sound rate flexibility, but an acceleration in rate adjustments sustained in 2023 is expected to weaken affordability. Utility charges across the sector had risen at a faster pace than CPI growth for many years heading into the pandemic. As rate actions continue into 2023, there will be increased focus among sector stakeholders on affordability concerns, particularly for the nation's most economically vulnerable. A program to aid lower income individuals, the Low Income Household Water Assistance Program, was created as part of federal legislation in 2021, but is still temporary in nature. Bill assistance programs at the local level can offer additional relief, but are often funded with one-time monies or contributions by other utility

customers, which are subject to variability. Longer-term, affordability remains a concern as utilities around the country look to increase capital spending to maintain or improve assets that will necessitate ongoing rate adjustments.

What to Watch – Trends in Service Affordability

A sector outlook revision to neutral would be supported by a demonstrated stability in service affordability, whether through improving median household income or lower than anticipated rate increases.

Regulatory Policy

Impact of Regulatory Policy on Capital or Operating Programs

Utilities will continue work into 2023 to meet requirements stipulated by the updated Lead and Copper Rule (LCR), which will require identification and public disclosure of lead service lines by October 2024. As utilities' needs to comply with the LCR become clearer in 2023, potential capital costs factor into new capital programs. Additionally, should there be additional operating resources needed, that should also become more clearly identified in 2023.

Over the next year the U.S. Environmental Protection Agency is expected to continue refining testing and reporting requirements related to per- and polyfluoroalkyl substances (PFAS), which have been detected widely across the country. The cost of more stringent treatment requirements could be significant, but will largely depend on a utilities' existing treatment capabilities and water supply sources. The technology used to treat PFAS is well identified, but for some utilities it could require construction of new treatment facilities. Compliance strategies are likely to affect the capital spending initially, but over the longer term could also increase operating budgets to maintain the new facilities.

What to Watch – Impact of Regulatory Policy on Capital or Operating Programs

The evolving regulatory environment, particularly regarding federal guidelines related to PFAS and emerging contaminants of concern, remains a factor in the outlook. The cost of complying with environmental regulations is expected to be meaningful, but the full scope of new rules and effect on cost structures and capital investing remain undetermined. Lower compliance thresholds could support a neutral outlook, while more stringent requirements and shorter deadlines could deteriorate the outlook further.

Outlooks and Related Research

2023 Outlooks

[Global Economic Outlook](#)

[Drought Augurs Risk for California Water Agencies \(October 2022\)](#)

[U.S. Water and Sewer – Peer Review 2022 \(August 2022\)](#)

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