

U.S. Water Utilities 2026 Outlook: Large And Small Systems Address Similar Challenges With Different Tools

December 9, 2025

This report does not constitute a rating action.

Sector View: Mixed

- S&P Global Ratings' sector outlook for large and medium U.S. utilities has returned to stable from negative, reflecting an easing in federal regulatory policy, slowing rate of inflation for primary cost drivers, and demonstrated management acumen.
- Our sector outlook for small systems remains negative due to the outsize financial effects of unbudgeted capital expenditures and less access to economies of scale, market access, and management flexibility.
- All systems, regardless of size, remain exposed to rising capital investment requirements, driven by aging infrastructure, climate resilience needs, and compliance, which may influence affordability in the future.

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What we're watching | U.S. water utilities



Federal policy

Federal influence on regulations, grant funding, natural resource oversight, FEMA, and economic policies.



Infrastructure investment

Expanding capital programs to meet resilience needs and aging infrastructure, stresses from rising construction costs, labor shortages, and significant funding gaps.



Weather variability

The impact of hydrology and climate events on financial performance and capital planning.



Labor

Shortages due to the aging workforce, private sector competition, and lack of skilled construction labor.



Affordability

Rate-setting increasingly strained by rising capital demands and operating expenses, especially given variable population and demographic trends throughout the country.



Management capacity

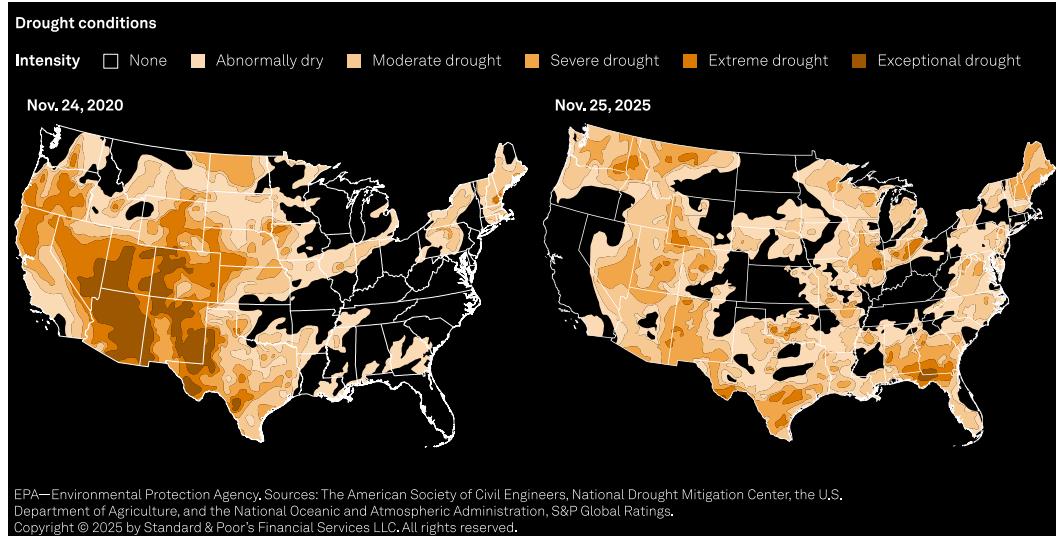
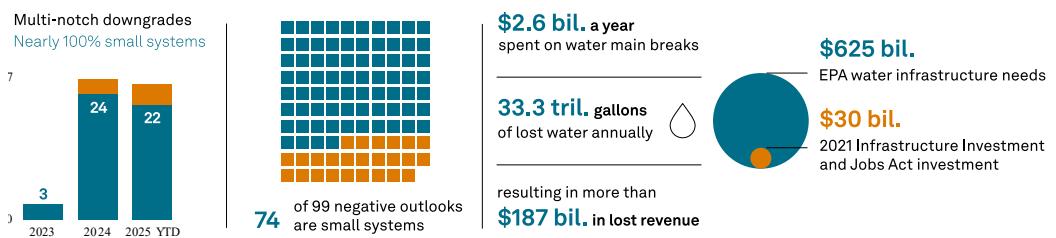
Depth and effectiveness of management, including how policies and practices mitigate complex sector risks.

Source: S&P Global Ratings.

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Chart 1

By the numbers | U.S. water utilities



What's Behind Our Sector View

We expect regulatory costs will continue to climb, albeit at a slower pace. Although the regulatory environment has improved, challenges remain to meet requirements related to lead and copper, pathogens, microplastics, and nutrient removal. Following several years of expanding proposed and adopted regulations and aggressive implementation timelines, there has been a pause in the pace and magnitude of regulatory change. The current administration seems less likely to promulgate aggressive mandates, beyond what is currently contemplated on current water quality standards. The Environmental Protection Agency (EPA) announced that it will maintain the maximum contaminant limits (MCLs) for perfluorooctanoic acid (PFOA) and perfluorooctyl sulfonate (PFOS) but rescind the regulatory determinations for several other proposed but less-tested contaminants (as well as reconsideration of the Hazard Index standard). The MCLs under the current administration far surpass those of global peers (see chart 2).

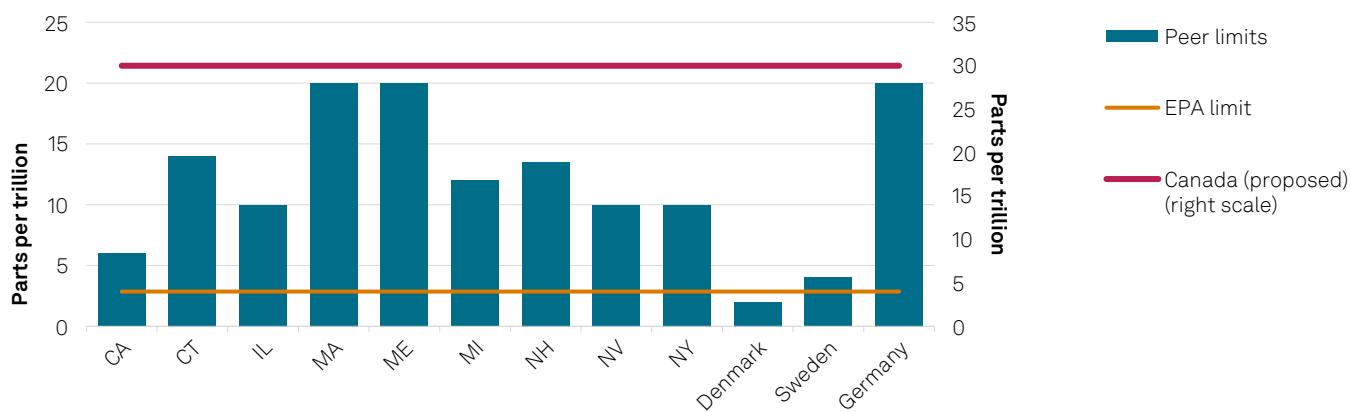
In addition, the EPA extended the compliance deadline an additional two years, buying utilities time to build in rate increases. We view this approach as generally positive for the sector, given that the estimated cost of meeting the previous requirement was nearly \$4 billion with a short timetable, which, for many, necessitated redirecting resources and delaying other projects to assess and reduce PFAS in the water supply. The influence of PFAS regulations on wastewater and biosolids remains uncertain. The current EPA administration has noted its intent to maintain the Comprehensive Environmental Response, Compensation, and Liability Act designation for

PFAS and PFOA but EPA Administrator Zeldin has noted the need for protective legislation for utilities as passive receivers of PFAS, which remains stalled in the legislature.

We expect federal funding will remain stable, in support of meeting the existing mandates, but we would view negatively any significant reductions to Water Infrastructure Finance and Innovation Act (WIFIA) or state revolving fund support. WIFIA closings have slowed, with the EPA closing three loans since the beginning of 2025, compared with 18 loans and 24 loans in the prior two years, respectively. However, in late November, the EPA announced \$6.5 billion in WIFIA funding available for water systems, with an additional \$550 million available to states as well as approval of five new WIFIA loans for projects in Florida, Illinois, Oregon, and Texas, which we view favorably. Stalled funding would be especially difficult for smaller utilities, given that they have weaker market access, and we continue to monitor this.

Chart 2

PFAS limits--domestic vs. global



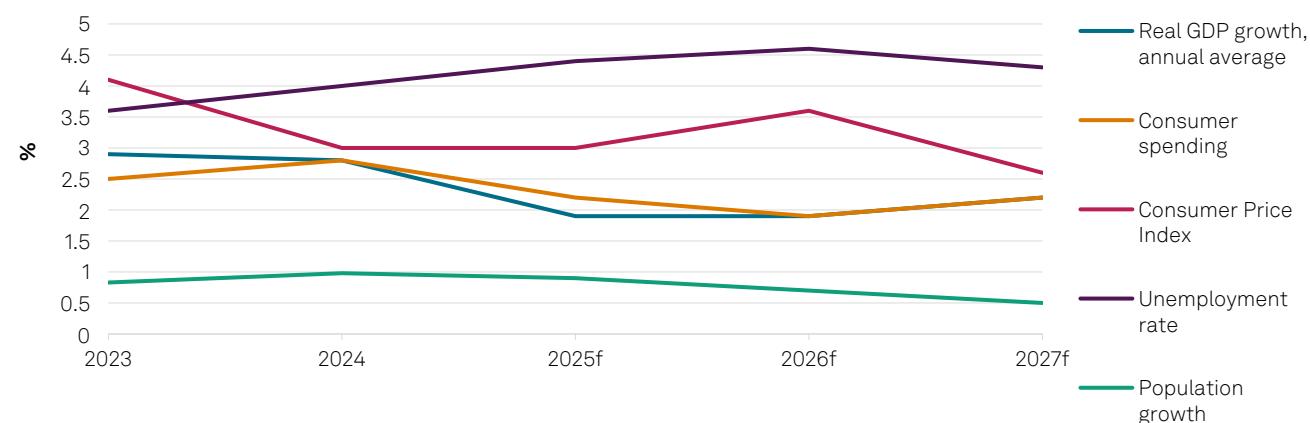
Source: S&P Global Ratings. Numbers are averaged when there are different limits for PFOS and PFOA. PFAS--Polyfluoroalkyl substances. PFOS--Perfluorooctane sulfonate. PFOA--Perfluorooctanoic acid.

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While the general economy has historically had less effect on utility financial performance than weather patterns and regulations, we believe it could be influential on capital costs and rate-setting. Some unknowns exist regarding the effect of global manufacturing delays for chemicals, goods, and services as well as the influence of tariffs, but generally we expect economic performance will improve (chart 3). However, we expect shortages in construction labor will persist, reportedly the result of lack of skills, licensing, or related issues rather than immigration enforcement, but that remains uncertain. Construction cost escalation, whether material or labor related, might affect capital costs and thus financial performance, especially given the backlog of critical infrastructure investment required in the sector. This may be offset by recent federal policy rate cuts that could lower borrowing costs and provide some stability to utilities in the medium term. S&P Global Ratings Economics' current forecast suggests a 30% chance of recession. For further information, see "[Economic Outlook U.S. Q1 2026: Steady As She Goes But On A Narrow Path](#)," Nov. 24, 2025. However, even during past periods of economic stress, demand has remained relatively inelastic for utilities, given the essential nature of service. We haven't seen meaningful swings in delinquencies during economic downturns unless material remedies were disallowed (such as shutoffs or liens). That said, if discretionary income contracts while utility bills continue to rise, we could see greater affordability pressures affecting rate-setting flexibility, especially in areas with higher poverty rates or more vulnerable populations.

Chart 3

U.S. key economic indicators, 2023-2027



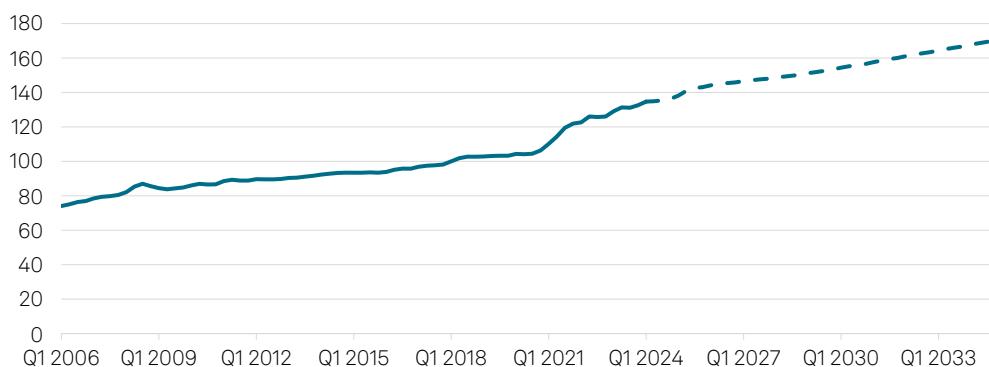
f--Forecast. Source: S&P Global Ratings, U.S. Census Bureau.

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Chart 4

Aggregate construction materials prices, 2006-2034

Q1 2018=100



Source: S&P Global Market Intelligence.

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Utilities face a new normal with respect to the underlying operating environment, but rate

hikes have begun to catch up. We do not expect flat expenses in the near term but believe the pace of the increase will be lower and more predictable; of particular importance, these increases are now factored into the revenue requirement for most utilities. In addition, the more sophisticated utilities have altered their procurement and inventory practices to better respond to disruptions in supply chain conditions. This contrasts with 2022 and 2023 when utilities were caught somewhat flat-footed in responding to inflation and supply chain difficulties. In addition to inflationary pressure, we expect costs will rise to meet state or federal regulatory mandates but given extended federal timelines, some utilities may have a longer runway for implementation. Labor costs also remain elevated, given the persistent hiring struggles utilities

face for skilled labor and the need to compete with private sector alternatives. According to the American Water Works Assn. compensation survey, nearly half of utilities are adding employees and all reported pay raises. These escalations may be offset by stabilizing energy costs, as coal plants' lifespan extends and support rises for natural gas, which could temper energy prices. However, states with strict renewable targets might see disproportionate cost increases, given the reduction of Inflation Reduction Act incentives and an unwillingness to leverage traditional energy sources.

For the most recent fiscal year, 2024, operating expenses rose 8%, moderating from the previous year's increase of 11% while income rose 6% compared with 5% the year before. Fiscal 2024 showed improved financial performance from the previous period as rate increases took hold but remained softer than in the two previous years. We expect margins will keep improving for large and medium utilities while smaller utilities could remain more exposed to financial volatility, given less flexibility on procurement and inventory decisions, limited economies of scale, more limited management capacity, and greater risks of unbudgeted capital expenditures.

Five Sector Trends

1. Rate structure is a key characteristic for financial stability

Several downgrades in 2024 and 2025 were caused by utilities' inability to recover rising operating costs in a timely manner, much less achieve full cost recovery, which is critical to the long-term viability of a utility. Cost recovery includes operations and maintenance, capital requirements, debt service, and fully funding reserves. Furthermore, weather volatility continues to affect revenue performance, especially for utilities without revenue stabilizing charges. Several recent wet years, for example, dampened coverage levels across the west, especially for utilities that lacked fixed or passive revenue components. Conversely, utilities in the southwest that implemented conservation without offsetting drought surcharges also reported weakened metrics. While we don't have a preferred rate structure, per our criteria, several structural characteristics support financial stability (see chart 5).

Chart 5

Benefits of different rate structures in U.S. water utilities



Source: S&P Global Ratings.

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Aligning rate structures with long-term capital, operational, and strategic needs improves credit quality, supporting a life-cycle approach to budgeting and capital management and addressing the differing risks inherent in utilities throughout different regions.

Affordability is a rising risk in the sector, with rates outpacing inflation and wage gains in the past decade. Although rates for the average ratepayer remain affordable, the more vulnerable quartile of the income spectrum faces significant affordability struggles: the average bill represents 2% of median household income but is three times higher for the lower quartile. This is meaningful, given that a normal single-digit rate hike equates to double-digit rate pressure on the bottom 20th percentile income. Given the historical trend of rate increases of about 5% per year for water and sewer service, national affordability struggles will remain a critical part of utility management. Further exacerbating the issue is the aging population and shrinking net population. Many utilities have been restructuring rates to address these concerns. Some have adopted customer assistance programs while others have moved to a more volumetric rate structure to reduce the fixed-cost burden on lower income users. There are benefits to a thoughtful affordability strategy, including reducing delinquencies and improving rate-setting flexibility. However, some approaches may have a cost, especially if transitioning to a fully volumetric approach, which can reduce budgetary predictability and revenue stability.

2. Resilience efforts are critical to offset credit risk associated with climate variability

Although the timing and magnitude of natural hazards are unknown, all regions are exposed to some degree of climate risk. Shifting weather patterns and more frequent and intense climate

events such as wildfire, droughts, and hurricanes, will require significant infrastructure hardening, risk management, and emergency preparedness. Operationally, severe weather can interrupt service, contaminate water supply, require higher levels of treatment, and damage assets. Aging infrastructure compounds the risk of disruption during severe climate events. Weak emergency preparedness and resilience efforts can expose a utility to both operational and health and safety risks and ultimately, lead to more likelihood of litigation and liabilities and weakened financial performance. However, greater climate risk doesn't preclude a utility from holding a high rating. Robust risk management policies, adaptive hardening, and strong liquidity can mitigate some climate risks.

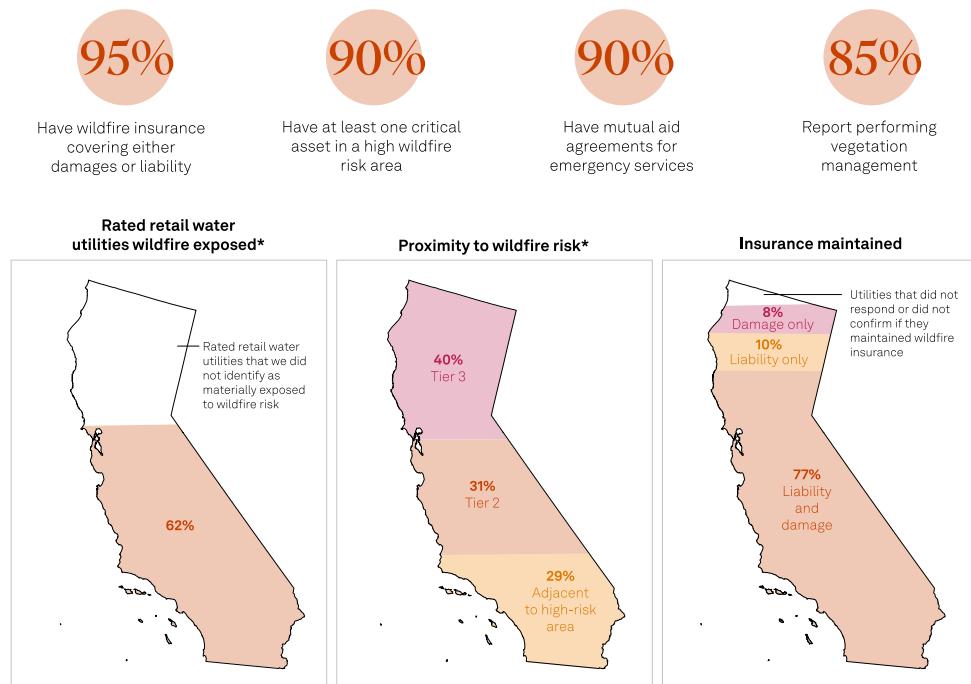
The western U.S. consists of numerous highly rated utilities with significant exposure to drought and hydrological volatility. These entities share many common attributes, including prudent water supply and demand management, revenue recovery mechanisms, and ample liquidity. Consensus on the Colorado River operating guidelines, including curtailment levels during drought conditions, remains elusive, with the seven states missing yet another critical deadline on Nov. 11, which has been extended by the federal government to February. Supply uncertainty and unmitigated water scarcity have resulted in negative rating actions throughout the west and southwest, which we expect will continue. We expect utilities exposed to water stress will require alternative supply to meet population and economic development needs, which is typically magnitudes more expensive. Failure to maintain sufficient supply can result in acute liquidity risk and threaten the underlying economy, as we have seen in Texas due, in part, to Mexico's continued failure to meet its obligations under the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty. We expect the current administration to continue to take steps to encourage compliance, including potentially increasing tariff levels. For more information, see "[Ongoing Water Delivery Uncertainty Intensifies Credit Pressure On Utilities In The Rio Grande Basin](#)," April 29, 2025.

Many climate and general event risks are addressed by the federal framework provided by the Americas Water Infrastructure Act, which requires water systems serving more than 3,300 people to complete a risk and resilience assessment (RRA) and emergency response plan (ERP). These frameworks continue to improve the resilience in the sector (see chart 6). Because the RRA must be continuously updated, most medium to large systems are keeping pace with prudent risk management. However, smaller systems are not required to complete these assessments, despite having equal climate (and cyber) exposure.

Chart 6

Wildfire risk management by California water utilities

In 2025, S&P Global Ratings surveyed publicly rated retail water utilities in California that it identifies as exposed to wildfire risks. Survey results found that approximately:



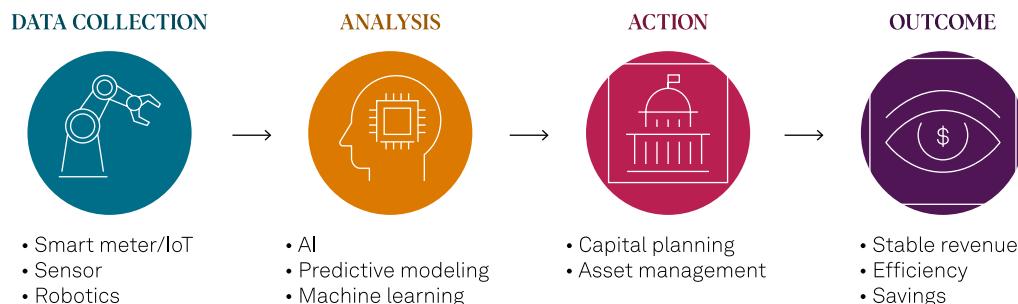
*Considering California Public Utilities Commission's High Fire Threat District (HFTD) mapping. Survey results as of July 31, 2025.
Note: Survey results include 52 publicly rated retail water utilities. Source: S&P Global Ratings.
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3. Technology is increasingly shaping the water and sewer utility sector, with implications for municipal credit quality

Utilities are adopting advanced data analytics and AI-driven tools to improve demand forecasting, asset management, and leak detection, enhancing operational efficiency and long-term capital planning. Smart meters and real-time monitoring support more stable cost recovery and revenue predictability, both critical to debt repayment capacity. At the same time, reliance on digital systems introduces cyber risk, which can disrupt billing, operations, and public confidence if not adequately managed through investment in security, insurance, and physical safeguards such as remote or automated shutoffs to protect public health and safety. For municipal bond investors, the sector's ability to balance innovation with cyber preparedness is becoming a key factor in assessing resilience and long-term credit strength.

Chart 7

AI opportunities for U.S. water utilities



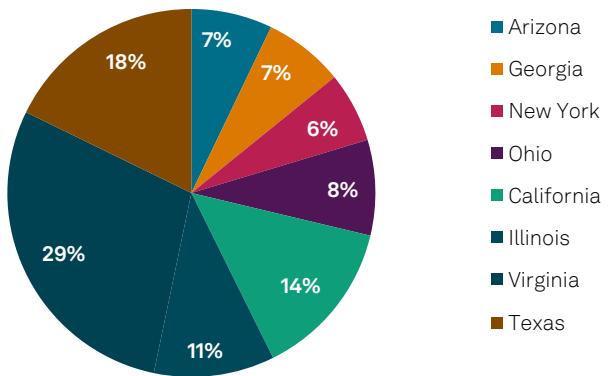
IoT—Internet of Things. Source: S&P Global Ratings.
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AI is expected to influence demand and potentially financial performance at utilities, given the need for significant additional data center capacity, and the associated water and power required. We expect data centers to bolster tax collections, especially during the construction period, as well as increase utility demand, given the significant amounts of water used for cooling. Revenue generation likely will be at least partially offset by greater capital and operating costs. Rising consumption or higher peak use, for example, could strain supply in areas experiencing water stress, which will require more expensive, alternative water sources. Furthermore, distribution infrastructure might be required for many sites, as most are built outside the service footprint. Operating expenses for treatment and energy also will likely rise. We expect closed loop systems, dry cooling, and a greater reliance on recycled water will reduce usage and offer attractive solutions for many data centers.

Resource availability decisions, however, are likely to play a role in data center development, as demonstrated recently in Arizona, Missouri, and Nevada, where there were limitations on resource burden and in some cases project cancellation due to resource concerns. Although fewer than 20 states have well-defined guidelines to address natural resource strain, we expect guidelines and regulation will continue to develop. Technology and concentration risk is meaningful, given the relatively shorter lease terms for many projects and the potential for the technology to become obsolete, resulting in stranded assets. The risk of a “pipeline to nowhere” is especially pronounced when the initial incentive structure shifts the costs for development to the residential rate base, stressing affordability. Utilities that transfer that risk and cost for capacity and supply acquisition to a third party will be better positioned.

Chart 8

Top states for data center development



■ Arizona

■ Georgia

■ New York

■ Ohio

■ California

■ Illinois

■ Virginia

■ Texas

Source: datacentermap.com.

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4. Aging infrastructure and demographics will exacerbate the operational and capital challenges in the sector

A substantial percentage of utility assets are approaching the end of their useful life. Degrading assets influence operations, reducing efficiencies and raising costs. Aged assets also are less resilient with respect to natural hazards, increasing the likelihood of disruptions to service and total failure. Unplanned or accelerated capital expenditures contributed to several downgrades in 2025, and we expect this trend will continue. Asset management policies remain a focus of our operational management assessment, but fewer than a third of the systems have a formal asset management program, according to a national survey.

These risks are compounded by the aging workforce, which has critical institutional knowledge of the systems, and by the complexities associated with assets' rising age. While we believe the aging assets and workforce are significant risks to the sector, we think improvements in technology and data could be a big part of the solution, filling stubborn workforce vacancies and identifying critical maintenance needs. Attracting and retaining talent will remain a focus in the sector; in addition, leveraging the expertise of outside consultants is a growing trend for small and medium-size utilities, in particular. Engaging external consultants is often a credit positive, depending on the nature of the contract and the engagement from utility staff.

5. Smaller systems remain exposed to greater credit vulnerabilities due to higher financial volatility and weaker management practices

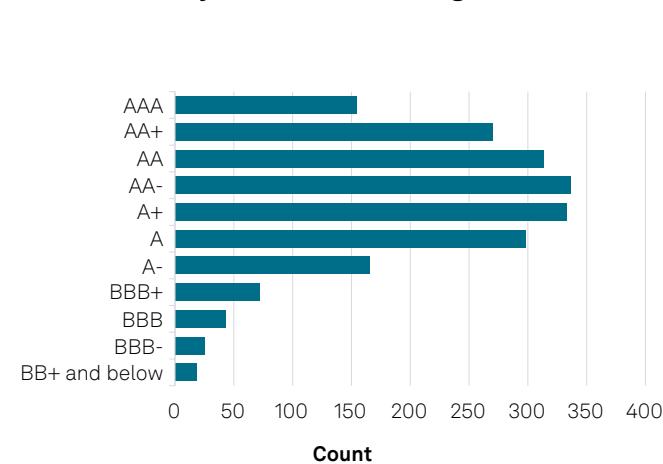
During the past two years, we lowered our ratings on more than 150 U.S. water and sewer utilities, the majority of which are small systems. Limited management practices, lower nominal liquidity, and weaker service territory characteristics have led to greater financial volatility, especially given the rising cost pressure vulnerabilities related to aging infrastructure, climate hazard exposures, and regulatory requirements. For more information, see "[U.S. Small Utility Systems Face Big Challenges To Maintain Credit Quality](#)," Sept. 10, 2025.

Ratings Performance

Negative rating actions significantly outpaced positive actions in 2025, continuing the trend observed since we changed our sector outlook to negative the previous June. Downgrades were more heavily concentrated in smaller systems, reflecting cost pressures and rising unbudgeted capital expenditures. Negative outlooks also continue to outpace positive outlooks, but the pace of negative rating actions slowed through the fourth quarter.

Chart 9

U.S. water utility revenue bond rating distribution

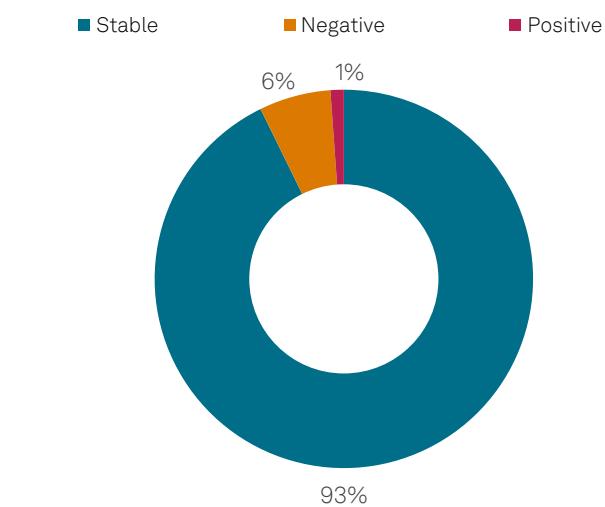


Source: S&P Global Ratings.

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Chart 10

U.S. water utilities outlook distribution



Source: S&P Global Ratings.

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