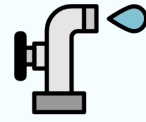


The Trilemma of a Water Utility

Challenge 1: Financial Health of the Utility

What is the current financial state of utilities in North Carolina?



31.6%

of public municipal systems are categorized as “financially distressed” by the NC Department of Environmental Quality.

88% are in rural counties

Service population size can influence a utility’s financial health. Recent studies by the American Water Works Association and the Environmental Finance Center indicate that the larger a utility’s service population, the more it can distribute costs, improving operating ratios and reducing monthly base costs for consumers.

Challenge 2: Water Affordability for Consumers

Average monthly residential water-related utility charges:

Water: \$54  | **Wastewater: \$71** 

At least **42%** of residential water and wastewater rate structures increased from 2024-2025.

How can we measure affordability?

The average percentage of a household’s income that goes toward water-related bills is 2.1% of a household income with a range of 0.37% - 12.92%.

Challenge 3: Water Quality and Safety

How safe is North Carolina’s water?

Throughout 2024, 2,790 Public Water Systems in North Carolina had a cumulative total of 3,991 violations of the Safe Drinking Water Act.

1,570 violations (40%) were resolved in 2024.

2,421 violations (60%) were unresolved in 2024.

The number of maximum contaminant level violations in 2024 was 88, with 28 being resolved. This type of violation is considered a **health-based violation**, as opposed to other violations, which include failures to submit a measurement or incorrect treatment techniques.

What costs are associated with safety upgrades?

Across North Carolina, it’s common for pipes to be **50 to 100 years old**. NCDEQ estimates that the capital cost of water and wastewater infrastructure needs in the state ranges from

\$17 to \$26 billion

over the next 20 years.

Emerging contaminants like **PFAS** play a role in these costs, since systems need to be upgraded with new treatment and filtering processes.

Systems have until 2029 to get updated with the EPA’s 2024 PFAS standards. This is costing some utilities

\$35 to \$75 million.

