



Project 2030: Water Main Replacement The Case for Investing in Water Reliability

Aging Infrastructure is a Reality

Water is essential to every aspect of households, community life, and the local economy. CHWD is committed to providing an uninterrupted source of safe and reliable water to its customers. Water sustains our families, feeds our yards, gardens and landscapes, supports our businesses, and maintains our quality of life. **Our water is only as reliable as the pipes that supply it to our communities.**

The District's service area urbanized mostly between

1960-1985. During that time, water mains were

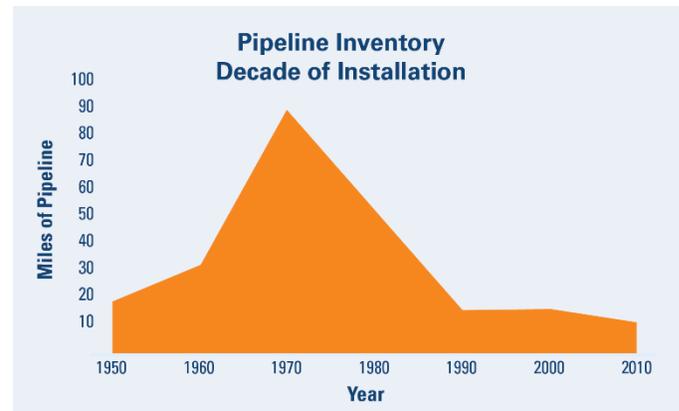
installed by private developers and inspected by CHWD staff. These water mains became donated assets to the District, and it became CHWD's responsibility to operate, maintain, and replace them.

Today, CHWD operates and maintains over 250 miles of pipeline that distribute water throughout the District's 12.8-square-mile service area. The life span of a water main is approximately 70 years, which means replacement must begin in 2030 to ensure long-term water reliability. With a technical team of engineering and financial experts, CHWD's Customer Advisory Committee evaluated how to phase, cost, and fund replacement of more than 70% of our water mains.

CHWD is not alone in this challenge. According to the American Water Works Association, most of the nation's aging water infrastructure needs to be replaced by 2040. Between 2012 and 2018, the rate of water main breaks increased by 27 percent, reaching an estimated 250,000 to 300,000 per year.¹ Water main failures can have catastrophic results to homes, businesses and the community.

- In Texas, catastrophic failures of utility infrastructure occurred during a severe winter storm in February 2021, resulting in loss of water and other utilities.
- In Jackson, Mississippi, 100-year-old pipes still in service led to more than 100 water main breaks in March 2021 and more than a month without water.
- In Los Angeles, California, recent water main breaks have led to a series of flooded neighborhoods, buckled streets, and debris flows.

By proactively planning for replacement of aging infrastructure, before critical failures occur, CHWD can continue to provide safe, clean, reliable water to customers.



¹ Steven Folkman, Water Main Break Rates in the USA and Canada: A Comprehensive Study (Logan: Utah State University, March 2018), https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1173&context=mae_facpub.



Water Sustains Us

Water is a precious resource. We use it every day for drinking, cooking, bathing, dish and clothes washing, toilet flushing, and to support our lawns and gardens. The District is dedicated to preserving these daily life-standards by maintaining and providing clean, reliable water for you and the future generations.

Out of Sight, But Not Forgotten

Just because water mains are underground and cannot be seen does not make them any less important. Reliable water mains deliver water to our residences and businesses. Water main failure can be caused by multiple issues including age, pipe material, and location (tree roots, spanning creeks, etc.). Failed water mains can lead to service disruptions and water loss.

The Case for Investing

CHWD is planning for the future today. Preparing to replace water mains before they reach critical condition is the safest and most cost-efficient way to address aging infrastructure. Proactively replacing pipes minimizes disruptions to homes, schools, and businesses - versus waiting for a crisis situation that could lead to service disruption and a greater economic and financial cost.

Community Leadership

Recognizing the significant need ahead, the CHWD Board of Directors called together a group of customers in 2018 and 2019 to study ways to fund the replacement of the District's water mains and put forth their recommendations. **The Customer Advisory Committee (CAC) is comprised of 24 community members who dedicated their time and effort on behalf of their neighbors and fellow business owners to explore, in-depth, a difficult problem and work through 21 separate scenarios to find the best and most fair way to phase and fund water main replacements for the CHWD community.**

The CAC worked with a technical team to consider the water main replacement options while analyzing key financial and technical issues that promote equity of funding between today's and future CHWD customers. The CAC then presented its recommendation to the CHWD Board of Directors on June 8, 2021. The Board approved the CAC's recommendation and developed a plan to fund work through 2080. The proposed plan implements a dedicated water main replacement charge, which promotes transparency and accountability.

Remaining ahead of the curve of anticipated water main replacement needs will minimize system failure, service disruption, and failure-related expenses due to deferred replacements.

Protecting Our Future Together

Reliable water delivery infrastructure promotes healthy, livable communities and strong local economies. When we all work together, we can accomplish a lot. With support from the current and next generation of CHWD's customers, we can protect our water future and keep taps flowing with clean, safe and reliable water for families, businesses, and the community, today and in the future.