



# Water and Wastewater Infrastructure Planning

PREPARING FOR THE FUTURE BY INVESTING TODAY

# Our Most Vital Resource Is One We Take for Granted

Turn on your tap, and clean water flows out. Flush your toilet, and dirty water goes away. When you have reliable water service, you don't think about the infrastructure that brings water to your home or business and then safely returns it to the environment.

But we all should.

## Westminster Water and Wastewater Infrastructure at a Glance



**\$4 billion** Water and wastewater system



Over **900 miles** of underground pipes



**4** Treatment facilities



**29** Pump/Lift stations



**5,000** Hydrants

**97%** of residents say that providing safe drinking water and sewer services is a top priority.

The City of Westminster takes our responsibility of providing water for our customers seriously. From the water in Standley Lake you kayak on, to the water your favorite local beer is made from, to the water you use every day in your business or home, our dedicated team of professionals protect every drop.

## The Challenge of Aging Infrastructure

The condition of Westminster's water and wastewater infrastructure is declining. A large portion of Westminster's water infrastructure is now close to 50 years old, with studies showing that just **44%** of its useful life remains. In fact, **25%** of this infrastructure is already past its designed life.

If we don't reinvest and the condition of our existing infrastructure continues to decline, our community will face increased maintenance costs and more expensive repairs in the future. By being aware of this challenge and addressing it head-on, the City of Westminster is in a much better position than many communities across the country.

Crews prepare to use the remotely controlled video camera used to inspect and assess the condition of Westminster's sewer pipes.

## Protecting Public Health and Maintaining Reliable Service

As part of our strategic goal of being financially sustainable, the City of Westminster is reinvesting in its existing infrastructure to protect public health by delivering safe, reliable drinking water and treating wastewater before releasing it back into the environment.

Every two years, staff conduct a comprehensive study of the city's water and wastewater infrastructure called Long Term Planning.

The city uses this planning to invest ratepayer funds as efficiently as possible, work toward stopping the decline of its infrastructure and maintain the levels of service our community depends on by systematically identifying the right projects at the right time.





## Setting Goals for Levels of Service

Long Term Planning begins with a review of level-of-service goals. These are the levels of service that the city commits to providing to support local businesses and residents' quality of life.

### Examples of these goals include:

- ▶ Fewer than 15 water main breaks per 100 miles of water pipe
- ▶ Fewer than two sewer backups per year
- ▶ Zero drinking water violations per year
- ▶ A maximum response time of one hour to water emergency calls

## Assessing the System

Once levels of service goals are established, staff takes inventory and assesses the condition of every piece of the city's water and sewer infrastructure that has a value of more than \$20,000.

### This inventory includes:

- ▶ When the infrastructure was installed
- ▶ How long industry standards expect it to last
- ▶ When it will need to be repaired
- ▶ The estimated cost of repairing or replacing it

The results from investigating more than 3,000 segments of pipes, pumps, tanks, and treatment equipment showed that our existing water and sewer infrastructure has depreciated by more than half.

## Prioritizing the Tasks Ahead

It is too costly to fix every piece of infrastructure that needs to be repaired or replaced. The city prioritizes projects by assessing the condition of the infrastructure plus the criticality, risk and vulnerability of that infrastructure. We ask, how many residents and businesses would a failure impact? What damage would be caused? Would this failure impact any critical facilities, such as hospitals or schools?

*In 2019, Westminster received the Directors Award from the Partnership for Safe Water for outperforming state and federal drinking water requirements.*



*The City of Westminster is investing \$15 million to rehabilitate the High Service Pump Station which delivers 80% of the water used in Westminster. Beginning in 2019, this project will replace aging equipment and add additional backup generator capacity to increase reliability in the event of a power outage.*



## Preparing for the Future by Investing in Existing Infrastructure

Long Term Planning identified more than **\$144 million** in water and wastewater infrastructure improvement projects for 2019 and 2020 and over **\$300 million** in projects over the next five years.

This process is the key to investing ratepayer fees in the most responsible manner to protect public health, provide reliable service and maintain the condition of our infrastructure.

The time to make infrastructure improvements is now. Failure to invest in these proactive updates our system needs today could result in costly failures and more expensive repairs and replacements in the future.

