

## Planning for the future

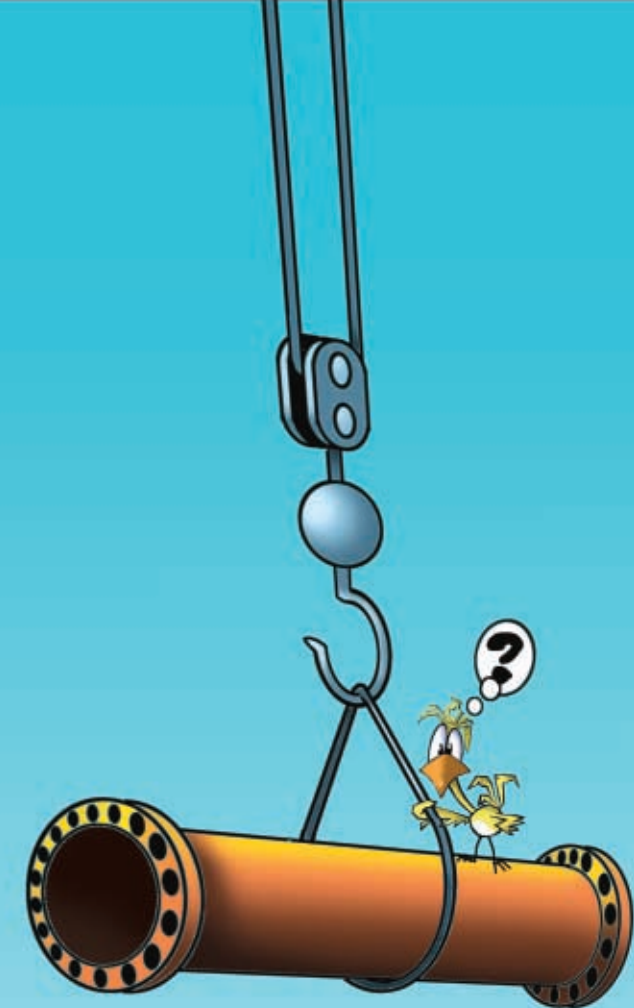
Water mains represent a significant and vital investment to WaterOne. The replacement value of WaterOne's 2400 miles of water main infrastructure is valued at approximately \$1.36 billion.

In keeping with its goal to be proactive, WaterOne has initiated an Asset Management Plan for identifying water main infrastructures that will need replacement in the future. This long-range strategy will help the utility identify, evaluate and implement distribution and transmission main replacements within a specific time frame.

Each year, when the program is fully implemented, mains that meet established replacement criteria will be scheduled for replacement.



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**What You Need to Know  
about Replacing  
Water Mains**



Replacing water mains is an integral part of running a water utility. Following is information that explains these types of projects in greater detail.

### When is the time?

- As the water main ages, the structural integrity can deteriorate and result in main breaks.
- Main breaks cause damage to streets, side walks, yards, etc., and repair of the main break causes water outages for our customers.
- Eventually the best economic and social solution is to install a new water main and change the customer's water service over to the new water main.

### Where to locate new main?

- The graphic below shows a typical 3-D view of existing buried utilities and trees within the right-of-way.
- Due to trees and other utilities behind the curb, the easiest path for the new water main is generally in the street, adjacent to the curb.

### Steps for installing the replacement main

- Work closely with cities during the design.
- Notify customers in advance.
- Several steps are involved during installation of new water main:

- (2) After new main is installed it is pressure tested and disinfected. Laboratory testing is performed to verify new main will provide safe water.
- (3) After new main passes tests, customer water service connections are disconnected from original main and reconnected to the new water main.
- (4) The old main remains in the ground, but is retired by disconnecting it from WaterOne's water distribution system.
- (5) The disturbed areas are returned to their original condition.

(1) Existing main remains in service.

