

Preparing the Pipe for Use

Consistent with American Water Works Association standards, as each segment of the Willamette Water Supply System (WWSS) pipeline is installed, it must be cleaned, tested, and disinfected prior to placing it into service. Due to the time between construction completion and WWSP's in-service date, each project completes these required steps prior to placing the pipeline into long-term storage, awaiting overall Willamette Water Supply System commissioning activities.

The cleaning, testing and disinfection process can be different depending on the pipe size and design specifications. Generally, the steps include:

1. A visual inspection of the interior of the pipeline.
2. Cleaning the inside of the pipeline. Depending on the size of the pipe, this include either flushing or sweeping and pressure washing.
3. Filling the pipe with potable water and letting it sit in the pipe for 48 hours before pressure testing.
4. Conducting pressure testing to ensure the pipe can withstand the water pressure without leaking.
5. Disinfecting and partially draining the pipe. Bacteriological analyses are conducted to ensure that the water samples are negative for coliform organism after disinfection. This process is repeated until the water samples have negative. Once the pipe has been disinfected, no entry into the pipe interior is allowed.
6. Dechlorinating and disposing of the water in accordance with all applicable regulations. Small pockets of water at low points remain in the pipe to maintain humidity and minimize cracking of the cement mortar lining.

When all the pipe segments have been installed, the entire system will be flushed and disinfected again before the WWSS is placed into operation.



After pipe installation, the pipes are flushed, cleaned and disinfected, and the water quality is tested. All of this testing ensures the pipes are ready to deliver clean and safe drinking water.

Learn More

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Our Future Water Supply

The Willamette Water Supply Program (WWSP) is a partnership between Tualatin Valley Water District, the City of Hillsboro and the City of Beaverton to develop the mid-Willamette River at Wilsonville as an additional water supply source. This new system, when operational in 2026, will provide a reliable water supply for the region while also helping water system operators balance supply during times of drought or other supply interruptions, and recover more quickly after a large natural disaster.