

PUBLIC WORKS

AT WORK

Check out what your local Wenatchee Public Works Department is up to.



The City of Wenatchee has 4 water reservoirs spread amongst the neighborhoods containing 1, 2, 4 and 8 million gallons of world-class drinking water that comes from four wells at our aquifer located near Lincoln Rock State Park.

Our 8 million gallon reservoir (8 mil) was built in the early 1960's due to a growing population and water demand in the Wenatchee valley. This reservoir along with our 4 million gallon reservoir are crucial infrastructure for our Cities drinking water. The levels of water in both these reservoirs is continuously monitored by our software system which signals the pumps when to send more water from the aquifer to maintain set water levels in the reservoirs.

Over the past few years it was noticed that an abnormally high amount of water was being used by our 8 million gallon reservoir. This led City staff to suspect there was a significant leak occurring. In February of this year, the Water Department shut down the intake and outtake lines to the reservoir and monitored the level of the water for several days. During this monitoring, staff found that the tank was leaking a significant amount of water each day. Next, the reservoir was drained to allow Water Department staff and an Engineering Consultant team to enter the reservoir for inspection and analysis.



Picture 1: Inside the 8 Mil Reservoir, looking at some of the 109 pillars.



Picture 2: These photos were building the 4 Million Gallon Reservoir in 1931. You can see steam engines in use.

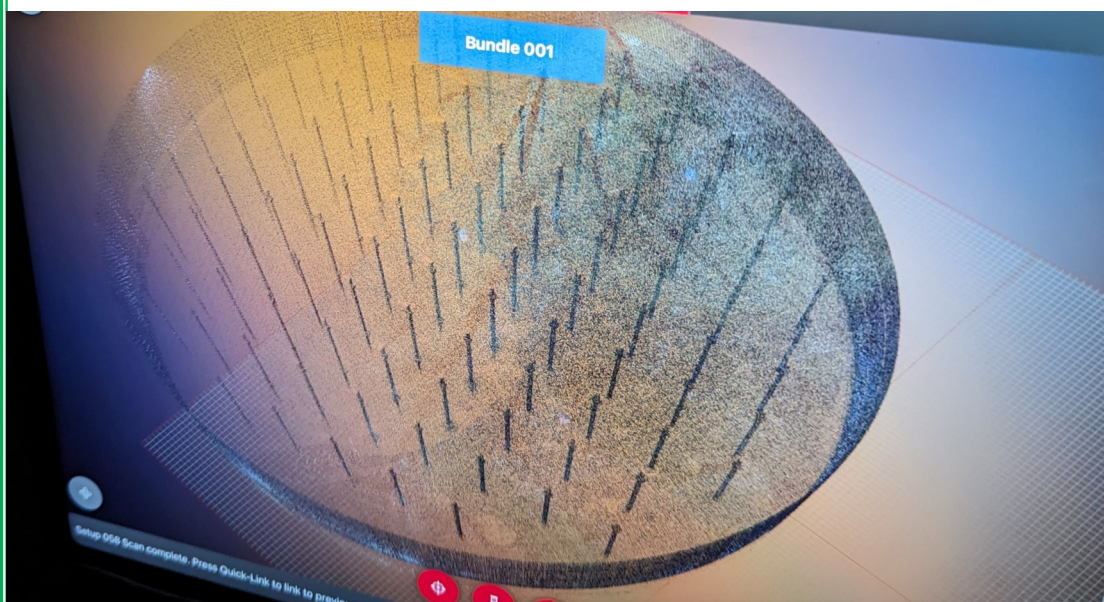


Picture 3: is the inside of the 4 Million Gallon Reservoir built in 1931. These are pillars similar to what is seen in the 8 mil reservoir.

Inside the reservoir there are 109 pillars holding up the roof. At each pillar and around the inside joint between the reservoir wall and floor there is a rubber seal to prevent the water from leaking out. City Staff and the Consultant found failures in the seals likely due to age (70+ years) and suspected that most of the leaking was attributed to these seal failures. Some temporary repairs were installed, but the reservoir needed to be refilled as soon as possible before the spring and summer peak water-use begins.

Now that we have diagnosed the problem a permanent repair solution will be determined and final repairs will be conducted during the winter of 2024-2025.

Thank you for reading and if you have any questions about this project or other work the City of Wenatchee Public Works Department is up to please visit our website at www.wenatcheewa.gov or call us at (509) 888-3200.



Picture 5: Scanning the inside of the 8 mil reservoir to help diagnose the issue.



Picture 4: Pillar with the seal and valves.