

Data Center Water Profile: The Dalles

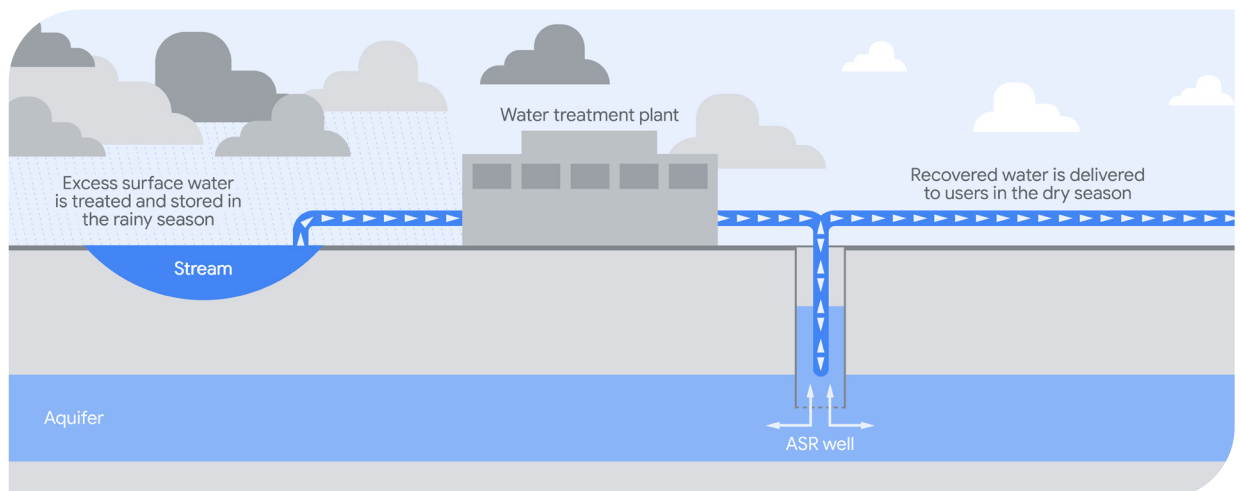


In 2006, Google opened a data center in The Dalles, Oregon, the first in what is now a global network of facilities that make products like Gmail, YouTube, Google Maps and Search possible. Since then, we have been proud to call The Dalles home, growing our presence from two small buildings to four buildings across two sites while supporting programs like the City’s free Wi-Fi network and STEM education in local schools. We are now planning a third campus on a former Superfund site that previously housed an aluminum smelter.

As part of the smelter redevelopment, we are working on a broad set of new water and sewer infrastructure projects, including wells, pipes, pumps, and tanks. Google is planning to pay for and construct all of the infrastructure and then deed it to the City of The Dalles once it is completed.

One of these projects is an innovative Aquifer Storage and Recovery (ASR) system, currently in the design phase, which will pump excess surface water into an existing aquifer for later use during drier months, functioning as an underground “savings account.” This surplus water available during the rainy season — which would otherwise be unusable as run off — will help meet the City’s higher demand in the summer and offset reliance on local streams. ASR is also expected to improve local water quality by storing treated surface water for the City and reducing its usage of untreated groundwater.

Aquifer Storage and Recovery (ASR) in The Dalles



In addition to infrastructure, we're in the process of permanently transferring groundwater rights associated with the former smelter site to the City of The Dalles. This will augment the City's existing water supplies from local streams and the underlying aquifer, making a previously private resource available for public benefit — be it a new business locating in The Dalles or residential growth. The community will have access to over 100 million additional gallons each year, beyond the amount needed to cool our planned data center expansion.

We are transferring water rights at no cost to the City as part of our global effort to support water security in communities where we operate. We use water to cool the data centers that make our products possible, and in The Dalles in 2021, we consumed almost 275 million gallons of water. For context, this is roughly the amount of water that three large cherry farms in Oregon might use in a year, and just over half of the groundwater used by the former smelter during peak operations.

By cooling our data centers with water instead of air, we use [less energy](#). Our second campus in The Dalles is the most energy-efficient in Google's fleet, with a "cooling overhead" of just [6%](#), compared to the [global industry average of 57%](#) reported for large-scale data centers.

In addition to investing in the resilience of the City's water supply and infrastructure for the community, we are helping fund several projects to enhance the health of the middle Columbia watershed where we operate.

Watershed forest restoration
The City of The Dalles is reforesting 150 acres within its municipal watershed that burned in a 2013 wildfire. The replanting will reduce runoff and erosion and improve surface water quality.

Irrigation piping project
The East Fork Irrigation District is converting 6 miles of an open irrigation canal to a pipeline system, preventing water loss from overflows and enhancing stream habitat for threatened salmon populations.

Increasing stream flows
The Wasco County Soil and Water Conservation District is piloting an underground water storage system that will increase stream flow and decrease water temperature in Fifteen Mile Creek, benefiting fish and local farmers.

As part of our commitment to the responsible use of water, we are investing for the long term, not just for our own operations but for the benefit of The Dalles and all users within the local watershed.