Fact Sheet Water Quality Lab



Water quality — the prime concern

As the primary wholesale water supplier in Santa Clara County, the Santa Clara Valley Water District (Valley Water) is dedicated to assuring a reliable supply of healthy, clean drinking water.

In support of this mission, Valley Water is home to a sophisticated laboratory dedicated to the safety of our tap water, source water and groundwater. Since 2008, the lab has been housed in a new, state-of-the-art building designed to maintain the specialized test equipment used to meet increased water-quality testing needs and respond to emerging contaminants and more stringent water quality standards.

A state-of-the-art lab

Valley Water is nationally recognized as a leader in water quality analysis and is accredited by the California Division of Drinking Water, Environmental Laboratory Accreditation Program. This state-of-the-art laboratory tests and quantifies the quality of Santa Clara County's drinking water.

The laboratory tests over 200,000 samples per year for over 353 regulated and unregulated contaminants, including: inorganic, organic and microbiological contaminants. The lab is staffed by chemists, microbiologists and support personnel to handle and analyze water samples from throughout Santa Clara County.

Overseeing safe drinking water

To ensure safe drinking water, the water quality lab tests the imported source water and local reservoir water before it arrives at Valley Water's water treatment plants. Valley Water upholds stringent testing standards to meet all state and federal regulations for drinking water safety. Valley Water is able to maintain high quality water deliveries to local water retailers by operating its own laboratory to enable technicians to quickly respond to changes in the raw source water.

Valley Water also has a program to supplement the regular testing recommended for all private well-owners.



Safe water in creeks and groundwater basins

The lab is responsible for monitoring the water quality in our creeks, reservoirs and groundwater basins. Water quality tests for watershed tributaries and reservoirs include: temperature, pH, dissolved oxygen levels, bacteria, ammonia, nitrate, phosphate, turbidity, and pesticides. The Valley Water laboratory also leads the effort to monitor other potential contaminants and invasive species that could effect our treated water such as zebra mussels, which can block water pipes.

Regulatory oversight

Valley Water's water quality lab is audited by regulatory agencies every two years. Annual performance testing features a battery of blind samples that are analyzed for the identity and concentration of several hundred consituents in each study. The Valley Water lab passes these tests with impeccable accuracy.

The Valley Water labratory also teams with other agencies to provide support through the California Mutual Aid Labratory Network and also the Federal Water Lab Alliance. These agency alliances provide a network to respond to intentional or unintentional threats to our water supply.

A "purpose-built" building

Valley Water's lab has been designed around state-of-the-art ventilation and isolation equipment. The \$17.5 million building is constructed as an "essential facility," with an upgraded design standard similar to hospitals, police and fire stations. The building is constructed to withstand a major earthquake, ensuring uninterrupted water quality testing support during an emergency situation.

Water quality reports

The water quality laboratory is responsible for ensuring that the drinking water that Valley Water provides is of the highest possible quality, meeting or exceeding all federal and state drinking water standards.

The laboratory accomplishes this by performing a range of analytic services on both untreated (source) and treated water, including organic, inorganic and microbiological analysis. The laboratory's water quality professionals perform water quality compliance and operational control monitoring, using methodology approved by the Environmental Protection Agency and state-of-the-art instrumentation.

The monthly water quality report shows the quality of source (untreated) water at each of Valley Water's three water treatment plants, and the treated water which the district delivers to water retailers in Santa Clara Valley.

To take a look at the monthly report, go to: www.valleywater.org/your-water/water-quality/water-quality-reports

Monitoring recycled water

The Valley Water lab monitors the quality of recycled water in Santa Clara County. The increased use and new standards for maintaining the quality of recycled water have added to the work load at the Valley Water lab. The Silicon Valley Advanced Water Purification Center began operations in 2014. A majority of its operational and compliance testing is done here at the water quality lab.



