# WATER QUALITY REPORT 2019



# SCOTTS VALLEY WATER QUALITY MAKES THE GRADE

This annual Consumer Confidence Report on water quality shows that last year, as in years past, the District's water met all State and Federal primary drinking water standards. Included in the report is information about the source water quality and treated water quality. It also explains how the water is treated and tested to ensure that it is always safe and refreshing to drink.



#### Start with a Local Water Supply

Drinking water comes from six wells pumping from the Lompico and Butano aquifers, which are part of the Santa Margarita Groundwater Basin.



#### Treat to Provide High-Quality Water

The Lompico and Butano aquifers are naturally high in iron and manganese. The District operates three treatment facilities that utilize oxidation and filtration to reduce these constituents and produce safe, high-quality water.



#### **Test to Ensure Quality**

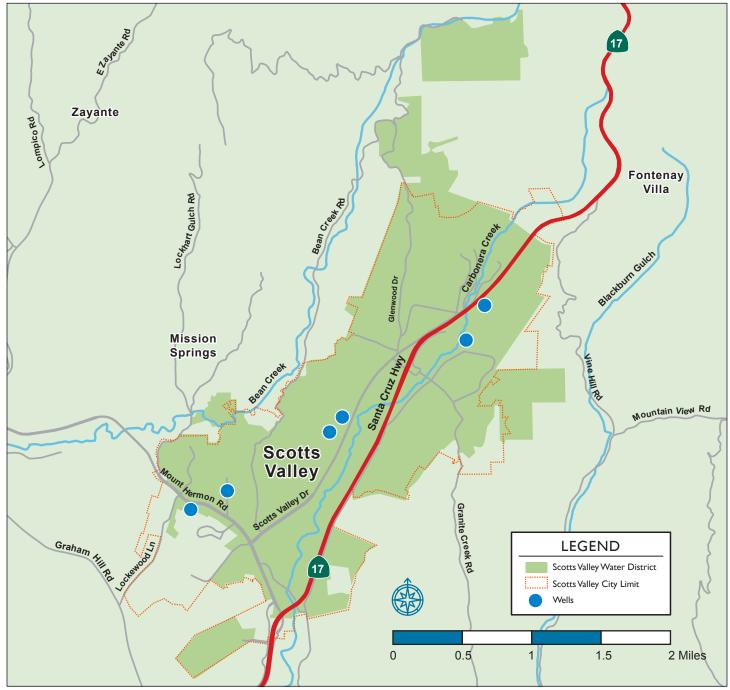
The District's state-certified water operators monitor the water system 24 hours a day, 7 days a week, to ensure the reliability and safety of our water. Depending on the constituent, the District conducts numerous tests on a daily, weekly, monthly, quarterly and annual basis.

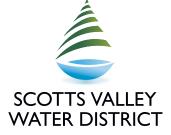


#### Providing Customers with Safe, Reliable, High-Quality Water is the District's Top Priority

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.







Scotts Valley Water District is a public agency providing water service to over 4,000 accounts within six square miles, including most of the City of Scotts Valley and portions of the unincorporated areas north of the city limits. The District serves as a leader in sustainable water management practices, embraces innovation and is a trusted source of water-related information in the community. The community of Scotts Valley places a high value on livability, innovation and planning for the future, and the District is proud to play a vital role in supporting those efforts by providing a reliable, highquality water supply.



### Source Water

Sources of drinking water (both tap and bottled water) include rivers, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Source water contaminants that may be present include:

- Microbial contaminants, such as viruses and bacteria, that may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agricultural applications, and septic systems.

### Source Water Assessment

In 2018, the District updated its 2001 Source Water Assessment of District wells that provide source water. These wells are considered most vulnerable to the activities associated with contaminants detected in the water supply from dry-cleaning, gasoline storage and distribution, and manufacturing. In addition, these wells are susceptible to negative impacts from

- Radioactive contaminants that can be naturally occurring or from oil and gas production and mining activities.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.



Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained

by visiting <u>epa.gov/safewater</u> or calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

abandoned water and monitoring wells, septic systems, transportation corridors, commercial parking lots, and sewer collection systems.

The complete assessment is available at the District Office – 2 Civic Center Drive, Scotts Valley – or by e-mail at <u>contact@svwd.org</u>.

### Water Quality Regulations

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain constituents in water provided by public water systems. State Board regulations also establish limits for constituents allowed in bottled water to provide protection for public health.

### When to Seek Health Care Advice

Some people may be more vulnerable to constituents in drinking water than the general population. Immunocompromised populations such as persons undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

# HOW CONSTITUENTS **ARE MEASURED**

# MILLIGRAMS per liter (mg/L) or parts per MILLION (ppm)







MICROGRAMS per liter (ug/L) or parts per BILLION (ppb)



One drop in 14,000 gallons



One second in nearly 32 years

NANOGRAMS per liter (ng/L) or parts per TRILLION (ppt)



One second in nearly 32,000 years



# WATER TEST RESULTS

This table lists all of the drinking water contaminants and other constituents detected between January I and December 31. Secondary standards relate to aesthetic aspects of water. Scotts Valley Water District water quality met or surpassed all State and Federal criteria for public health protection.

| Primary Health Standards  | MCL or MRDL   | PHG or MCLG | Range             | Average   | Violation                          | Typical Sources of Constituents  |
|---|---------------|-------------|-------------------|---|------------------------------------|--|
| Aluminum (ppm) <sup>1</sup>   | I             | 0.6         | ND - 0.028        | 0.002   | No                                 | Erosion of natural deposits; residual<br>from some surface water treatment<br>processes                      |
| Arsenic (ppb) <sup>2,3</sup>  | 10            | 0.004       | ND - 6.2          | 1.4   | No                                 | Naturally occurring minerals   |
| Fluoride from natural source (ppm)  | 2             | I           | 0.15 - 0.32       | 0.24  | No                                 | Naturally occurring minerals   |
| Monochlorobenzene (ppb) <sup>4</sup>  |               |             |                   |   |                                    | Discharge from industrial and agricultural<br>chemical factories and dry cleaning<br>facilities              |
| Nitrate as N (ppm)  | 10            | 10          | ND - ND           | ND  | No                                 | Naturally occurring minerals   |
| Gross alpha particle activity (pCi/L) <sup>1</sup>                          | 15            | None        | ND - 4.6          | 2.3   | No                                 | Naturally occurring minerals; last sampled<br>in 2010 and 2011; a new source was added<br>and tested in 2018 |
| Disinfection By-Products<br>& Disinfection Residual                         | MCL or MRDL   | PHG or MCLG | Range             | Average   | Violation                          | Typical Sources of Constituents  |
| Total Trihalomethanes (ppb)   | 80            | None        | ND - 48           | 12.59   | No                                 | By-product of drinking water chlorination  |
| Haloacetic Acids as HAA5 (ppb)  | 60            | None        | ND - 4.8          | 1.7   | No                                 | By-product of drinking water chlorination  |
| Chlorine Residual (ppm)   | 4             | 4           | 0.21 - 1.42       | 0.79  | No                                 | Drinking water disinfectant added for treatment  |
| Residential Tap Monitoring <sup>2</sup>                                     | MCL           | PHG or MCLG | Sites<br>Sampled  | 90th<br>Percentile  | Sites<br>Exceeding<br>Action Level | Typical Sources of Constituents  |
| Lead (ppb)  | 15            | 0           | 31                | 2.4   | 0                                  | Internal corrosion of household plumbing;<br>erosion of natural deposits                                     |
| Copper (ppm)  | 1.3           | 0.3         | 31                | 0.3   | 0                                  | Internal corrosion of household plumbing;<br>erosion of natural deposits                                     |
| Lead Sampling of Drinking Water in California Schools<br>(AB746/HSC-116277) |               | Year Tested | Schools<br>Tested | Typical Sources of Constituents   |                                    |  |
| Lead  |               | 2017        | 3                 | Internal corrosion of household plumbing; erosion of natural deposits   |                                    |  |
| Secondary Aesthetic Standards   | Secondary MCL | Range       | Average           | Typical Sources of Constituents   |                                    |  |
| Aluminum (ppm)  | 0.2           | ND - 0.028  | 0.002             | Erosion of natural deposits; residual from some surface water treatment processes   |                                    |  |
| Chloride (ppm)  | 500           | 24 - 64     | 33                | Naturally occurring minerals  |                                    |  |
| Iron (ppb)  | 300           | ND - 21     | 2                 | Naturally occurring minerals  |                                    |  |
| Manganese (ppb)   | 50            | ND - 3.2    | 0.3               | Naturally occurring minerals  |                                    |  |
| Odor Threshold @ 60 C (TON)   | 3             | ND          | ND                | Naturally occurring minerals  |                                    |  |
| Specific Conductance (MHOS/CM)  | 1,600         | 480 - 770   | 625               | Naturally occurring substance that form ions in water   |                                    |  |
| Sulfate (ppm)   | 500           | 77 - 110    | 89                | Naturally occurring minerals  |                                    |  |
| Turbidity (NTU)   | 5             | ND - 1.9    | 0.25              | Naturally occurring minerals  |                                    |  |
| Total Dissolved Solids (ppm)  | 1,000         | 290 - 470   | 404               | Naturally occurring minerals  |                                    |  |
| Other Monitoring Results  |               | Range       | Average           |   |                                    |  |
| pH (UNITS)  |               | 7.2 - 8.4   | 8.0               | NOTES   |                                    |  |
| Sodium (ppm)  |               | 37 - 62     | 44                | <ul> <li>Except where noted, water samples for this report were collected<br/>from District treatment plants, the water distribution system, and</li> </ul>   |                                    |  |
| Total Hardness <sup>3</sup> as CaCO <sub>3</sub> (ppm)                      |               | 120 - 330   | 236               | <ul> <li>customer homes throughout the 2019 calendar year.</li> <li>The treatment processes effectively remove concentrations of iron, manganese, arsenic, sulfide, and reduce other constituents inherent</li> </ul>                                 |                                    |  |
| Calcium (ppm)   |               | 37 - 71     | 61                |   |                                    |  |
| Carbonate as CO <sub>3</sub> (ppm)  |               | ND - 4.3    | 2.2               | <ul> <li>in the groundwater supply.</li> <li>The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants rarely change.</li> <li>Definitions and footnotes on next page.</li> </ul> |                                    |  |
| Magnesium (ppm)   |               | 5.8 - 38    | 23.7              |   |                                    |  |
| Potassium (ppm)   |               | 1.7 - 2.6   | 2.1               |   |                                    |  |
| Total Alkalinity (ppm)  |               | 67 - 260    | 174               |   |                                    |  |
| Orthophosphate as PO <sub>4</sub> (ppm)                                     |               | ND - 2.1    | 1.42              |   |                                    |  |

# Definitions

**Constituents:** Chemical and physical elements contained in water.

**Grains per Gallon**: A unit of hardness where 17.1 parts per million equals 1 grain per gallon.

Turbidity: A physical characteristic of water that makes the water appear cloudy. The condition is caused by the presence of suspended matter. It's monitored because it is a good indicator of the effectiveness of the filtration system.

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. **MHOS/CM:** Micromhos per Centimeter: An indicator of dissolved minerals in the water.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

NA: Not applicable.

ND: Not detected at testing limit.

NTU: Nephelometric turbidity unit, indicating the clarity of the water.

pCi/L: Picocuries per liter is a measure of radio-activity.

**PDWS**: Primary Drinking Water Standards: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**ppb**: Parts per billion or micrograms per liter. I ppb equals 0.001 ppm and is equivalent to about one drop in 14,000 gallons of water.

**ppm**: Parts per million or milligrams per liter. I ppm equals 1,000 ppb and is equivalent to about one drop in 14 gallons of water.

PHG: Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Total Dissolved Solids: An indicator of dissolved minerals in the water.

TON: Threshold Odor Number: The unit of odor.

**90TH Percentile**: The third highest sample result of 20 sample results.

#### FOOTNOTES

<sup>1,2</sup> All testing is from 2019, except for radiological constituents which were drawn from three treatment plants in September 2010 and 2011. <sup>3</sup> Average Total Hardness for 2019 was 13.8 grains per gallon.

## COVID-19

The novel coronavirus has no impact on the quality or supply of tap water. As always, tap water has remained both available and safe during the COVID-19 pandemic. The District uses chlorine to eliminate pathogens, which includes viruses. This ensures safe drinking water for all District customers.

#### **Got Questions?**

Contact Operations Manager David McNair at (831) 600-1903.

#### How to Get Involved

Customers are invited to attend monthly board meetings on the second Thursday of every month at 7 pm at the District Office, 2 Civic Center Drive, Scotts Valley.

Download this report at: svwd.org/sites/default/files/documents/reports/2019CCR.pdf

