

WATER QUALITY REPORT 2018

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.



We Start with a Local Water Supply

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



We Provide Advanced Treatment

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.



We 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 Our 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

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, high-quality water supply.

Intertie with San Lorenzo Valley Water District

Through the intertie connecting the Scotts Valley Water District and the San Lorenzo Valley Water District customers may receive water produced by the neighboring water district. The purpose of this intertie is to provide mutual aid between the two districts in the event of a water emergency. No water was exchanged between the two districts in 2018. For San Lorenzo Valley Water District water quality information, visit <u>slvwd.com/</u> <u>ccr/SLVWD-2018-CCR.pdf</u>.

DRINKING WATER QUALITY

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.

- 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 (800-426-4791).

Source Water Assessment

In 2018, the District updated its 2001 Source Water Assessment of District wells that provide our 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 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. Immuno-compromised 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 (800-426-4791).



HOW CONSTITUENTS **ARE MEASURED**

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



One drop in 14 gallons



One second in 11.5 days

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 drop in 14,000,000 gallons

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 refer to aesthetic aspects of water. Scotts Valley Water District water quality met or surpassed all State and Federal criteria for public health protection.

	X					
Primary Health Standards	MCL or MRDL	PHG or MCLG	Range	Average	Violation	Typical Sources of Constituents
Aluminum (ppm) ¹	I	0.6	ND - 0.22	0.01	No	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic (ppb) ^{2,3}	10	0.004	ND - 8.9	1.88	No	Naturally occurring minerals
Fluoride from natural source (ppm)	2	I	0.30 - 0.53	0.42	No	Naturally occurring minerals
Monochlorobenzene (ppb)⁴	70	70	ND - 0.75	0.04	No	Discharge from industrial and agricultural chemical factories and dry cleaning facilities
Nitrate as N (ppm)	10	10	ND - 0.34	0.07	No	Naturally occurring minerals
Gross alpha particle activity (pCi/L) ⁵	15	None	ND - 3.8	0.17	No	Naturally occurring minerals; last sampled in 2010 and 2011; a new source was added and tested in 2018
Disinfection By-Products & Disinfection Residual	MCL or MRDL	PHG or MCLG	Range	Average	Violation	Typical Sources of Constituents
Total Trihalomethanes (ppb)	80	None	ND - 54	16.44	No	By-product of drinking water chlorination
Haloacetic Acids as HAA5 (ppb)	60	None	1.5 - 4.6	1.51	No	By-product of drinking water chlorination
Chlorine Residual (ppm)	4	4	0.05 - 1.51	0.77	No	Drinking water disinfectant added for treatment
Residential Tap Monitoring ⁶	MCL	PHG or MCLG	Sites Sampled	90th Percentile	Sites Exceeding Action Level	Typical Sources of Constituents
Lead (ppb)	15	0	31	2.4	0	Internal corrosion of household plumbing; erosion of natural deposits
Copper (ppm)	1.3	0.3	31	0.3	0	Internal corrosion of household plumbing; erosion of natural deposits
Lead Sampling of Drinking Water in California Schools (AB746/HSC-116277)		Year Tested	Schools 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 - 0.22	0.01	Erosion of natural deposits; residual from some surface water treatment processes		
Chloride (ppm)	500	24 - 64	37	Naturally occurring minerals		
Iron (ppb)	300	ND - 84	14.92	Naturally occurring minerals		
Manganese (ppb)	50	ND - 9.5	1.34	Naturally occurring minerals		
Odor Threshold @ 60 C (TON)	3	ND	ND	Naturally occurring minerals		
Specific Conductance (MHOS/CM)	I,600	580 - 940	758	Naturally occurring substance that form ions in water		
Sulfate (ppm)	500	77 - 130	93	Naturally occurring minerals		
Turbidity (NTU)	5	ND - 0.65	0.26	Naturally occurring minerals		
Total Dissolved Solids (ppm)	1,000	300 - 580	418	Naturally occurring minerals		
Other Monitoring Results		Range	Average	NOTES Except where noted, water samples for this report were collected from District treatment plants, the water distribution system, and 		
_P H (UNITS)		7.2 - 8.8	8.0			
Sodium (ppm)		34 - 120	55			
Total Hardness ⁷ as CaCO3 (ppm)		120 - 340	230	customer	customer homes throughout the 2018 calendar year.	
Calcium (ppm)		38 - 74	57	 The treatment processes effectively remove concentrations of iron, manganese, arsenic, sulfide, and reduce other constituents inherent in the groundwater supply. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants rarely change. 		
Carbonate as CO3 (ppm)		ND - 6.2	3.3			
Magnesium (ppm)		5.7 - 39	19.2			
Potassium (ppm)		1.5 - 3.2	2.2			
Total Alkalinity (ppm)		160 - 310	248	Definition	Definitions and footnotes on next page.	
Orthophosphate as PO4 (ppm)		0.31 - 2.1	1.42			

Definitions

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. We monitor it because it is a good indicator of the effectiveness of our 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.

FOOTNOTES

¹ Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.

² Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

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.

³ While our drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. **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.

⁴ Some people who use water containing monochlorobenzene in excess of the MCL over many years may experience liver or kidney problems.

⁵⁶ All testing is from 2018, except for radiological constituents which were drawn from three treatment plants in September 2010 and 2011.

⁷ Average Total Hardness for 2018 was 13.4 grains per gallon.

You may download this report at svwd.org/sites/default/files/documents/reports/2018CCR.pdf

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.

