

# QUAIL VALLEY WATER DISTRICT

#### **BOARD OF DIRECTORS**

Mike Biglay
Jean Grodewald
Rita Leonard Phillips
Enrique Lopez
Joan Tyer

### **2020 Consumer Confidence Report**

#### **Water System Information**

Water System Name: QUAIL VALLEY WATER DISTRICT

Report Date: May 31, 2021

Type of Water Source(s) in Use: Groundwater (WELLS)

Name and General Location of Source(s): Water supply consists of 1 well located within District boundaries (Montclaire Well)

Drinking Water Source Assessment Information: The most recent drinking water source assessment for the Montclaire well was completed in October of 2017. No contaminants associated with the identified activities were detected in the water supply. The Montclaire well is considered most vulnerable to these activities:

- 1. Septic systems,
- 3. Drinking water treatment plants,
- 5. Above ground storage tanks,
- 2. Water supply wells,
- 4. Transportation corridors (roads),
- 6. Surface water (streams).

Time and Place of Regularly Scheduled Board Meetings for Public Participation:

Regular meetings of the Board of Directors are held at the District Office (24750 Sand Canyon Road) at 8:30 A.M. on the last Saturday of each month.

For More Information, Contact: Randy Hardenbrook, (661) 822-1923

## **About This Report**

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2020 and may include earlier monitoring data.

# Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse **QUAIL VALLEY WATER DISTRICT** a 24750 Sand Canyon Road, Tehachapi, (661) 822-1923 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 QUAIL VALLEY WATER DISTRICT以获得中文的帮助: 24750 Sand Canyon Road, Tehachapi, (661) 822-1923

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa **QUAIL VALLEY WATER DISTRICT**, 24750 Sand Canyon Road, Tehachapi o tumawag sa (661) 822-1923 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ **QUAIL VALLEY WATER DISTRICT**] tại 24750 Sand Canyon Road, Tehachapi, (661) 822-1923 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau **QUAIL VALLEY WATER DISTRICT** ntawm 24750 Sand Canyon Road, Tehachapi, (661) 822-1923 rau kev pab hauv lus Askiv.

#### **Terms Used in This Report**

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	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.
Maximum Contaminant Level Goal (MCLG)	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 (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	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.

Term	Definition						
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.						
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.						
Public Health Goal (PHG)	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.						
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.						
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.						
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.						
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.						
ND	Not detectable at testing limit.						
ppm	parts per million or milligrams per liter (mg/L)						
ppb	parts per million or milligrams per liter (mg/L)						
ppt	parts per trillion or nanograms per liter (ng/L)						
ppq	parts per quadrillion or picogram per liter (pg/L)						
pCi/L	picocuries per liter (a measure of radiation)						

## Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, 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.

Contaminants that may be present in source water include:

• Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

#### **Regulation of Drinking Water and Bottled Water Quality**

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

#### **About Your Drinking Water Quality**

#### **Drinking Water Contaminants Detected**

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

 Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	(In a month) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	s in MCL		Typical Source of Bacteria
Fecal Coliform or E. coli (State Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	None	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	(In the year) 0	0	(b)	0	Human and animal fecal waste

<sup>(</sup>a) Two or more positive monthly samples is a violation of the MCL

Table 2. Sampling Results Showing the Detection of Lead and Copper

Lead and Copper	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant	
Lead (ppb)	2019	12	0	2	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	
Copper (ppm)	2019	12	0.16	0	1.3	0.3	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

<sup>(</sup>b) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**Table 3. Sampling Results for Sodium and Hardness** 

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2020	27		None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2020	260		None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Turbidity (NTU)	2020	1.9	-	TT	N/A	Soil runoff
Radium 228 (pCi/L)	2016/2017	0.87	ND-2.63	5	0.019	Erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2019	2.16		15	(0)	Erosion of natural deposits
Flouride (mg/L)	2020	0.16		2		Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
TTHMs (Total Trihalomethanes) (µg/L)	2020	1.8	0.50-3.1	80	N/A	Byproduct of drinking water disinfection
HAA5 (Sum of 5 Haloacetic Acids) (µg/L)	2020	<2.0		60	N/A	Byproduct of drinking water disinfection
Chlorine (mg/L)	2020	.93	0.23-1.74	[4.0 (as Cl <sub>2</sub> )]	[4.0 (as Cl <sub>2</sub> )]	Drinking water disinfectant added for treatment

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color (Units)	2020	15		15		Erosion of natural deposits; residual from surface water treatment processes
Iron (µg/L)	2020	650 *	550-720 *	300		Leaching from natural deposits; industrial wastes
Manganese (µg/L)	2020	63 *	58-67 *	50		Leaching from natural deposits
Turbidity (NTU)	2020	1.9	14	5		Soil runoff
Total Disolved Solids (TDS) (mg/L)	2020	370		1000		Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	2020	570		1600		Substances that form ions when in water; seawater influence
Chloride (mg/L)	2020	18		500		Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	2020	41	-	500		Leaching from natural deposits; industrial wastes

**Table 6. Detection of Unregulated Contaminants** 

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
None	N/A	N/A	N/A	N/A	N/A

#### Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about

drinking water from their health care providers. U.S. EPA/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 (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Quail Valley Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <a href="http://www.epa.gov/lead">http://www.epa.gov/lead</a>.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Exceedance of secondary drinking water standards for Iron	Water produced by the Montclaire well exceeds secondary drinking water standards for Iron	1/1/2020- 12/15/2020	Water treatment installed to remove iron and manganese to levels below MCL	There are no PHGs, MCLGs, or mandatory standard health effects language for these
Exceedance of secondary drinking water standards for Manganese	Water produced by the Montclaire well exceeds secondary drinking water standards for Manganese	1/1/2020- 12/15/2020		constituents because secondary MCLs are set on the basis of aesthetics.

In December of 2020, as part of the Proposition 84 funded arsenic remediation project, the newly installed filtration system was placed into operation. The filtration system consists of two Greensand filters designed to remove iron and manganese from the water produced by District wells to levels below the State standards. The filters have exceeded expectations and all samples for iron and manganese from the finished water indicate that iron and manganese levels are below detectable limits. Three additional samples were collected in January of 2021 from various locations in the distribution system and, of those three samples, all had manganese levels below detectable limits and only one indicated a trace of iron remaining (39 parts per billion, well below the secondary maximum contaminant level of 300 parts per billion).