

2018 WATER QUALITY REPORT

Water Quality Report – 2018 | Covering Calendar Year – 2017

Our Promise to You: *Quality. Delivered.*

Truckee Meadows Water Authority (TMWA) is dedicated to providing reliable service and delivering high-quality drinking water to more than 400,000 residents throughout the Reno-Sparks area. In accordance with the US Environmental Protection Agency (EPA) Consumer Confidence Rule, I am pleased to present TMWA's annual Water Quality Report on behalf of our staff and board of directors.

This report, which is based on data collected in the 2017 calendar year, contains information about the source of your drinking water and how it compares to drinking water standards established by the EPA. We are providing this report electronically. If you would like a print copy mailed to you, please call Water Quality Senior Chemist Craig Moyle at (775) 834-8130 or contact him by email at cmoyle@tmwa.com.

Information in this report reinforces TMWA's standing among the nation's leaders in water quality—a distinction recognized by the Partnership for Safe Water. The Partnership ranks TMWA's Chalk Bluff Water Treatment Plant among the highest-performing water treatment plants in the country for individual filter performance. While we appreciate this recognition, it simply reflects what has always been our priority: maintaining and improving our water system's infrastructure for the safety of our customers and ensuring that the water delivered to you is of exceptional quality.

If you have any general questions about water quality, please call our Water Quality Department at (775) 834-8118. For information on other water topics, go to www.tmwa.com to find helpful resources as well as a complete list of the phone numbers for TMWA's departments. We know water has a direct connection to the quality of life in our community, and we are always ready to hear from you.

Yours in good health,



Mark Foree, General Manager



What regulations does TMWA water meet?

TMWA adheres to all federal, state, and local water regulations set forth by the Environmental Protection Agency, State of Nevada Division of Environmental Protection, and the Washoe County Health District. TMWA is required to monitor and meet regulatory standards for more than one hundred contaminants. All water delivered to customers is treated and must adhere to some of the strictest drinking water regulations in the world.



Your water comes from the following wells:

SOURCE NAME	SOURCE WATER TYPE
TRUCKEE CANYON WELL 1	GROUNDWATER
TRUCKEE CANYON WELL 3	GROUNDWATER

Your drinking water is supplied from groundwater sources. We add a disinfectant to protect against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of your source water. For results of the Source Water Assessment, please contact us.

MESSAGE FROM THE EPA

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

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 before we treat it include:

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

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

Pesticides and herbicides, may come from a variety of sources such as storm water run-off, agriculture and residential use.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We aim to provide water that meets EPA's regulations. We treat your water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

WATER QUALITY DATA

The tables below list all drinking water contaminants that were detected during the 2017 calendar year. The presence of these contaminants at current levels does not indicate a potential health risk. Unless noted, the data presented in this table is from the testing done January 1–December 31, 2017. Due to the consistent presence of contaminants that do not cause a health concern, the state suggests that not all contaminants be tested for every year. Some of the data, though representative of the water quality, is more than one year old. We can assure you that your water is safe for human consumption.

CONTAMINANTS	MCLG OR MRDLG	MCL, TT, OR MRDL	2017 Result	Range Low	Range High	Sample Year	Violation?	Typical Source
DISINFECTANTS & DISINFECTANT BY-PRODUCTS (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl ₂) (ppm)	4	4	0.96	0.20	1.18	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	ND	ND	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	3.6	3.6	3.6	2017	No	By-product of drinking water disinfection
INORGANIC CONTAMINANTS								
Arsenic (ppb)	0	10	7.2	4.1	8.9	2017	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.0193	0.0193	0.0193	2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS								
Total Coliform (% positive samples/month)	0	5	0	0	0	2017	No	Naturally present in the environment
RADIOACTIVE CONTAMINANTS								
Alpha emitters (pCi/L)	0	15	0.14	0.14	0.14	2017	No	Erosion of natural deposits
SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES								
Di (2-ethylhexyl) phthalate (ppb)	0	6	ND	ND	0.8	2017	No	Discharge from rubber and chemical factories
CONTAMINANTS	MCLG	AL	2016 Result	Sample Date	Exceeds AL?	Typical Source		
INORGANIC CONTAMINANTS								
Copper-action level at consumer taps (ppm)	1.3	1.3	0.275	2016	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead-action level at consumer taps (ppb)	0	15	2.65	2016	No	Corrosion of household plumbing systems; Erosion of natural deposits		

ADDITIONAL INFORMATION FOR LEAD

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. TMWA 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. 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 or at <http://www.epa.gov/safewater/lead>.

ADDITIONAL INFORMATION FOR ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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.

WATER QUALITY MONITORING VIOLATION

Truckee Canyon public water system (PWS ID NV0000978) did not test the contaminants listed in the table below as required by State and Federal laws. Therefore, during that monitoring period, Truckee Canyon PWS did not know whether the contaminants were present in the drinking water.

SOURCE ID	SOURCE	CONTAMINANT	Monitoring Period	Number of Samples Req'd	Number of Samples Taken
TP02	Fe, Mn and As Treatment Plant	SOCs Phase 2 & 5	3rd Quarter 2017	1	0
TP02	Fe, Mn and As Treatment Plant	VOCs Phase 2 & 5	3rd Quarter 2017	1	0

SOC = synthetic organic chemicals

VOC = volatile organic chemicals

WHAT DOES THIS MEAN TO ME?

This is not an emergency. Although this event did not pose a safety risk and does not require that you take action, you, as a customer of Truckee Canyon PWS, have the right to know what happened and how we have corrected the situation.

HOW DID THIS VIOLATION OCCUR?

Beginning second quarter 2017, Truckee Canyon PWS was required to collect four consecutive quarters of the contaminants listed in the table above. However, Truckee Canyon PWS failed to collect the third quarter sample within the required monitoring period.

WHAT IS TRUCKEE CANYON PUBLIC WATER SYSTEM DOING CORRECT THIS ISSUE?

As soon as the oversight became evident, staff took immediate action and collected samples for the contaminants listed above. All prior and subsequent quarters were monitored according to State and Federal laws. A sample will be collected third quarter 2018 to make up for the missed quarter in 2017.

TERMS AND ABBREVIATIONS

In this report you may find terms or abbreviations that may not be familiar. To help you better understand these terms, we have provided the following definitions:

UNIT DESCRIPTIONS	
Term	Definition
ug/L	Number of micrograms of substance in one liter of water
ppm	Parts per million, or milligrams per liter (mg/L)
ppb	Parts per billion, or micrograms per liter (µg/L)
pCi/L	Picocuries per liter (a measure of radioactivity)
NTU	Nephelometric Turbidity Units: Turbidity is a measure of the cloudiness of the water.
% positive samples/month	Percent of samples taken monthly that were positive
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended

IMPORTANT DRINKING WATER DEFINITIONS	
Term	Definition
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 allow for a margin of safety.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	Maximum Residual Disinfection Level Goal: 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.
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.
MNR	Monitored Not Regulated

WHERE CAN I GET WATER QUALITY DATA?

The Water Quality section of our website, tmwa.com, provides water quality information for different areas of our service territory. We also maintain a news and information page with fact sheets on water quality issues. Additional information on our water sources, distribution, and treatment can also be found online. If you have questions or need more information, please contact any of the following staff:

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