

Truckee Donner Public Utility District

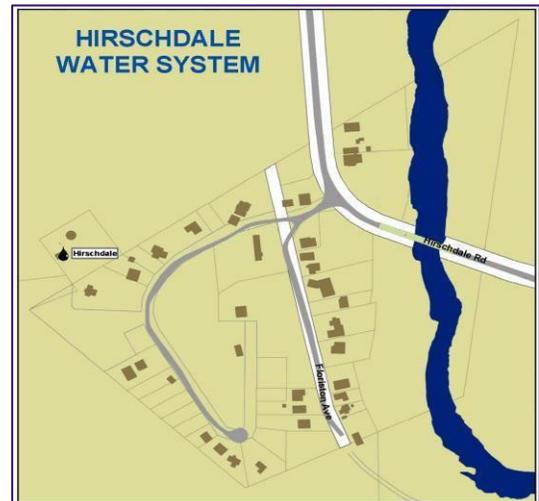
2016 WATER QUALITY REPORT

Hirschdale Water System PWS# 2910010

Customer Views Are Welcome

If you are interested in participating in the decision-making process of the Truckee Donner Public Utility District, you are welcome to attend Board meetings.

The Board of Directors meet at 6:00 PM on the first and third Wednesday of each month in the TDPUD Board room located at 11570 Donner Pass Road, Truckee, California. Agendas for upcoming meetings may be obtained on our website at ww.tdpud.org or from the Deputy District Clerk's office, (530) 582- 3980.



For More Information:

- About this report or the water treatment process, contact Truckee Donner Public Utility District's Senior Water Quality Technician, Julie Nelson at (530) 582-3926.
- About water conservation and efficiency, the TDPUD has water conservation programs that will help customers save water and save money. Information can be found on the TDPUD's website at www.tdpud.org or by calling 530-587-3896.

For more information
about us, please visit
our website at:
www.tdpud.org

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

Water Quality

Truckee Donner Public Utility District vigilantly safeguards its mountain groundwater supplies. We are able to report that the District has met the California Department of Public Health drinking water standards.

This brochure is a snapshot of the quality of water provided to customers for the 2016 calendar year. Included in this document are details about where your water comes from, what it contains, and how it compares to State and USEPA Standards.

Truckee Donner Public Utility District is committed to providing you with the information about your water supply because customers who are well informed are the District's best allies in supporting improvements that are necessary to maintain the highest drinking water standards.

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, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals, and infants can be particularly at risk from 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 microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Where Does Our Water Come From

The source of the drinking water served to our Hirschdale customers comes from a well drawing from a deep aquifer. We filter this water to remove iron, manganese, and arsenic before delivering it to your tap. Additionally, each month the system is sampled for microbial quality. Because of natural filtration, the groundwater aquifer is protected from surface water contamination, giving us a high quality of drinking water.

Source Water Assessment

A source water assessment has been completed for the well serving the Hirschdale area. The well is considered most vulnerable to the following activities not associated with any detected contaminants: septic systems, drinking water treatment plants, and transportation corridors. A copy of the complete assessment may be viewed at the Truckee Donner Public Utility District located at 11570 Donner Pass Road, Truckee, CA or by calling Brian Wright at (530) 582-3957.

No Cryptosporidium or Giardia in District Water

You may have seen or heard news reports about Cryptosporidium and Giardia, microscopic organisms that can enter surface waters from runoff containing animal wastes. If ingested, Cryptosporidium and Giardia can cause diarrhea, fever and other gastro-intestinal symptoms. Because Truckee Donner Public Utility District's water comes from deep wells rather than surface water, it is almost impossible to have these contaminants in the District's water supply.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your State radon program (1-800-745-7236), the EPA Safe Drinking Water Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-SOS-RADON).

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at the other homes in the community as a result of materials used in your home's plumbing. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Truckee Donner Public Utility District is responsible for providing high quality 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 USEPA Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

The data in the tables on the following pages is from the most recent monitoring done in compliance with California drinking water regulations. Some data may be more than a year old.

TERMS USED IN THIS REPORT

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 (USEPA).

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.

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.

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.

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.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: State Board permission 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 billion or micrograms per liter ($\mu\text{g/L}$)

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)

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 by-products 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.

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	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment

TABLE 2 – DISINFECTION BY-PRODUCTS

Contaminant	No. Samples, Frequency	Average Level	Range	MCL (MRDL)	MCLG (MRDLG)	Typical Source of Contaminant
Chlorine Residual (ppm)	1 per month	0.52	0.43-0.58	4	4	Drinking water disinfectant added for treatment
Total Trihalomethanes (ppb)	1 on 8/10/16	30	N/A	80	N/A	By-product of drinking water disinfection
Haloacetic Acids (ppb)	1 on 8/10/16	9.6	N/A	60	N/A	By-product of drinking water disinfection

TABLE 3 – DISTRIBUTION SYSTEM CUSTOMER TAP SAMPLING FOR LEAD AND COPPER

Lead and Copper	Date Last Sampled	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/10/16	5	1.5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/10/16	5	0.074	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 4 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (reporting units)	Date Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2016	43	N/A	N/A	N/A	Salt present in the water and is generally naturally occurring
Hardness (as CaCO ₃) (ppm)	2016	91	N/A	N/A	N/A	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 5- UNREGULATED COMPOUNDS

Chemical or Constituent (reporting units)	Date Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Alkalinity (as CaCO ₃) (ppm)	2016	150	N/A	N/A	N/A	Erosion of natural deposits
Bicarbonate Alkalinity (as HCO ₃) (ppm)	2016	180	N/A	N/A	N/A	Leaching of natural deposits
Calcium (ppm)	2016	15	N/A	N/A	N/A	Erosion of natural deposits
Magnesium (ppm)	2016	13	N/A	N/A	N/A	Erosion of natural deposits
Potassium (ppm)	2016	7.4	N/A	N/A	N/A	Erosion of natural deposits

TABLE 6 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (reporting units)	Date Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Inorganic Contaminants						
Arsenic (ppb)	2016	4.2	N/D-6.6	10	0.004	Erosion of natural deposits
Barium (ppm)	2016	74	N/A	1000	2000	Erosion of natural deposits
Fluoride (ppm)	2016	0.09	N/A	2	1	Erosion of natural deposits
Turbidity (NTU)	2016	2.30	N/A	5	5	Soil runoff
Radioactive Contaminants						
Gross Alpha Particle Activity (pCi/L)	2014	N/D	N/D	15	0	Erosion of natural deposits
Radon (pCi/L)	2005	570	N/A	N/A*	N/A*	Erosion of natural deposits
*Note	The State of California does not have an MCL for Radon. The EPA has an advisory MCL of 4000 pCi/L for Radon.					

TABLE 7 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (reporting units)	Date Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2016	6	N/A	250	N/A	Leaching of natural deposits
Iron (ppb)	2016	90	N/A	300	N/A	Leaching of natural deposits
Manganese (ppb)	2016	5.90	N/A	50	N/A	Leaching of natural deposits
pH	2016	8.0	7.7 - 8.3	6.5 - 8.5	N/A	Erosion of natural deposits
Specific Conductance (μ S/cm)	2016	350	N/A	1600	N/A	Substances that form ions when in water.
Sulfate	2016	14	N/A	250	N/A	Leaching of natural deposits
Total Dissolved Solids (ppm)	2016	260	N/A	500	N/A	Leaching of natural deposits