

# ANNUAL WATER QUALITY REPORT

Reporting Year 2024



*Presented By*  
**South Tahoe Public Utility District**

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

PWS ID#: CA0910002



## Our Commitment

The South Tahoe Public Utility District (District) is pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve and protect our water resources.

## Where Does My Water Come From?

The District's network of 11 active wells supplies water to over 14,000 homes and businesses. All your drinking water is pumped from the aquifer beneath our feet – the Tahoe Valley South Subbasin. More information about our aquifer and groundwater management can be found at [stpubd.us/drinking-water](http://stpubd.us/drinking-water).



## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 or [epa.gov/safewater](http://epa.gov/safewater).

## Substances That Could Be in 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 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 the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Dan Arce, Laboratory Director, at (530) 544-6474, ext. 6231.

## Testing for Radon

Our wells were last monitored for radon in 2023 and the results of that testing are provided later in this report. Radon is a naturally occurring 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 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, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal if the level of radon in your air is 4 picocuries per liter (pCi/L) of air or higher. There are simple ways to fix a radon problem. For additional information, call California's Radon Program at (800) 745-7236, the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791, or the National Safety Council Radon Hotline at (800) 767-7236.

## Source Water Assessment and Protection

The District continues to work diligently to protect and maintain our groundwater quality and an adequate water supply. The District's Groundwater Management Plan (California Water Code, section 10750) is on file with the California Department of Public Health (CDPH). You may view the document by visiting the District's website at [stpubd.us](http://stpubd.us) or request a copy by calling customer service at (530) 544-6474. The District has an ongoing drinking water source development program that seeks potential drinking water well locations. Due to the volume of the average annual Sierra snowpack and Lake Tahoe itself, our aquifer has a significant recharge capability.

Groundwater in South Lake Tahoe is generally of excellent quality, though it has faced threats from both natural and human-made contaminants. Methyl tert butyl ether (MTBE) and tetrachloroethylene (PCE) plumes in the South Y area led the District to remove affected wells from service and develop new, uncontaminated sources. Naturally occurring arsenic, uranium, and gross alpha particle activity have been found in parts of the aquifer, with one District well requiring arsenic treatment to meet water quality standards. Infiltration basins used for stormwater recharge also pose potential risks, but these are effectively managed through careful well siting, design, and wellhead treatment.

## Community Participation

The District is governed by an elected five-member board of directors. Board meetings are held on the first and third Thursday of each month at 2:00 p.m. in the District boardroom at 1275 Meadow Crest Drive. All meetings are open to the public, and the District encourages our customers to attend, ask questions, and provide feedback.



## Arsenic Regulation

Arsenic contamination of drinking water sources may result from either natural or human activities. Volcanic activity, erosion of rocks and minerals, and forest fires are natural sources that can release arsenic into the environment. Although about 90 percent of the arsenic used by industry is for wood preservative purposes, it is also used in paints, drugs, dyes, soaps, metals, and semiconductors. Agricultural applications, mining, and smelting also contribute to arsenic releases. Arsenic is usually found in the environment combined with other elements such as oxygen, chlorine, and sulfur (inorganic arsenic) or carbon and hydrogen (organic arsenic). Organic forms are usually less harmful than inorganic forms.

Low levels of arsenic are naturally present in water--about 2 parts arsenic per billion parts water (ppb), so you normally take in small amounts of arsenic in the water you drink. Some areas of the country have unusually high natural levels of arsenic in rock, which can lead to unusually high levels of arsenic in water.

In January 2001, the U.S. EPA lowered the arsenic MCL from 50 to 10 ppb in response to new and compelling research linking high arsenic levels in drinking water with certain forms of cancer. All water utilities were required to implement this new MCL in January 2006.

Removing arsenic from drinking water is a costly procedure but well worth the expenditure considering the health benefits. For a more complete discussion, visit the U.S. EPA's arsenic web page, [epa.gov/dwreginfo/drinking-water-arsenic-rule-history](http://epa.gov/dwreginfo/drinking-water-arsenic-rule-history).



## What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit [atsdr.cdc.gov/pfas/index.html](http://atsdr.cdc.gov/pfas/index.html).



## Test Results

The following tables list the drinking water contaminants monitored for the calendar year of this report, unless otherwise noted. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The U.S. EPA and SWRCB require us to monitor for certain contaminants less often than once per year based on results of previous testing. The District monitors for more contaminants than are listed in these tables. Contaminants not detected during testing are not shown in the tables.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

The District participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791 or visit <https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule>.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Arsenic (ppb)	2024	10	0.004	3.0	<1.0–8.0	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium (ppm)	2024	1	2	0.010	<0.002-0.046	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Fluoride (ppm)	2024	2.0	1	0.075	<0.050–0.200	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Nitrate [as nitrogen] (ppm)	2024	10	10	0.23	<0.020–0.57	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	1.7	<0.5–11	No	By-product of drinking water disinfection	
Uranium (pCi/L)	2024	20	0.43	3.6	<0.67–12	No	Erosion of natural deposits	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	0.3	0.61	<0.002–1.2	0/82	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2023	15	0.2	2.9	<0.5–88	2/82	No	Corrosion of household plumbing systems; erosion of natural deposits
SECONDARY SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AVERAGE DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Chloride (ppm)	2024	500	NS	7.7	0.83–73.9	No	Runoff/leaching from natural deposits; seawater influence	
Iron (ppb)	2024	300	NS	<10	<10–11	No	Leaching from natural deposits; industrial wastes	
Manganese (ppb)	2024	50	NS	3.0	<2.0–69	No	Leaching from natural deposits	
Odor, Threshold (TON)	2024	3	NS	<1	NA	No	Naturally occurring organic materials	
Specific Conductance (µS/cm)	2024	1,600	NS	124	81–303	No	Substances that form ions when in water; seawater influence	
Sulfate (ppm)	2024	500	NS	3.3	0.92–6.0	No	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (ppm)	2024	1,000	NS	93	65–227	No	Runoff/leaching from natural deposits	



## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AVERAGE DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Turbidity (NTU)	2024	5	NS	0.15	0.10–0.50	No	Soil runoff

## UNREGULATED SUBSTANCES<sup>1</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2024	51.8	35.7–64.6	NA
Bromide (ppm)	2024	0.008	<0.005–0.027	NA
Calcium (ppm)	2024	14.1	7.70–22.6	NA
Hardness, Total [as CaCO <sub>3</sub> ] (ppm)	2024	40.9	20.2–79.0	NA
Perfluoroheptanoic Acid [PFHpA] (ppt)	2024	0.4	<4–4.0	NA
Perfluorohexanoic Acid [PFHxA] (ppt)	2024	1.9	<4–12.3	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2024	0.4	<4–4.0	NA
Perfluoropentanoic Acid [PFPeA] (ppt)	2024	2.5	<4–14	NA
Radon (pCi/L)	2023	1,430	407–1,460	NA
Sodium (ppm)	2024	9.4	4.5–25.0	NA
Vanadium (ppb)	2024	3.5	<3.0–7.2	NA

<sup>1</sup> Unregulated contaminant monitoring helps the U.S. EPA and SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

## Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The District is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact the District's laboratory at (530) 544-6474, ext. 6231. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines is the first step for beginning to replace lead service lines and protecting public health. While no lead water service lines have been identified in the District's system to date, service lines with unknown materials are still being assessed. More information about the District's lead service inventory may be found at [stpubd.us/water-service-line-inventory](http://stpubd.us/water-service-line-inventory). Please contact us at (530) 544-6474 if you would like more information about the inventory or lead sampling that has been done.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**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 US EPA.

**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.

**MRDLG (Maximum Residual Disinfectant 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.

**NA:** Not applicable.

**NS:** No standard.

**pCi/L (picocuries per liter):** A measure of radioactivity.

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

**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 EPA.

**ppb (µg/L) (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (mg/L) (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppt (ng/L) (parts per trillion):** One part substance per trillion parts water (or nanograms per liter).

**TON (Threshold Odor Number):** A measure of odor in water.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.