South Tahoe Public Utility District

CONSUMER CONFIDENCE REPORT 2023

IS MY WATER SAFE?

Yes. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The South Tahoe Public Utility District (District) vigilantly safeguards its water supplies, and we are proud to report that our source water has not violated a maximum contaminant level or any other water quality standard.

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 people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. 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 EPA's Safe Water Drinking Hotline(1-800-426-4791).

WHERE DOES MY WATER COME FROM?

The District's network of 11 active and 2 standby wells supplies water to over 14,000 homes and businesses. All 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 www.stpud.us/drinking-water.

SOURCE WATER ASSESSMENT AND PROTECTION

The District continues to work diligently to protect and maintain our groundwater quality and 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 www.stpud.us or by requesting 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.

HOW DO CONTAMINANTS GET INTO 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency'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 wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming. Pesticides and herbicides 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, are by-products of industrial processes and petroleum production, and can also

SPANISH (ESPANOL) Este informe contiene informacion muy importante sobre la calidad de su agua de beber. Por favor hagalo traducir o hable con alguien que lo entienda bien.

come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for human health.

RADON MONITORING

Radon is a naturally occurring gas present in some groundwater. Inhaled radon has been linked to lung cancer and may pose a health risk when inhaled after the release from water into the air. This inhalation could occur during showering, bathing, washing dishes, or washing clothes. The radon gas released from drinking water is a relatively small part of the total radon found in air. One major source of radon gas is from the soil, where the gas can seep through the foundations of homes. It is not clear whether ingested (i.e. taken through the mouth) radon contributes to cancer or other adverse health conditions. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on home testing call your state radon program or EPA's Radon Hotline (800-SOS-RADON).

REGARDING 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.

INFORMATION ABOUT 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. The 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 the 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 www.epa.gov/safewater/lead.

HOW CAN I FIND OUT MORE?

If you would like more detailed information on your drinking water, please call Dan Arce in the District Laboratory at 530-544-6474 x6231 or check our website at www.stpud.us.

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 p.m. at 1275 Meadow Crest Drive, South Lake Tahoe. All meetings are open to the public and the District encourages our customers to attend, ask questions, and provide feedback.

WATER QUALITY DATA TABLE The table below lists the drinking water contaminants monitored for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less often than once per year because the concentrations of these contaminants do not change frequently.

ADDITIONAL CONTAMINANTS In an effort to ensure the safest water possible, the State has required us to monitor some contaminants not required by Federal regulations. These contaminants are listed on Page 5 under "Additional Monitoring". None were found in your water.

Sampled at Customers' Taps

	MCLG	AL	90TH PERCENTILE	SAMPLE DATE	# SAMPLES EXCEEDING	EXCEEDS AL	TYPICAL SOURCE
Lead (ppb)	ND	15	2.9	2023	2	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppb)	ND	1,300	613	2023	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Sampled at Distribution System

	MCLG	MCL	AVERAGE	MIN	MAX	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
DISINFECTION BYPRODUCTS								
Total Trihalomethanes (ppb)	N/A	80	1.9	ND	10.1	2023	No	Byproduct of drinking water disinfection
HaloAcetic Acids (ppb)	N/A	60	ND	ND	ND	2023	No	Byproduct of drinking water disinfection
MICROBIOLOGY	A total of 1,522 Coliform and E.coli bacteria samples were taken throughout our distribution system as part of our routine monitoring in 2023.							
Total Coliforms (% Positive each month)		5	0.0	0	1	2023	No	Naturally present in the environment. Source is warm blooded animals
E.coli (% Positive)		0	0	0	0	2023	No	Human and animal fecal matter and wastes
Heterotrophic Plate Count or HPC (CFU)	200	N/A	0.2	ND	3.5	2023	No	Naturally present in environment
Chlorine, Free (ppm)	4	4	0.45	ND	1.6	2023	No	Added for drinking water disinfection
Temperature - System (°F)	N/A		49	36	72	2023	No	

Sampled at Source

RADIONUCLIDES								
Gross Alpha (pCi/L), minus Uranium		15	0.1	ND	1.6	2023	No	Decay and erosion of natural deposits
Uranium (pCi/L)	0.4	20	4.5	0.8	14.1	2023	No	Decay and erosion of natural deposits
Radium-226 (pCi/L)	0.05		ND	ND	ND	2022	No	Erosion of natural deposits
Radium-228 (pCi/L)	0.02		ND	ND	ND	2022	No	Erosion of natural deposits
Radon (pCi/L)	N/A	4,000	1,455	407	2,890	2023	No	Decay and erosion of natural deposits

IMPORTANT DRINKING WATER DEFINITIONS

AL Allowed Limit: Limit for 90th percentile of samples.

AVERAGE If the analyte was not detected in any samples, the average is reported as 'non-detect' (ND). If the analyte was detected in some, but not all samples, the average was calculated by considering ND results as half the reporting limit.

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.

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.

PRIMARY INORGANIC CONTAMINANTS & MINERALS	Most of these results are expressed in Parts per Billion(ppb). One part per billions is equivalent to one second in 32 years.					
	STATE MCL	AVERAGE	MAXIMUM	VIOLATION	SAMPLE DATE	COMMON SOURCE
Aluminum (ppb)	1,000	ND	ND	No	2023	Erosion of natural deposits. Water treatment
Antimony (ppb)	6	ND	ND	No	2023	Discharge from Refineries, Soldering, Electronics
Arsenic (ppb)	10	4.1	8.7	No	2023	Glass and electronics production waste. Erosion
Asbestos (mfl) (fibers exceeding 10um)	7	ND	ND	No	2015	Internal corrosion. Erosion of natural deposits
Barium (ppb)	1,000	12	48	No	2023	Oil drilling waste. Refineries. Erosion
Beryllium (ppb)	4	ND	ND	No	2023	Discharge from coal burning factories
Cadmium (ppb)	5	ND	ND	No	2023	Internal corrosion. Erosion. Runoff from waste
Chromium (ppb)	50	0.6	1.2	No	2023	Discharge from steel and pulp mills. Erosion
Chromium 6 (ppb)	10	0.42	1.3	No	2015	Erosion, industrial byproduct
Cyanide (ppb)	150	ND	ND	No	2023	Discharge from metal, fertilizer factories
Fluoride (ppb)	2,000	75	140	No	2023	Discharge from aluminum factories. Erosion
Lead (at source) (ppb)	15	0.3	0.9	No	2023	Discharge from manufacturers. Erosion
Mercury (ppb)	2	ND	ND	No	2023	Runoff from landfills and factories. Erosion
Nickel (ppb)	100	ND	ND	No	2023	Discharge from metal factories. Erosion
Nitrate as N (ppm)	10	0.19	0.58	No	2023	Runoff and leaching from fertilizer use. Septic tanks. Sewage spills. Erosion
Nitrite as N (ppm)	1	ND	ND	No	2023	
Perchlorate (ppb)	6	ND	ND	No	2023	Industrial discharge
Selenium (ppb)	50	ND	ND	No	2023	Discharge from refineries. Runoff from livestock lots.
Thallium (ppb)	2	ND	ND	No	2023	Discharge from electronic and drug factories
VOLATILE ORGANIC CHEMICALS						
MTBE [Methyl Tert Butyl Ether] (ppb)	13	ND	ND	No	2023	Leaking underground storage tanks
Styrene (ppb)	100	ND	ND	No	2023	Discharge from factories. Leaching from landfills
Tetrachloroethylene (PCE) (ppb)	5	ND	ND	No	2023	Discharge from factories, dry cleaners and auto shops
Toluene (ppb)	150	ND	0.4	No	2023	Leaking underground storage tanks
Xylenes (ppb)	1,750	ND	ND	No	2023	Discharge from chemical factories. Solvent
Methylene Chloride (ppb)	5	0.5	5.5	No	2023	
1,2,3-TCP (ppb)	0.005	ND	ND	No	2023	Discharge from industrial and agricultural waste. Leaching from hazardous waste sites.
SECONDARY INORGANIC CONTAMINANTS & MINERALS	Most of these results are expressed in Parts per Million (ppm). One part per million is equivalent to one second in 11.5 days.					
Alkalinity – Total (ppm)	N/A	52.9	65.7	No	2023	Erosion of natural deposits
Bromide (ppm)	N/A	0.01	0.04	No	2023	Erosion of natural deposits
Calcium (ppm)	N/A	14.9	23.1	No	2023	Erosion of natural deposits
Carbon Dioxide, Free (ppm)	N/A	4.1	30.5	No	2023	Naturally occurring
Chloride (ppm)	500	12.2	73	No	2023	Erosion of natural deposits
Chlorine, Free (ppm)	4	0.45	1.6	No	2023	Added for drinking water disinfection
Color (units)	15	ND	ND	No	2023	Naturally occurring organic materials
Copper (at source) (ppm)	1	0.003	0.013	No	2023	Erosion of natural deposits
Dissolved Solids, Total (ppm)	1,000	107	240	No	2023	Erosion of natural deposits
Electrical Conductivity (µS/cm)	1,600	140	294	No	2023	Erosion of natural deposits

UNIT DESCRIPTIONS

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)

MFL: Million Fibers per Liter, used to measure asbestos concentration

NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water.

CFU/ml: Colony Forming Units per milliliter

N/A: Not Applicable

ND: Not Detected

SECONDARY INORGANIC CONTAMINANTS & MINERALS	STATE MCL	AVERAGE	MAXIMUM	VIOLATION	SAMPLE DATE	COMMON SOURCE
Hardness (ppm)	N/A	45	85	No	2023	Erosion of natural deposits
Iron (ppm)	0.3	0.01	0.024	No	2023	Erosion of natural deposits
Magnesium (ppm)	N/A	2.4	6.4	No	2023	Erosion of natural deposits
Manganese (ppm)	0.05	0.002	0.005	No	2023	Erosion of natural deposits
Odor-Threshold (units)	3	ND	ND	No	2023	Naturally occurring organic materials
ortho-Phosphate, as P (ppm)	N/A	0.04	0.13	No	2023	Erosion of natural deposits
Phosphorus - Total (ppm)	N/A	0.06	0.18	No	2023	Erosion of natural deposits
pH – after treatment (units)	N/A	8	9.0	No	2023	Erosion of natural deposits
Potassium (ppm)	N/A	1.1	4.4	No	2023	Erosion of natural deposits
Silver (ppm)	0.1	ND	ND	No	2023	Erosion of natural deposits
Sodium (ppm)	N/A	11	26	No	2023	Erosion of natural deposits
Sulfate(ppm)	500	3.3	5.2	No	2023	Erosion of natural deposits
Turbidity (NTU)	5	0.35	0.55	No	2023	Sediment
Zinc (ppm)	5	ND	ND	No	2023	Runoff/leaching from natural deposits

UNIT DESCRIPTIONS

µg/L: Micrograms per Liter, or parts per billion

mg/L: Milligrams per liter or parts per million

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)

MFL: Million Fibers per Liter, used to measure asbestos concentration

NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water.

CFU/ml: Colony Forming Units per milliliter

N/A: Not Applicable

ND: Not Detected

µS/cm: Microsiemens per centimeter (a measure of electrical conductivity)

SOCs (Synthetic Organic Compounds) are man-made carbon-based chemicals. They are used as pesticides, defoliants, fuel additives and as ingredients in the manufacture of many other compounds. Some of the more well-known ones include PCBs, atrazine, florene, dioxins and caffeine. SOC's health effects include damage to the nervous system and cancer risks. The District last tested for these chemicals in 2021.

Additional Monitoring

SOC RESULTS	AVERAGE	MINIMUM	MAXIMUM	SAMPLE DATE
EPA 505 - Organochlorine Pesticides/PCBs	ND	ND	ND	7/2021, 11/2021
EPA 515.4 - Chlorophenoxy Herbicides	ND	ND	ND	7/2021, 11/2021
EPA 551.1 - EDB/DBCP/HAN	ND	ND	ND	7/2021, 11/2021
EPA 525.2 - Semivolatiles	ND	ND	ND	7/2021, 11/2021
EPA 548.1 - Endothall	ND	ND	ND	7/2021, 11/2021
EPA 1613B - 2,3,7,8-TCDD, Dioxin	ND	ND	ND	7/2021, 11/2021
EPA 547 - Glyphosate	ND	ND	ND	7/2021, 11/2021
EPA 531.2 - Aldicarbs	ND	ND	ND	7/2021, 11/2021
EPA 549.2 - Diquat and Paraquat	ND	ND	ND	7/2021, 11/2021
EPA 524M-TCP - 1,2,3-Trichloropropane	ND	ND	ND	7/2021, 11/2021

ADDITIONAL MONITORING As part of an ongoing evaluation program called UCMR (Unregulated Contaminant Monitoring Rule), the Environmental Protection Agency (EPA) requires water agencies to monitor additional contaminants/chemicals. Data collected through this monitoring provides information for future decisions on drinking water standards.

UCMR-5 Water agencies are required to sample for 30 additional chemicals between 2023 and 2025. This includes the metal Lithium and 29 chemicals collectively known as PFAS (per- and polyfluoroalkyl compounds). For a detailed explanation on the toxicity of these chemicals please visit: www.epa.gov/pfas. The District sampled each of its water sources at least two times between 2023 and 2024. Some sources were sampled more often to confirm results.

NATIONAL PFAS STANDARDS In April 2024, the EPA established drinking water standards for five specific PFAS chemicals, including Maximum Contaminant Levels (MCL). The MCLs and monitoring results are expressed in Parts per Trillion (ppt). One part per trillion is equivalent to one second in 32,000 years. Of the drinking water wells tested, only one of the regulated chemicals (PFOA) was detected at one well. This well was tested four times in 2023/2024 and this chemical was below the EPA MCL limit three out of the four times. This well supplied less than 5% of the District's drinking water in 2023.

UCMR-5 RESULTS	FEDERAL MCL	MINIMUM	MAXIMUM	SAMPLE DATE
Lithium (ppb)		ND	19.1	2023/24
PFOS (ppt)	4	ND	ND	2023/24
PFOA (ppt)	4	ND	4.0	2023/24
PFHxS (ppt)	10	ND	ND	2023/24
PFNA (ppt)	10	ND	ND	2023/24
HFPO (ppt)	10	ND	ND	2023/24
Mixtures containing two or more PFHxS, PFNA, HFPO-DA, and PFBS	Unitless Hazard Index	ND	ND	2023/24
PFHxA (ppt)	N/A	ND	12.3	2023/24
PFPeA (ppt)	N/A	ND	14.0	2023/24
PFHpA (ppt)	N/A	ND	4.0	2023/24
11Cl-PF3OUdS (ppt)	N/A	ND	ND	2023/24
9Cl-PF3ONS (ppt)	N/A	ND	ND	2023/24
ADONA (ppt)	N/A	ND	ND	2023/24
HFPO-DA (ppt)	N/A	ND	ND	2023/24
PFBS (ppt)	N/A	ND	ND	2023/24
PFDA (ppt)	N/A	ND	ND	2023/24
PFDoA (ppt)	N/A	ND	ND	2023/24
PFUnA (ppt)	N/A	ND	ND	2023/24
PFBA (ppt)	N/A	ND	ND	2023/24
8:2 FTS (ppt)	N/A	ND	ND	2023/24
4:2 FTS (ppt)	N/A	ND	ND	2023/24
6:2 FTS (ppt)	N/A	ND	ND	2023/24
NFDHA (ppt)	N/A	ND	ND	2023/24
PFEESA (ppt)	N/A	ND	ND	2023/24
PFMPA (ppt)	N/A	ND	ND	2023/24
PFMBA (ppt)	N/A	ND	ND	2023/24
PFHpS (ppt)	N/A	ND	ND	2023/24
PFPeS (ppt)	N/A	ND	ND	2023/24
NEtFOSAA (ppt)	N/A	ND	ND	2023/24
NMeFOSAA (ppt)	N/A	ND	ND	2023/24
PFTA (ppt)	N/A	ND	ND	2023/24
PFTrDA (ppt)	N/A	ND	ND	2023/24