



PUBLIC HEALTH GOALS REPORT

SOUTH TAHOE PUBLIC UTILITY DISTRICT
JUNE 2025

Background

Provisions of the California Health and Safety Code §116470(b) specify that larger (> 10,000 service connections) water utilities prepare a special report by July 1, 2025 if their water quality measurements have exceeded any Public Health Goals (PHGs). PHGs are non-enforceable goals established by the California Environmental Protection Agency (Cal EPA) Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, the water suppliers are to use the maximum contaminant level goals (MCLG) adopted by the United States Environmental Protection Agency (US EPA). Only constituents which have a California primary drinking water standard and for which either a PHG or MCLG has been set are to be addressed. (Reference No. 2 is a list of all regulated constituents with the MCLs and PHGs or MCLGs).

There are a few constituents that are routinely detected in water systems at levels usually well below the drinking water standards for which no PHG nor MCLG has yet been adopted by OEHHA or US EPA including Total Trihalomethanes. These will be addressed in a future required report after a PHG has been adopted.

If a constituent was detected in the South Tahoe Public Utility District's (District) water supply between 2022 and 2024 at a level exceeding an applicable PHG or MCLG, this report provides the information required by the law. Included is the numerical public health risk associated with the MCL and the PHG or MCLG, the category or type of risk to health that could be associated with each constituent, the best treatment technology available that could be used to reduce the constituent level, and an estimate of the cost to install that treatment if it is appropriate and feasible.

What Are Public Health Goals?

Public Health Goals (PHGs) are set by the California Office of Environmental Health Hazard Assessment (OEHHA) which is part of Cal-EPA and are based solely on public health risk considerations. None of the practical risk-management factors that are considered by the US EPA or the California Division of Drinking Water in setting drinking water standards (MCLs) are considered in setting the PHGs. These factors include analytical detection capability, treatment technology available, benefits and costs. The PHGs are not enforceable and are not required to be met by any public water system. MCLGs are the federal equivalent to PHGs.

Water Quality Data Considered

All the water quality data collected by South Tahoe Public Utility District between 2022 and 2024 for purposes of determining compliance with drinking water standards was considered. This data was all summarized in our 2022, 2023, and 2024 Consumer Confidence Reports. (Reference No. 3)

Guidelines Followed

The Association of California Water Agencies (ACWA) formed a work group which prepared guidelines for water utilities to use in preparing these newly required reports. The ACWA guidelines were used in the preparation of our report. No guidance was available from state regulatory agencies.

Best Available Treatment Technology and Cost Estimates

Both the US EPA and California Division of Drinking Water (DDW) adopt what are known as BATs or Best Available Technologies which are the best-known methods of reducing contaminant levels to the maximum contaminant level (MCL). Costs can be estimated for such technologies. However, since many PHGs and all MCLGs are set much lower than the MCL, it is not always possible nor feasible to determine what treatment is needed to further reduce a constituent downward to or near the PHG or MCLG, many of which are set at zero. Estimating the costs to reduce a constituent to zero is difficult, if not impossible. It is sometimes not possible to verify by analytical means that the level has been lowered to zero. In some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality.

Constituents Detected That Exceed a PHG or a MCLG

The following is a discussion of constituents that were detected in one or more of the District's drinking water sources at levels above the PHG, or if no PHG, above the MCLG.

Chemical	Health Risk Category	California PHG (mg/L or ppm)	Cancer Risk at the PHG	California MCL (mg/L or ppm)	Cancer Risk at the California MCL
Arsenic	Carcinogenicity (causes cancer)	0.000004 (4x10 ⁻⁶)	1x10 ⁻⁶ (one per million)	0.01	2.5x10 ⁻³ (2.5 per thousand)
Uranium	Carcinogenicity (causes cancer)	0.43 pCi/L	1x10 ⁻⁶ (one per million)	20 pCi/L	5x10 ⁻⁵ (five per hundred thousand)
Perfluoro-octanoic acid (PFOA)	Carcinogenicity (causes cancer)	7x10 ⁻⁹	1x10 ⁻⁶ (one per million)	NA	NA

Arsenic

The contamination of a drinking water source by arsenic can result from either natural or human activities. Arsenic is an element that occurs naturally in rocks and soil, water, air, plants and animals. Volcanic activity, the 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 in the United States is used for wood preservative purposes, arsenic is also used in paints, drugs, dyes, soaps, metals

and semi-conductors. Burning fossil fuels and waste, paper production, glass manufacturing, cement manufacturing, mining and smelting can also release arsenic. While arsenic can no longer be used in making pesticides and weed killers, the US EPA is aware that these substances have contributed to drinking water contamination.

The PHG for Arsenic is 0.004 micrograms per liter (ug/L or parts per billion). The MCL or drinking water standard for arsenic is 10 ppb. The District detected arsenic levels above the PHG but not exceeding the MCL in the discharge from eight (8) District Wells listed below. The average of the samples taken between 2022 and 2024 are shown in the table below.

Well	Arsenic (ppb) 2022 - 2024 Average
Arrowhead #3*	3.2
Bakersfield	8.2
Bayview	2.0
Elks Club #2	1.3
Helen #2	6.2
South Upper Truckee #3	1.7
Sunset	3.8
Valhalla	1.9

* Arrowhead Well #3 is equipped with wellhead treatment for Arsenic removal and the level reported is after treatment

Some people who drink water containing arsenic in excess of EPA’s standard over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer. OEHHA has determined that the health risk associated with arsenic is an increased risk of cancer. Numerical health risk data provided by OEHHA determined the health risk associated with the PHG is one (1) excess case of cancer in a million people and the health risk associated with the MCL is two and a half (2.5) excess cases of cancer in 1,000 people over lifetime of exposure.

The best available technology for arsenic treatment is Activated Alumina, Coagulation/Filtration, Lime Softening, Ion Exchange and Reverse Osmosis. These treatment methods would require more consultation beyond the scope of this report to determine the appropriate treatment for each well site. Some of the well sites do not have enough land to install/construct a wellhead treatment facility, therefore acquisition of land and associated piping to the facility would be required.

For the purpose of this report, adsorption using iron oxide will be selected because that is what the District utilizes at the Arrowhead Well to remove arsenic. Treatment for the wells listed above (excluding Arrowhead Well #3) is estimated to have an annualized capital and operation and maintenance (O&M) cost could range from approximately \$3,000,000 to \$4,000,000 per year¹. That would result in an assumed increased cost for each water customer ranging from \$215 to \$285 per year.

¹ Estimate based on Cost Estimates for Treatment Technologies from 2012 ACWA Survey

Uranium

Uranium is a naturally occurring radioactive element that is found in many types of rocks. Uranium is found in ground and surface waters due to its natural occurrence in geological formations.

The PHG for Uranium (U) is 0.43 picoCuries per liter (pCi/L). The MCL for drinking water standard for Uranium is 20 pCi/L. The District detected uranium levels above the PHG but not exceeding the MCL in the discharge from ten (10) District Wells listed below. The average of the samples taken between 2022 and 2024 are shown in the table below:

Well	Uranium (pCi/L) 2022 - 2024 Average
Al Tahoe #2	1.18
Arrowhead #3	13.4
Bakersfield	8.57
Bayview	0.92
Elks Club #2	1.67
Glenwood #5	5.87
Helen #2	7.37
South Upper Truckee #3	0.78
Sunset	8.03
Valhalla	0.93

Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer. Numerical health risk data provided by OEHHA determined the health risk associated with the PHG is one (1) excess case of cancer in a million people and the health risk associated with the MCL is five (5) excess cases of cancer in 100,000 people over lifetime of exposure.

The best available technology for Uranium treatment is Coagulation/Filtration, Ion Exchange, Lime Softening and Reverse Osmosis. These treatment methods would require more consultation beyond the scope of this report to determine the appropriate treatment for each well site. Some of the well sites do not have enough land to install/construct a wellhead treatment facility, therefore acquisition of land and associated piping to the facility would be required.

For the purpose of this report, ion exchange will be selected for treatment. The disposal of the spent media for Uranium treatment is complex due to the radioactive nature of the element which can result in a wide range in O&M cost. Ion Exchange for the wells listed above is estimated to have an annualized capital and O&M cost could range from approximately \$4,000,000 to \$8,000,000 per year². That would result in an assumed increased cost for each water customer ranging from \$286 to \$571 per year.

² Estimate based on Cost Estimates for Treatment Technologies from 2012 ACWA Survey

PFOA

Starting in the 1940s, perfluorooctanoic acid (PFOA) was widely used in industrial applications and consumer products, including carpets, rugs, upholstered furniture and non-stick cookware. PFOA has also been present in some firefighting foams used at airports, firefighter training facilities and military airfields. Notably, PFOA in nonstick cookware and PFOS in stain and water-repellant fabrics and in firefighting foams. The manufacture of these chemicals was phased out in the US following concerns about their extreme persistence in the environment and their detection in virtually all human blood serum samples, however, may still be present in some imported products. Although levels in the environment have declined from their peak around the year 2000, PFOA and PFOS continue to be present in the environment and are found in California drinking water.

The US EPA's MCL for PFOA is 4 ppt (parts-per-trillion), and the PHG for PFOA is 0.007 ppt. The District detected PFOA levels above the PHG but not exceeding the MCL in the discharge from one (1) District Well listed below. The average of the samples taken between 2022 and 2024 are shown in the table below:

Helen Well #2 – 3.1 ppt

OEHHA has determined that the health risk associated with PFOA is an increased risk of cancer. Numerical health risk data provided by OEHHA determined the health risk associated with the PHG is one (1) excess case of cancer in a million people.

The best available technology for PFOA treatment is Ion exchange, granular activated carbon, reverse osmosis and nanofiltration. These treatment methods would require more consultation beyond the scope of this report to determine the appropriate treatment.

For the purpose of this report, granulated activated carbon will be selected for treatment. The capital cost for granulated activated carbon wellhead treatment would likely be between \$3,000,000 to \$5,000,000 due to the need for a building and potentially additional land. That would result in an assumed increased cost for each water customer ranging from \$15 to \$21 per year.

Recommendations For Further Action

The drinking water quality of the South Tahoe Public Utility District meets all State of California, Division of Drinking Water, and US EPA drinking water standards set to protect public health. To further reduce the levels of the constituents identified in this report that are already significantly below the health-based Maximum Contaminant Levels established to provide "safe drinking water," additional costly treatment processes would be required. The effectiveness of the treatment processes to provide any significant reductions in constituent levels at these already low values is uncertain. The health protection

benefits of these further hypothetical reductions are not clear and may not be quantifiable. The District is developing a Water Supply Master Plan and evaluating public health goals and potential for wellhead treatment be considered as a part of that process.

References

No. 1 Excerpt from Calif Health & Safety Code: Section 116470

No. 2 Table of Regulated Constituents with MCLs, PHGs or MCLGs

No. 3 South Tahoe Public Utility District's 2022, 2023 and 2024 Water Quality Reports

REFERENCE #1

STATE OF CALIFORNIA HEALTH AND SAFETY

CODE - SECTION 116470

JUSTIA

[Go to Previous Versions of this Section](#) ▾

2024 California Code Health and Safety Code - HSC DIVISION 104 - ENVIRONMENTAL HEALTH PART 12 - DRINKING WATER CHAPTER 4 - California Safe Drinking Water Act ARTICLE 5 - Public Notification Section 116470.

Universal Citation:

CA Health & Safety Code § 116470 (2024) ○

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116470. (a) As a condition of its operating permit, every public water system shall annually prepare a consumer confidence report and mail or deliver a copy of that report to each customer, other than an occupant, as defined in Section 799.28 of the Civil Code, of a recreational vehicle park. A public water system in a recreational vehicle park with occupants as defined in Section 799.28 of the Civil Code shall prominently display on a bulletin board at the entrance to or in the office of the park, and make available upon request, a copy of the report. The report shall include all of the following information:

(1) The source of the water purveyed by the public water system.

(2) A brief and plainly worded definition of the terms “maximum contaminant level,” “primary drinking water standard,” and “public health goal.”

(3) If any regulated contaminant is detected in public drinking water supplied by the system during the past year, the report shall include all of the following information:

(A) The level of the contaminant found in the drinking water, and the corresponding public health goal and primary drinking water standard for that contaminant.

(B) Any violations of the primary drinking water standard that have occurred as a result of the presence of the contaminant in the drinking water and a brief and plainly worded statement of health concerns that resulted in the regulation of that contaminant.

(C) The public water system’s address and phone number to enable customers to obtain further information concerning contaminants and potential health effects.

(4) Information on the levels of unregulated contaminants, if any, for which monitoring is required pursuant to state or federal law or regulation.

(5) Disclosure of any variances or exemptions from primary drinking water standards granted to the system and the basis therefor.

(b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:

(1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.

(2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.

(3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief plainly worded description of these terms.

(4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely at its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.

(5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.

(6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.

(c) Public water systems required to prepare a report pursuant to subdivision (b) shall hold a public hearing for the purpose of accepting and responding to public comment on the report. Public water systems may hold the public hearing as part of any regularly scheduled meeting.

(d) The department shall not require a public water system to take any action to reduce or eliminate any exceedance of a public health goal.

(e) Enforcement of this section does not require the department to amend a public water system's operating permit.

(f) Pending adoption of a public health goal by the Office of Environmental Health Hazard Assessment pursuant to subdivision (c) of Section 116365, and in lieu thereof, public water systems shall use the national maximum contaminant level goal adopted by the United States Environmental Protection Agency for the corresponding contaminant for purposes of complying with the notice and hearing requirements of this section.

(g) This section is intended to provide an alternative form for the federally required consumer confidence report as authorized by 42 U.S.C. Section 300g-3(c).

(Repealed and added by Stats. 1996, Ch. 755, Sec. 12. Effective January 1, 1997.)

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REFERENCE #2
TABLE OF REGULATED CONSTITUENTS WITH
MCLS, PHGS OR MCLGS

MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants

Last Update: November 2024

This table includes:

- California’s maximum contaminant levels (MCLs)
- Detection limits for purposes of reporting (DLRs)
- [Public health goals \(PHGs\) from the Office of Environmental Health Hazard Assessment \(OEHHA\)](#)
- The PHGs for NDMA, PFOA and PFOS (which are not yet regulated in California) are included at the bottom of this table.
- The Federal MCLs for PFOA and PFOS are also listed at the end of this table.

Units are in milligrams per liter (mg/L), unless otherwise noted.

Chemicals with MCLs in 22 CCR §64431 – Inorganic Chemicals

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Aluminum	1	0.05	0.6	2001
Antimony	0.006	0.006	0.001	2016
Arsenic	0.010	0.002	0.000004	2004
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003
Barium	1	0.1	2	2003
Beryllium	0.004	0.001	0.001	2003
Cadmium	0.005	0.001	0.00004	2006
Chromium, Total	0.05	0.01	withdrawn Nov. 2001	1999
Chromium, Hexavalent	0.01	0.0001	0.00002	2011
Cyanide	0.15	0.1	0.15	1997
Fluoride	2	0.1	1	1997
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*
Nickel	0.1	0.01	0.012	2001
Nitrate (as nitrogen, N)	10 as N	0.4	45 as NO3 (=10 as N)	2018
Nitrite (as N)	1 as N	0.4	1 as N	2018
Nitrate + Nitrite (as N)	10 as N	--	10 as N	2018
Perchlorate	0.006	0.004	0.001	2015
Selenium	0.05	0.005	0.03	2010
Thallium	0.002	0.001	0.0001	1999 (rev2004)

*OEHHA’s review of this chemical during the year indicated (rev20XX) resulted in nochange in the PHG.

Radionuclides with MCLs in 22 CCR §64441 and §64443 – Radioactivity

Units are picocuries per liter (pCi/L), unless otherwise stated; n/a = not applicable

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical	15	3	none	n/a
Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical	4 mrem/yr	4	none	n/a
Radium-226	--	1	0.05	2006
Radium-228	--	1	0.019	2006
Radium-226 + Radium-228	5	--	--	--
Strontium-90	8	2	0.35	2006
Tritium	20,000	1,000	400	2006
Uranium	20	1	0.43	2001

Chemicals with MCLs in 22 CCR §64444 – Organic Chemicals

(a) Volatile Organic Chemicals (VOCs)

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Benzene	0.001	0.0005	0.00015	2001
Carbon tetrachloride	0.0005	0.0005	0.0001	2000
1,2-Dichlorobenzene	0.6	0.0005	0.6	1997 (rev2009)
1,4-Dichlorobenzene (p-DCB)	0.005	0.0005	0.006	1997
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999
Cis-1,2-Dichloroethylene	0.006	0.0005	0.013	2018
Trans-1,2-Dichloroethylene	0.01	0.0005	0.05	2018
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000
1,2-Dichloropropane	0.005	0.0005	0.0005	1999
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)
Ethylbenzene	0.3	0.0005	0.3	1997
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999
Monochlorobenzene	0.07	0.0005	0.07	2014
Styrene	0.1	0.0005	0.0005	2010
1,1,2,2-Tetrachloroethane	0.001	0.0005	0.0001	2003
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001
Toluene	0.15	0.0005	0.15	1999
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999
1,1,1-Trichloroethane (1,1,1-TCA)	0.2	0.0005	1	2006
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.2	0.01	4	1997 (rev2011)
Vinyl chloride	0.0005	0.0005	0.00005	2000
Xylenes	1.75	0.0005	1.8	1997

(b) Non-Volatile Synthetic Organic Chemicals (SOCs)

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Alachlor	0.002	0.001	0.004	1997
Atrazine	0.001	0.0005	0.00015	1999
Bentazon	0.018	0.002	0.2	1999 (rev2009)
Benzo(a)pyrene	0.0002	0.0001	0.000007	2010
Carbofuran	0.018	0.005	0.0007	2016
Chlordane	0.0001	0.0001	0.00003	1997 (rev2006)
Dalapon	0.2	0.01	0.79	1997 (rev2009)
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	0.000003	2020
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.07	0.01	0.02	2009
Di(2-ethylhexyl) adipate	0.4	0.005	0.2	2003
Di(2-ethylhexyl) phthalate (DEHP)	0.004	0.003	0.012	1997
Dinoseb	0.007	0.002	0.014	1997 (rev2010)
Diquat	0.02	0.004	0.006	2016
Endothal	0.1	0.045	0.094	2014
Endrin	0.002	0.0001	0.0003	2016
Ethylene dibromide (EDB)	0.00005	0.00002	0.00001	2003
Glyphosate	0.7	0.025	0.9	2007
Heptachlor	0.00001	0.00001	0.000008	1999
Heptachlor epoxide	0.00001	0.00001	0.000006	1999
Hexachlorobenzene	0.001	0.0005	0.00003	2003
Hexachlorocyclopentadiene	0.05	0.001	0.002	2014
Lindane	0.0002	0.0002	0.000032	1999 (rev2005)
Methoxychlor	0.03	0.01	0.00009	2010
Molinate	0.02	0.002	0.001	2008
Oxamyl	0.05	0.02	0.026	2009
Pentachlorophenol	0.001	0.0002	0.0003	2009
Picloram	0.5	0.001	0.166	2016
Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009	2007
Simazine	0.004	0.001	0.004	2001
Thiobencarb	0.07	0.001	0.042	2016
Toxaphene	0.003	0.001	0.00003	2003
1,2,3-Trichloropropane	0.000005	0.000005	0.0000007	2009
2,3,7,8-TCDD (dioxin)	3x10 ⁻⁸	5x10 ⁻⁹	5x10 ⁻¹¹	2010
2,4,5-TP (Silvex)	0.05	0.001	0.003	2014

Copper and Lead, 22 CCR §64672.3

Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called “Action Levels” under the lead and copper rule

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Copper	1.3	0.05	0.3	2008
Lead	0.015	0.005	0.0002	2009

Chemicals with MCLs in 22 CCR §64533 – Disinfection Byproducts

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
Total Trihalomethanes	0.080	--	--	--
Bromodichloromethane	--	0.0010	0.00006	2020
Bromoform	--	0.0010	0.0005	2020
Chloroform	--	0.0010	0.0004	2020
Dibromochloromethane	--	0.0010	0.0001	2020
Haloacetic Acids (five) (HAA5)	0.060	--	--	--
Monochloroacetic Acid	--	0.0020	--	--
Dichloroacetic Acid	--	0.0010	--	--
Trichloroacetic Acid	--	0.0010	--	--
Monobromoacetic Acid	--	0.0010	--	--
Dibromoacetic Acid	--	0.0010	--	--
Bromate	0.010	0.0050**	0.0001	2009
Chlorite	1.0	0.020	0.05	2009

**The DLR for Bromate is 0.0010 mg/L for analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0.

Chemicals with PHGs established in response to DDW requests. These are not currently regulated drinking water contaminants.***

Regulated Contaminant	MCL	DLR	PHG	Date of PHG
N-Nitrosodimethylamine (NDMA)	--	--	0.000003	2006
Perfluorooctanoic acid (PFOA)***	--	--	0.00000007	2024
Perfluorooctane sulfonic acid (PFOS)***	--	--	0.000001	2024

***PFOA and PFOS have US EPA MCLGs and MCLs.

PFOA - MCLG is zero. MCL is 4 ng/L

PFOS - MCLG is zero. MCL is 4 ng/L

REFERENCE #3
CONSUMER CONFIDENCE REPORTS
2022, 2023 AND 2024

South Tahoe Public Utility District

CONSUMER CONFIDENCE REPORT 2022



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 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, 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 USEPA's Safe Water Drinking Hotline (1-800-426-4791).

WHERE DOES MY WATER COME FROM? There are 11 active drinking water wells and 4 standby wells which supply more than 14,000 homes and businesses. All our drinking water is pumped from underground aquifers. No water is taken from Lake Tahoe or any other surface water source.

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) was adopted on

December 4, 2014, and 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 (EPA) Safe Drinking Water Hotline (1-800-426-4791). 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 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. 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 stormwater 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 agriculture, urban stormwater 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 come from gas stations, urban stormwater runoff, agricultural application, and septic systems. Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities. Many of these contamination sources do not exist in Lake Tahoe. In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (DPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

HOW CAN I FIND OUT MORE? The information contained in the Consumer Confidence Report may not answer all the questions you may have about the quality of the South Tahoe Public Utility District's drinking water supply. If you would like more detailed information, please call the District Laboratory at 530-543-6231 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 the Customer Service Facility located 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.

RESULTS OF RADON MONITORING Radon is a radioactive gas that cannot be seen, tasted, or smelled. 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 cause an increased risk of stomach cancer. If you are concerned about radon in your home, you can test the air in your home. For additional information on radon, call your state radon program or the EPA's Radon Hotline (800-SOS-RADON).

RESULTS OF VOLUNTARY MONITORING
See data sheets.

REGARDING ARSENIC Arsenic is a naturally occurring substance that is sometimes found at low levels in drinking water, particularly groundwater. The South Tahoe Public Utility District has an active Arsenic monitoring program, as well as a pilot Arsenic removal system in one of its wells.

WATER QUALITY DATA TABLE The table below lists all the drinking water contaminants detected which are applicable 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. Of those contaminants only the ones listed on the last page under "Additional Contaminants" were found in your water.

IMPORTANT DRINKING WATER DEFINITIONS

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

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 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.

PDWS Primary Drinking Water Standards: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG Primary Health Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

RADIONUCLIDES	MCLG/PHG OR MRDLG	MCL OR MRDL	AVERAGE	MIN	MAX	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
Gross Alpha (pCi/L), minus Uranium		15	2.2	ND	6.4	2022	No	Decay and erosion of natural deposits
Uranium (pCi/L)	0.4	20	5.8	0.9	14.1	2022	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)	NA	4,000	1330	305	3,930	2021	No	Decay and erosion of natural deposits
VOLATILE ORGANIC CHEMICALS								
MTBE [Methyl Tert Butyl Ether] (ppb)	5	13	ND	ND	ND	2022	No	Leaking underground storage tanks
Styrene (ppb)	100	100	ND	ND	ND	2022	No	Discharge from factories. Leaching from landfills
Tetrachloroethylene (PCE) (ppb)	ND	5	ND	ND	ND	2022	No	Discharge from factories, dry cleaners, and auto shops
Toluene (ppb)		150	ND	ND	ND	2022	No	Leaking underground storage tanks
Xylenes (ppb)		1,750	ND	ND	ND	2022	No	Discharge from chemical factories. Solvent
Total Trihalomethanes (ppb)	NA	80	2.6	ND	7.0	2022	No	Byproduct of drinking water disinfection
Haloacetic Acids (ppb)	NA	60	0.2	ND	1.5	2022	No	Byproduct of drinking water disinfection
1,2,3-TCP (ppb)	0.0007	0.005	ND	ND	ND	2021	No	Discharge from industrial and agricultural waste. Leaching from hazardous waste sites.
MICROBIOLOGY								
A total of 1,306 Coliform and E.coli bacteria samples were taken throughout our distribution system, as part of our routine monitoring, in 2022.								
Total Coliforms (% Positive each month)	0	5	0.1	0	1	2022	No	Naturally present in the environment. Source is warm blooded animals
E.coli (% Positive)	0	0	0	0	0	2022	No	Human and animal fecal matter and wastes
Heterotrophic Plate Count or HPC (CFU)	200	NA	0.2	ND	1.9	2022	No	Naturally present in environment
Chlorine, Free (ppm)	4	4	0.56	ND	2.1	2022	No	
Temperature - System (°F)	NA		51	36	77	2022	No	
LEAD AND COPPER – 2020 AT CUSTOMERS' TAPS								
	MCLG/PHG	AL	90TH PERCENTILE	SAMPLE DATE	# SAMPLES EXCEEDING AL	EXCEEDS AL	TYPICAL SOURCE	
Lead - action level at consumer taps (ppb)	ND	15	2.8	2020	0	No	Corrosion of household plumbing systems Erosion of natural deposits	
Copper - action level at consumer taps (ppb)	ND	1,300	394	2020	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

PRIMARY INORGANIC CONTAMINANTS	UNITS	STATE MCL	AVERAGE	MAXIMUM	VIOLATION	SAMPLE DATE	COMMON SOURCE
Aluminum	ppb	1,000	ND	ND	No	2022	Erosion of natural deposits. Water treatment
Antimony	ppb	6	ND	ND	No	2022	Discharge from Refineries, Soldering, Electronics
Arsenic	ppb	10	2.8	8.3	No	2022	Glass and electronics production waste. Erosion
Asbestos (fibers exceeding 0.01 mm)	MFL	7	ND	ND	No	2015	Internal corrosion. Erosion of natural deposits
Barium	ppb	1,000	12	47	No	2022	Oil drilling waste. Refineries. Erosion
Beryllium	ppb	4	ND	ND	No	2022	Discharge from coal burning factories
Cadmium	ppb	5	ND	ND	No	2022	Internal corrosion. Erosion. Runoff from waste
Chromium	ppb	50	0.6	1.3	No	2022	Discharge from steel and pulp mills. Erosion
Cyanide	ppb	150	ND	ND	No	2022	Discharge from metal, fertilizer factories
Fluoride	ppb	2,000	71	140	No	2022	Discharge from aluminum factories. Erosion
Lead (at source)	ppb	15	ND	ND	No	2022	Discharge from manufacturers. Erosion
Mercury	ppb	2	ND	ND	No	2022	Runoff from landfills and factories. Erosion
Nickel	ppb	100	ND	ND	No	2022	Discharge from metal factories. Erosion
Nitrate as N	ppm	10	0.19	0.60	No	2022	Runoff and leaching from fertilizer use. Septic tanks.
Nitrite as N	ppm	1	ND	ND	No	2022	Sewage spills. Erosion
Perchlorate	ppb	6	ND	ND	No	2022	Industrial discharge
Selenium	ppb	50	ND	ND	No	2022	Discharge from refineries. Runoff from livestock lots.
Thallium	ppb	2	ND	ND	No	2022	Discharge from electronic and drug factories
SECONDARY INORGANIC CONTAMINANTS							
Alkalinity – Total	ppm	NA	52.3	64.3	No	2022	Erosion of natural deposits
Bromide	ppm	NA	0.02	0.05	No	2022	Erosion of natural deposits
Calcium	ppm	NA	14.6	20.9	No	2022	Erosion of natural deposits
Carbon Dioxide, Free	ppm	NA	3.2	20.2	No	2022	Naturally occurring
Chloride	ppm	500	11.4	67	No	2022	Erosion of natural deposits
Color	units	15	ND	ND	No	2022	Naturally occurring organic materials
Copper (at source)	ppb	1,000	1.9	5.8	No	2022	Erosion of natural deposits
Dissolved Solids, Total	ppm	1,000	100	202	No	2022	Erosion of natural deposits
Electrical Conductance	µS/cm	1,600	151	360	No	2022	Erosion of natural deposits
Hardness	ppm	NA	44	75	No	2022	Erosion of natural deposits
Iron	ppb	300	7	22	No	2022	Erosion of natural deposits
Magnesium	ppm	NA	2.6	6.8	No	2022	Erosion of natural deposits
Manganese	ppb	50	1.7	4.3	No	2022	Erosion of natural deposits
Odor-Threshold	units	3	ND	ND	No	2022	Naturally occurring organic materials
ortho-Phosphate, as P	ppm	NA	0.04	0.08	No	2022	Erosion of natural deposits
Phosphorus - Total	ppm	NA	0.05	0.09	No	2022	Erosion of natural deposits
pH – after treatment	units	NA	8	6.7 and 9.1	No	2022	Erosion of natural deposits
Potassium	ppm	NA	1.2	4.8	No	2022	Erosion of natural deposits
Silver	ppb	100	ND	ND	No	2022	Erosion of natural deposits
Sodium	ppm	NA	12	32	No	2022	Erosion of natural deposits
Sulfate	ppm	500	3.5	5.4	No	2022	Erosion of natural deposits
Turbidity (NTU) The Turbidity limit for the highest single measurement at source.	NTU	5	0.18	0.86	No	2022	Soil runoff
Vanadium	ppb	NA	3.4	6.7	No	2022	Erosion of natural deposits
Zinc	ppb	5,000	ND	ND	No	2022	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

NA: Not Applicable

ND: Not Detected

SOCs (Synthetic Organic Compounds) are mostly human-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.

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 - Aldicarb	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 requires the District to monitor a number of additional contaminants/chemicals. Information collected through this monitoring provides information for future decisions on drinking water standards.

UCMR-3 The District was required to monitor our source water for 28 chemical contaminants. The first round was completed in August 2014 and the second round in February 2015. In the absence of identifiable industrial sources, these contaminants are naturally occurring in our watershed. Chlorate is an exception and is a degradation product of the disinfectant used by the District for drinking water.

UCMR-3 RESULTS	UNITS	AVERAGE	MINIMUM	MAXIMUM	SAMPLE DATE
Chlorate	ppm	0.083	ND	0.440	2/2015
Chromium, Total	ppb	0.52	ND	1.30	2/2015
Chromium-6	ppb	0.42	1.3	1.10	2/2015
Cobalt	ppb	ND	ND	ND	2/2015
Molybdenum	ppb	13.8	ND	65	2/2015
Strontium	ppb	124	15	330	2/2015
Vanadium	ppb	3.6	ND	13	2/2015

UCMR-4 In this round of UCMR, the District was required to monitor for 18 chemical contaminants, as well as the Total Organic Carbon (TOC) content in our Source Water. The first round was completed in January 2019 and the second round in July 2019. These contaminants included metals like Germanium, volatile Pesticides and their byproducts such as alpha-HCH, volatile Alcohols like 1-Butanol and Tar/Oil byproducts like Quinoline.

The District also tested its distribution system for 9 disinfection byproducts, collectively known as Haloacetic Acids (HAA9).

UCMR-4 RESULTS	UNITS	AVERAGE	MINIMUM	MAXIMUM	SAMPLE DATE
Total Haloacetic Acids HAA9	ppb	0.5	ND	4.2	1/2019, 7/2019
TOC	ppm	0.3	ND	0.5	1/2019, 7/2019
Germanium	ppb	ND	ND	ND	1/2019, 7/2019
alpha-HCH	ppb	ND	ND	ND	1/2019, 7/2019
Quinoline	ppb	ND	ND	ND	1/2019, 7/2019
1-Butanol	ppb	ND	ND	ND	1/2019, 7/2019

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 Drinking Water 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

South Tahoe Public Utility District

CONSUMER CONFIDENCE REPORT 2023



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.

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.

Sampled at Customers' Taps							TYPICAL SOURCE
	MCLG	AL	90TH PERCENTILE	SAMPLE DATE	# SAMPLES EXCEEDING	EXCEEDS AL	
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								TYPICAL SOURCE
	MCLG	MCL	AVERAGE	MIN	MAX	SAMPLE DATE	VIOLATION	
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

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.
Nitrite as N (ppm)	1	ND	ND	No	2023	Sewage spills. Erosion
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.

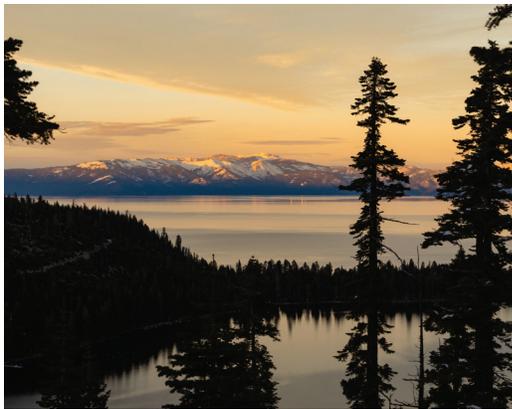
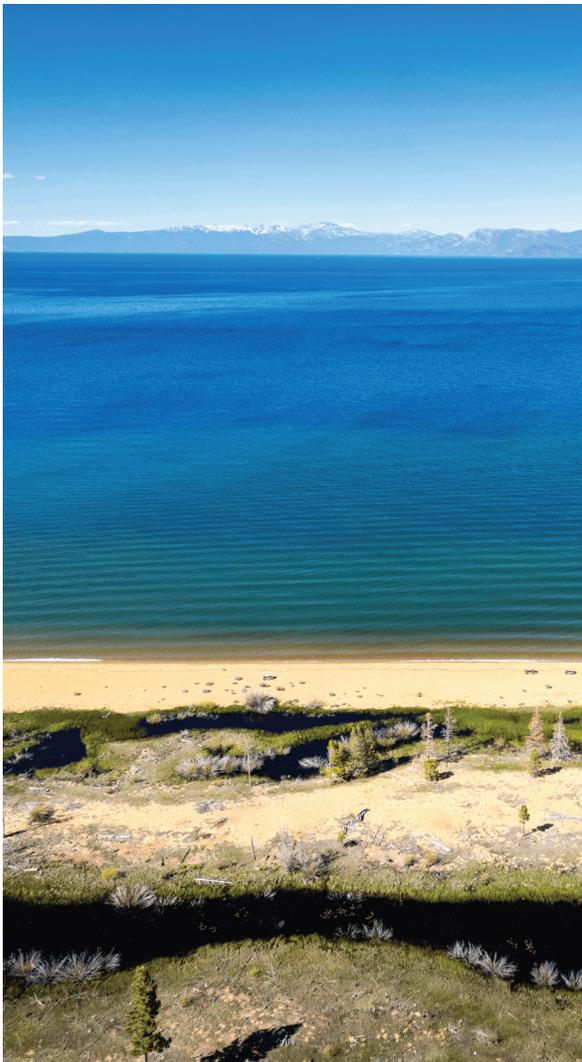
UCMR-5 Water agencies are required to sample for 30 additional chemicals between 2023 and 2025. This includes the metal Lithium and 29 chemicals collectively known as PFAS (per- and polyfluoroalkyl compounds). For a detailed explanation on the toxicity of these chemicals please visit: www.epa.gov/pfas. 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
11CI-PF3OUdS (ppt)	N/A	ND	ND	2023/24
9CI-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
PFTTrDA (ppt)	N/A	ND	ND	2023/24

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.



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.

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 test results were below the maximum contaminant level (MCL). 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.

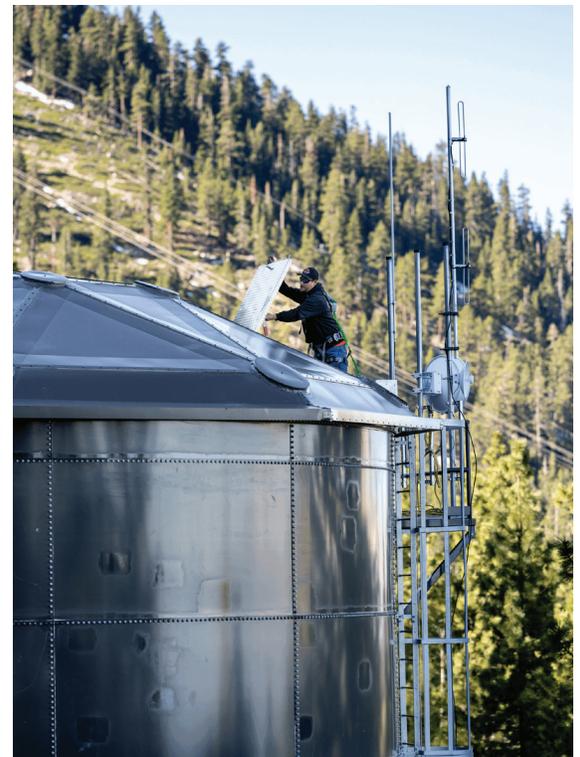
Source Water Assessment and Protection

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 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.



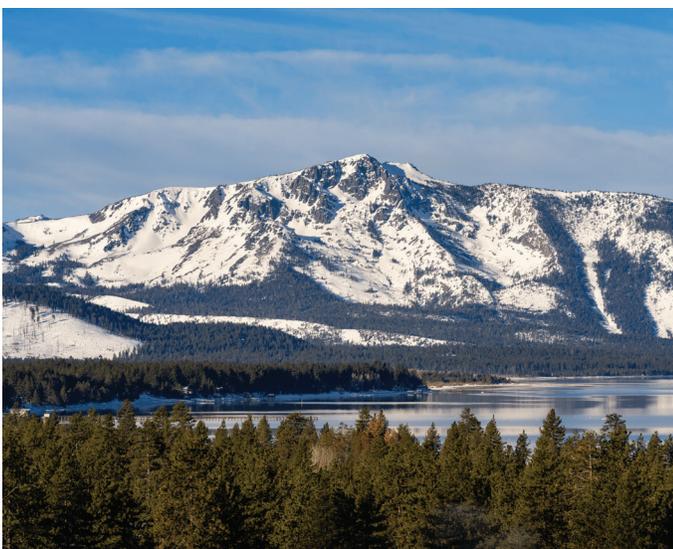
Arsenic Regulation

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.



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.



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 SUBSTANCES¹

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 ₃] (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

¹ 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.

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. 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.