2020 Water Quality Report

JUNE 2021

Consumer Confidence Report

Do you ever wonder what is in your drinking water? If your water has an undesirable taste, odor or color, or you want to learn more about your water quality, you may want to look in detail at your water quality report for the cause of these issues. Water quality reports help you identify if there are contaminants present in your tap water and how these may affect your health.

The U.S. Environmental Protection Agency (EPA) requires most community water systems to provide customers with an annual water quality report or Consumer Confident Report (CCR'S) that provide detailed information about the quality of your drinking water during the past year.

Most homeowners will automatically receive a copy of the report each year. People living in apartments or condominiums may not receive a copy directly, but can still access this information on their community's website or by calling the local water department.

Water reports can look a little technical, but they are actually fairly easy to read once you know what to look for.

How Dependable is My Water?

The Water Company sampled production sources for nitrates and Regulated SOC as required by the State Water Resource Control Board. Regulated SOC test results returned as non-detect and a weighted average of .50 ug/L or .022 mg/L for nitrates.

In 2020 San Antonio Water Company tested throughout the distribution system 331 times for harmful bacteria.

Although designated as ground water, The Water Company is also required by the Department of Drinking Water (DDW) to annually test our tunnel water for the presence of Cryptosporidium and Giardia lamblia which can be present in most surface waters. Another test taken by the water company to assess the risk of being under the influence of surface water contamination is a Micro Particulate Analysis (MPA) sample. Both samples are taken during the time of the year when we experience higher tunnel flows, which normally occurs during the first parts of the year. This consists of running approximately 900 gallons of water through a micron filter at a flow rate of 1 gallon a minute to trap any indicators of surface water (organic debris, algae, diatoms, plant material, crustacean, insects, and larva) that may be associated with surface waters. In all tests taken for Cryptosporidium and Giardia lamblia the results returned as non-detectable. The results for the particulate analysis were returned with the results as not being under the influence.

Holly Drive Reservoir

Noticia Importante

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

"If there is magic on this planet, it is contained in water"

~Loren Eiseley~

Board of Directors

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What if I have questions about my water & how can I get involved?

San Antonio Water Company is a private non-profit water utility, formed pursuant to the State Corporations Code. Our monthly Board of Directors meetings are open to the public and allow for shareholders and public testimony in the beginning of each meeting. *For more information about your water and consumer input opportunity, call (909)982-4107 and ask the office staff or request a response from our General Manager. If your message is left after business hours, your question will be answered in a timely manner. For meeting dates and locations see our website for information and the ability to contact the office via email www.sawaterco.com.*

Snow is just rain. Taking its time.

~unknown~

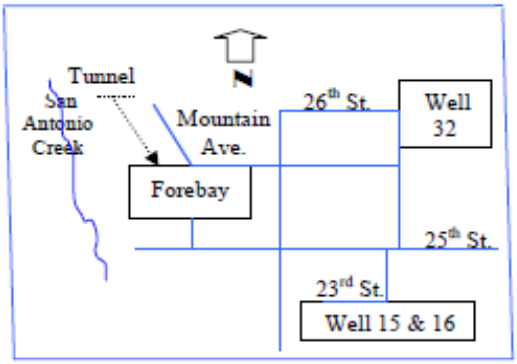
Who is the EPA & what do they say about drinking water contaminants?

The United States Environmental Protection Agency (USEPA) was established in 1970 by the White House and Congress. Their mission is to protect human health and the environment.

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 the water poses a health risk. *More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline [1-800-426-4791].*

Where does your water come from?

Your drinking water supply comes from three deep wells and a deep rock tunnel. Our domestic wells are located in two underlying groundwater basins (Cucamonga, and Chino) and the deep rock tunnel is in the lower San Antonio Canyon. Before the water is delivered to the domestic system we add a disinfectant (sodium hypochlorite) to protect you against natural occurring microbial contaminates.



Are there other factors that may affect my health?

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. USEPA/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 *Safe Drinking Water Hotline [1-800-426-4791].*

Why are there contaminants found in drinking water?

The sources of drinking water (both tap 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, which may come from septic systems, sewage treatment plants, agricultural livestock operations and wildlife. (such as Cryptosporidium and Giardia)
- **Inorganic contaminants**, such as salts, and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which 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* that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- **Radioactive contaminants** can be naturally occurring due to radioactive decay or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by both public and private water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

What is the significance of contaminants?

In 2016 the **SWRCB** changed how the water company reports **Nitrate (as NO3).** Prior to 2016, nitrate was measured as NO3 with a MCL of 45 MGL. The new standard is **Nitrate as Nitrogen or "N"** and reported with a MCL as 10 MG/L or parts per million (PPM). *In drinking water at levels above 10 ppm. [One part per million (ppm) is equivalent to 4 drops of ink in a 55 gallon barrel of water. This a health risk for infants typically less than six months of age.* Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. *Nitrate levels above 10 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies.* If you are caring for an infant, or are pregnant, you should ask advice from your health care professional. The presence of Nitrate in our sources for irrigation water is due to activities associated with fertilization practices on golf courses, residential areas, septic systems (low density), and leaking sewer collection systems.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. San Antonio Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components in your home. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

What is Specific Conductance (SC)?

What is Specific Conductance (SC)? Specific Conductance (SC) is a measure of how well water can conduct an electrical current. Generally, there are no regulatory levels of Specific Conductance (SC). Instead, the concentration of total dissolved solids (TDS) is often regulated SC is an indirect measure of the presence of dissolved solids such as chloride, nitrate, sulfate, phosphate, sodium, magnesium, calcium and iron, and can be used as an indicator of water pollution. Pure water would theoretically have an SC value of zero µS/cm at 25°C. Sea water has an SC of approximately 50,000 µS/cm, because of the large amount of dissolved salts it contains.

What are drinking water standards?

Individual water companies do not decide what constitutes "safe" water. *The federal Safe Drinking Water Act requires all public water supplies in the State to meet stringent quality standards.* Those standards are enforced by the State Department of Drinking Water, in concert with the United States Environmental Protection Agency. These two organizations set standards that are very protective of the public's health. In California, drinking water standards (also called Maximum Contaminate Levels or MCLs) are set in two categories. Primary standards relate to public health concerns, and the secondary standards relate to aesthetic qualities such as taste, odor and color. In this report you will find a complete listing of the standards alongside the test results on those contaminants detected in the source waters.

You can't stop the waves, but you can learn to surf.

~Jon Kabat-Zan~

Terms used in this report

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

NS: No standard

Total Coliform Rule (TCR)

According to the Environmental Protection Agency (EPA)'s website, the Total Coliform Rule (TCR), a National Primary Drinking Water Regulation (NPDWR), was published in 1989 and became effective in 1990. The rule set both a health goal (Maximum Contaminant Level Goal, or MCLG) and legal limits (Maximum Contaminant Levels, or MCLs) for the presence of total coliforms in drinking water. EPA set the MCLG for total coliforms at zero because there have been waterborne disease outbreaks in which researchers found very low levels of coliforms, so any level indicates some health risk. The MCL levels are based on the positive sample tests for total coliforms (monthly MCL), or for total coliforms and Escherichia coli (E. coli) or fecal coliforms (acute MCL).

The purpose of the 1989 TCR is to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbial contamination. The rule requires all public water systems (PWSs) to monitor for the presence of total coliforms in the distribution system at a frequency proportional to the number of people served. Systems which serve fewer than 1,000 people may test once a month or less frequently, while systems with 50,000 customers test at least 60 times per month and those with 2.5 million customers test at least 420 times per month.

To comply with the monthly MCL for total coliforms, PWSs must not find coliforms in more than five percent of the samples they take each month to meet EPA's standards. If more than five percent of the samples contain coliforms, PWS operators must report this violation to the state and the public. If a sample tests positive for total coliforms, the system must collect a set of repeat samples located within 5 or fewer sampling sites adjacent to the location of the routine positive sample within 24 hours. When a routine or repeat sample tests positive for total coliforms, it must also be analyzed for fecal coliforms or E. coli, which are types of coliform bacteria that are directly associated with fresh feces. A positive result for fecal coliforms or E. coli can signify an acute MCL violation, which necessitates rapid state and public notification because it represents a direct health risk. Often, an acute violation due to the presence of fecal coliform or E. coli will result in a "boil water" notice. The system must also take at least 5 routine samples the next month of operation if any sample tests positive for total coliforms.

LEAD AND COPPER TESTING

In 1991 the Federal Environmental Protection Agency (EPA) published the Lead and Copper Rule that requires water agencies to monitor the amount of lead and copper in the water at select customers homes every three years. Homes built before 1986 are more likely to have lead pipes, fixtures and solder making them at greater risk for lead contamination.
In 2019, SAWCo had 10 customers volunteer to participate and all 10 results came back with "Non Detect" for lead contamination. The results for copper came back extremely low ranging from 0.096 mg/L - 0.30 mg/L. The Water Company will test again in 2022. If you are a shareholder, with a home built before 1986 and would like to participate in 2022, please contact our office and we will add you to the list of possible participants.

WATER QUALITY DATA

"The table below lists those water contaminants and physical properties from the 3 domestic wells, tunnel flow and sampling stations that were detected during the 2020 calendar year. 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 January through December 2020. The State of California requires us to monitor about 38 different contaminants and physical properties, some of which are monitored less than once a year. This lesser frequency is because the concentrations of certain contaminants are not expected to vary significantly from year to year; therefore, some of the data is more than one year old, but is still representative of the water quality. "

Contaminate (CCR Units)		State MCL	State PHG fed. (MCLG)	SAW-CO Water	Range of Detection	Most Recent Sample Year	Viola-tion	Typical Source of Contaminate & Perti-nent Notations
Microbiological								
(a) Total Coliforms (% positive)		0	0	0	0	2020	N	Naturally present in the environment
Fecal Coliforms & E. coli (if positive)		0	0	0	0	2020	N	Human and animal fecal waste
Radionuclide								
Gross Alpha	(pCi/L)	15	0	1.13	0-13	2018	N	Erosion of some natural minerals
Uranium		20	0	1.11	0-6	2018	N	Radioactive metallic element occurring naturally in minerals
Inorganic								
(e) Fluoride	(ppm)	2	0.42	0.39	0-1	2018	N	Erosion of natural deposits, discharge from fertilizer and aluminum factories and an additive for teeth
Lead	(ppb)	15	2	ND	ND	2017	N	Corrosion of water plumbing, discharges from industries and erosion of natural deposits
Nitrate	(ppm) (b) & (f)	10	10	1.305	1-2	2019	N	Leaching from fertilizer (animal waste), septic tanks and sewage; erosion of natural deposits
Vanadium	(ug/L)	NS	NS	.71	0-4	2018	N	Naturally present in the environment
Additional Parameters Tested								
Bicarbonate		NS	NS	37.63	35-40	2018	N	Leaching from naturally-occurring materials
Calcium	(ppm)	NS	NS	51.56	49-54	2018	N	Leaching from naturally-occurring materials
Chloride	(ppb)	500	NS	2.39	2-4	2018	N	Leaching from natural deposits and seawater influence
Hardness	[CaC03] (ppm)	NS	NS	170	160-180	2018	N	Bonding of naturally-occurring calcium and carbonate ions in solution. (considered hard if 171 ppm)
Magnesium	(ppm)	NS	NS	10.51	8-11	2018	N	Leaching from naturally-occurring materials
Odor threshold	Units	3	NS	1.0	1-2	2018	N	Naturally-occurring organic materials
pH	Units	NS	NS	7.5	7-8	2019	N	Naturally-occurring leachate blend from acid and base materials
Aggressive Index		NS	NS	11.86	11-12	2018	N	Unit of measurement for corrosivity in drinking water

**Due to a ND (monitored and not detected) result, waiver received from The State Department of Drinking Water*

NS=No Standard

SAWCo water is a weighted average unless specified

PH results is an average of the three production wells

Water Quality Data (cont.)

Contaminate (CCR Units)	State MCL	State Fed.	PHG [MCLG]	SAWCo Water	Range of detec-tion	Most Recent Sample	Viola-tion	Typ. Source of Contaminate & Perti-nent Notations
Additional Parameters Tested								
Temperature –Celsius	(ug/L)	NS	NS	57.5	56-61	2020	N	
Iron	(ug/L)	NS	NS	.13	0-270	2018	N	
Alkalinity	(ppm)	NS	NS	170	160-170	2018	N	
Potassium	(ppm)	NS	NS	2.04	2-3	2018	N	Leaching from naturally-occurring materials
Sodium	(ppm)	Ns	NS	7.91	7-11	2018	N	Salt present in the water and is generally naturally occurring
Specific Con-ductance	(micro-ohms)	"1,600"	NS	380	360-380	2013	N	Substances that form ions when in water and salinity
Sulfate	(ppm)	500	NS	24.81	20-26	2018	N	Leaching from natural deposits and in-dustrial wastes
Total Dissolved Solids (TDS)	(ppm)	"1,000"	NS	217.50	210-250	2018	N	Leaching from natural deposits
Turbidity (groundwater)	(T.U.)	TT	NS	.14	0-3	2018	N	Soil runoff. This is a good indicator of water quality and the probably effectiveness of disinfectants.
TTHM (Total Trihalome-thanes)	(ug/L)	80	NS	6.1	1.4-11.1	2020	N	Stage 1 disinfection by-product sam-pling. By-products are formed when disinfectants used in water react with natural organic matter present in source water, forming these groups of chemicals that may be harmful to human health. Extensive research is underway to better un-derstand potential risk to exposure.
HAA5	(ug/L)	60	NS	2.7	0.0-5.2	2020	N	See TTHM Notation
Perchlorate		6	NS	ND	ND	2008*	N	See TTHM Notation
1.2.3. TCP		0.00005	ND	ND	ND	2017		See TTHM Notation

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NS=No Standard

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PH results is an average of the three production wells

What can I do?

PROTECTION

15th ANNUAL SAN ANTONIO CANYON WATERSHED CLEAN UP DAY JULY 13, 2019

Your source water assessments

A source water assessment was conducted in December 2002 on the canyon tunnel, and the wells that comprise the San Antonio water system. A copy of the complete assessment may be viewed at the San Antonio Water Company office. You may also request a summary of the assessment by contacting The State Department of Drinking Water District Engineer at (909) 383-4328. *The purpose of the assessment was to determine the vulnerability of our sources to "possible contaminating activities" (PCAs) and to identify the possible sources of contamination.*

Water Alert

Conservation Program - Year Round Stage

- No Outdoor Watering between 10 am and 6 pm
- Handheld hose with nozzle required when washing automobiles
- No washing off driveways, sidewalks, or walkways
- Repair leak or leaks within 72 hours of discovery
- No Excessive water run-off or unreasonable spray of areas being watered

139 North Euclid Avenue
Upland, CA 91786
(909) 982-4107

Your Water Quality Report is produced annually to keep San Antonio Water Company shareholders informed about the water system, water sources, definitions, levels of detected contaminants, water quality compliance/violations, and some educational information. If you have any questions or comments, please call the office at 909-982-4107.

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PROJECTS IN MOTION

Euclid Crescent East Domestic Pipeline Replacement

Reservoir 9 Waterline Replacement