

ANNUAL WATER QUALITY REPORT

Reporting Year 2022

Presented By



Este informe contiene información muy importante sobre su agua potable. Por favor traduzcala o hable con alguien que la entienda.

PWS ID#: 4010002

Here When You Need Us

We are pleased to present our annual water quality report covering January 1 through December 31, 2022. Atascadero Mutual Water Company's (AMWC) highly competent staff constantly seeks the best approaches to delivering the highest quality water possible to you and is dedicated to producing drinking water that meets all state and federal standards. We are committed to meeting the state's water source production, water conservation, and community education goals and serving the needs of all our water users.

What's the Source of My Water?

AMWC's water sources are the groundwater found in the Atascadero Basin, the underflow of the Salinas River, and Nacimiento Lake. Groundwater resides in the spaces between the sands and gravels that make up these geologic formations and is naturally filtered, clean, and clear. AMWC pumps the groundwater from 15 active wells into various portions of its distribution system. If needed, AMWC can discharge water from the Nacimiento Water Project into a recharge basin to replenish the groundwater.

The watershed that replenishes the Atascadero Basin encompasses a 247-square-mile area along the Salinas River, extending to its headwaters. Of that area, only a small percentage (about 550 acres) is owned by AMWC. The majority of the watershed is composed of open space and residential or commercial development.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 <http://water.epa.gov/drink/hotline>.

Community Participation

AMWC holds monthly board meetings, typically on the second Wednesday of each month at 4:30 p.m. The meetings are held at the AMWC business office at 5005 El Camino Real, Atascadero. Please call (805) 466-2428 or check our website to confirm the date. Agendas are available at the meetings and on our website. Public comment is welcome.

Drinking Water Source Assessment and Protection Program

Drinking Water Source Assessment Plans (DWSAPs) assess the area around a drinking water source through which contaminants might move and reach that drinking water supply. They include an inventory of possible contaminating activities (PCAs) that might lead to the release of microbiological or chemical contaminants within the delineated area and a determination of the PCAs to which the drinking water source is most vulnerable.

According to the DWSAPs, our water system has a physical barrier effectiveness rating of low to moderate. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. If you would like to review the DWSAPs, please feel free to contact our office during regular business hours.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

QUESTIONS?

Should you ever have questions regarding this report or the quality of your drinking water, please call Mike Stephens, Chief Operator, at (805) 464-5361, or email mstephens@amwc.us.

AMWC Wants to Share What We Do

Need a guest speaker? If your group would like to learn more about AMWC water resources, topics include:

- The 100+ year history of AMWC
- Water production, treatment facilities, and the Nacimiento recharge basin
- Water conservation
- Appropriate plants for Atascadero home gardens

Tours

AMWC will schedule tours of its facilities for interested shareholders. These tours last approximately two hours. On the tour, you will visit wells, treatment facilities, the Nacimiento Water Project recharge basin, and AMWC's corporate yard, booster stations, and tanks. To arrange a tour, call John Neil at (805) 464-5351.

Activities for Kids

- The Story of Our Water: a 45-minute presentation for third- and fifth-grade classes in Atascadero
- Water Exploration field trip: provides students with a terrific firsthand investigation of the Salinas River and explains how this water source is managed to provide a safe, reliable water supply to residents in AMWC's service area
- Water Cycle or Conservation bracelet activity: for children's organizations, troops, and childcare facilities

Call (805) 464-5347 or email jhendrickson@amwc.us to schedule your free presentation, talk, or tour.

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.

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

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 can 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, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

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.

Per- and Polyfluoroalkyl Substances

AMWC recently reactivated four of its wells that have perfluorooctanoic acid (PFOA) above the response level¹ established by the State Board. Perfluorooctane sulfonic acid (PFOS) and perfluorohexane sulfonic acid (PFHxS) were also detected in these wells at levels below the response level and above the notification levels.² All three contaminants are in a group of human-made chemicals collectively referred to as per- and polyfluoroalkyl substances (PFAS).

On January 21, 2021, the State Board approved AMWC's treatment of blending water from these wells with water from other wells that have PFAS levels below the response level. Response levels for PFOA, PFOS, and PFHxS are 10, 40, and 20 parts per trillion (ppt), respectively. Recent sampling shows that PFAS levels in the blended water are consistently below the response levels and occasionally above the notification levels for PFOA, PFOS, and PFHxS of 5.1, 6.5, and 3.0 ppt, respectively.

¹ Water source must be taken out of service.

² State Board recommends that water utility notify customers.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the tables represents only those substances that were detected. 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 are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2022	10	0.004	0.28	ND–2.2	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2022	1	2	0.014	ND–0.11	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2022	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.90	0.86–0.95	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2022	2.0	1	0.22	0.13–0.33	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2022	15	(0)	0.46	0.42–0.57	No	Erosion of natural deposits
HAA5 [sum of 5 haloacetic acids]–Stage 2 (ppb)	2022	60	NA	15.6	5.9–17.9	No	By-product of drinking water disinfection
Nickel (ppb)	2022	100	12	0.0019	ND–0.015	No	Erosion of natural deposits; discharge from metal factories
Nitrate [as N] (ppm)	2022	10	10	1.12	ND–3.2	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (ppm)	2022	10	10	1.1	ND–1.7	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
pH (units)	2022	NA	NA	7.4	7.0–7.9	No	NA
Selenium (ppb)	2022	50	30	0.0022	ND–0.012	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80	NA	50.9	19.7–60.6	No	By-product of drinking water disinfection
Uranium (pCi/L)	2022	20	0.43	1.68	ND–2.6	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 PERCENTILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	0.3	0.92	1/61	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2022	15	0.2	ND	0/61	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Specific Conductance (µS/cm)	2022	1,600	NS	718	440–1,400	No	Substances that form ions when in water; seawater influence
Total Dissolved Solids (ppm)	2022	1,000	NS	582	300–890	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2022	5	NS	0.30	0.20–0.90	No	Soil runoff

UNREGULATED SUBSTANCES¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity, Total [as CaCO ₃] (ppm)	2022	215	160–350	Naturally occurring
Bicarbonate [HCO ₃] (ppm)	2022	289	200–430	Naturally occurring
Boron (ppb)	2022	54	ND–220	NA
Calcium (ppm)	2022	70	49–120	Erosion of natural deposits
Chloride (ppm)	2022	87	22–200	Runoff/leaching from natural deposits; seawater influence
Hardness, Total [as CaCO ₃] (grains/gal)	2022	18	13–27	Sum of polyvalent cations in water, generally naturally occurring magnesium and calcium
Magnesium (ppm)	2022	33	22–49	Erosion of natural deposits
o-Phosphate [as PO ₄] (ppm)	2022	2.2	1.9–2.5	Added as a corrosion inhibitor
Potassium (ppm)	2022	1.9	1.4–3.1	Erosion of natural deposits
Sodium (ppm)	2022	51	25–120	Naturally occurring
Sulfate (ppm)	2022	107	66–200	Runoff/leaching from natural deposits; industrial wastes
Total Organic Carbon [TOC] (ppb)	2021	0.82	0.53–1.5	Natural and human-made sources
Vanadium (ppm)	2022	0.54	ND–4.3	Naturally occurring

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Perfluorobutane Sulfonic Acid [PFBS] ² (ppb)	2022	0.0038	ND–0.0071	Industrial manufacturing persistent in the environment
Perfluorohexane Sulfonic Acid [PFHxS] ³ (ppb)	2022	0.0052	ND–0.0084	Industrial manufacturing persistent in the environment
Perfluorohexanoic Acid [PFHxA] ⁴ (ppb)	2022	0.0026	ND–0.0046	Industrial manufacturing persistent in the environment
Perfluorononanoic Acid [PFNA] ⁴ (ppb)	2022	0.0024	ND–0.0030	Industrial manufacturing persistent in the environment
Perfluorooctane Sulfonic Acid [PFOS] ⁵ (ppb)	2022	0.0062	ND–0.015	Industrial manufacturing persistent in the environment
Perfluorooctanoic Acid [PFOA] ⁶ (ppb)	2022	0.0045	ND–0.011	Industrial manufacturing persistent in the environment

¹ Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

² Notification level 0.5 ppt; response level 5 ppb.

³ Notification level 3 ppt; response level 20 ppt.

⁴ No notification or response level.

⁵ Notification level 6.5 ppt; response level 40 ppt.

⁶ Notification level 5.1 ppt; response level 10 ppt.

Definitions

90th percentile: 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.

grains/gal (grains per gallon): Grains of compound per gallon of water.

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 U.S. 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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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 (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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