

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By



Here When You Need Us

We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. AMWC's highly competent staff is constantly seeking the best approaches to delivering you the highest-quality water possible and is dedicated to producing drinking water that meets all state and federal standards. We are committed to meeting the state's water source protection, water conservation, and community education goals, and to serving the needs of all our water users.



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 first-hand investigation of the Salinas River and explains how this water source is managed to provide a safe, reliable water supply to residents of the Atascadero 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.

Drinking Water Source Assessment and Protection Program

Drinking Water Source Assessment Plans (DWSAP) 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.

Community Participation

AMWC holds monthly board meetings, typically on the second Wednesday of each month. The meetings are held at the AMWC business office at 5005 El Camino Real, Atascadero, at 4:30 p.m. Please call (805) 466-2428 or check our website (www.amwc.us) to confirm the date. Agendas are available at the meetings and on our website. Public comment is welcome. Due to COVID-19, board meetings have been held via webinar.



Polyfluoroalkyl Substances

Atascadero Mutual Water Company (AMWC) reactivated four of its wells that have levels of two polyfluoroalkyl substances (PFASs) above the response levels established by the California State Water Resources Control Board (Water Board). The two substances are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

On January 21, 2021, the Water Board approved AMWC's treatment of water from these wells by blending it with water from other wells that have PFOA and PFOS levels below the response levels of 10 parts per trillion (ppt) and 40 ppt, respectively. Recent sampling shows that the PFOA and PFOS levels in the blended water are below the response levels but still above the notification levels of 5.1 ppt for PFOA and 6.5 ppt for PFOS.

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 2 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.

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 (USEPA) and the State Water Resources Control Board (Water 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 storm-water 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 storm-water 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 storm-water 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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

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 voids 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. When needed, AMWC discharges 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/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 with cancer 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 USEPA/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>.

QUESTIONS? Should you ever have questions regarding this report or the quality of your drinking water, please call Mike Stephens, AMWC's Chief Operator, at (805) 466-2428, or email him at mstephens@amwc.us.

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; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less often 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.

We participated in the 4th stage of the USEPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the USEPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if USEPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are 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 USEPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2019	10	0.004	0.3	ND–3.4	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	2020	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.93	0.85–1.04	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2019	2.0	1	0.20	ND–0.29	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Fecal Coliform or <i>E. coli</i> ¹ (# positive samples)	2020	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or <i>E. Coli</i> positive	0	0	0–0	No	Human or animal fecal waste
Gross Alpha Particle Activity (pCi/L)	2019	15	(0)	4.5	2.1–7.8	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2020	60	NA	11.0	5.1–17.3	No	By-product of drinking water disinfection
Nitrate + Nitrite (ppm)	2019	10	10	1.63	ND–2.6	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate [as N] (ppm)	2020	10	10	1.65	0.44–4.5	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
pH (Units)	2020	NA	NA	7.55	7.13–7.98	No	NA
Selenium (ppb)	2019	50	30	6.2	ND–8.2	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] (ppb)	2020	80	NA	34.8	25.7–49.2	No	By-product of drinking water disinfection
Total Coliform Bacteria ¹ (# positive samples)	2020	More than 1 positive monthly sample	0	0	0–0	No	Naturally present in the environment
Uranium (pCi/L)	2019	20	0.43	4.7	3.6–8.9	No	Erosion of natural deposits

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	0.3	1.1	4/62	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2020	15	0.2	ND	1/62	No	Internal corrosion of household water plumbing systems; discharge 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
Manganese (ppb)	2019	50	NS	12	ND–20	No	Leaching from natural deposits
Odor–Threshold (TON)	2020	3	NS	2.0	1.0–4.0	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2020	1,600	NS	746	580–1100	No	Substances that form ions when in water; seawater influence
Total Dissolved Solids (ppm)	2020	1,000	NS	542	340–840	No	Runoff/leaching from natural deposits
Turbidity (Units)	2020	5	NS	0.25	0.1–1.7	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (Total, as CaCO ₃) (ppm)	2020	224	200–310	Naturally occurring
Bicarbonate (HCO ₃) (ppm)	2019	282	200–400	Naturally occurring
Bromide (ppm)	2018	113	79–180	Naturally occurring
Boron (ppb)	2019	130	ND–230	NA
Calcium (ppm)	2020	75	51–120	Erosion of natural deposits
Chloride (ppm)	2020	71	18–190	Runoff/leaching from natural deposits; seawater influence
HAA6Br ³ (ppb)	2018	21	15–23	By-product of drinking water disinfection
HAA9 ³ (ppb)	2018	30	18–33	By-product of drinking water disinfection
Hardness (Total, as CaCO ₃) (grains/gal)	2020	22	16–29	The sum of the polyvalent cations present in the water, generally, magnesium and calcium. The cations are usually naturally occurring
Magnesium (ppm)	2019	32	25–42	Erosion of natural deposits
Perfluorobutanesulfonic Acid [PFBS] (ppb)	2020	0.0063	ND–0.017	Industrial manufacturing persistent in the environment
Perfluoroheptanoic Acid [PFHpA] (ppb)	2020	0.0008	ND–0.0031	Industrial manufacturing persistent in the environment
Perfluorohexanesulfonic Acid [PFHxS] (ppb)	2020	0.0071	ND–0.016	Industrial manufacturing persistent in the environment
Perfluorohexonic Acid [PFHxA] (ppb)	2020	0.0046	ND–0.0067	Industrial manufacturing persistent in the environment
Perfluorononanoic Acid [PFNA] (ppb)	2020	0.006	ND–0.0072	Industrial manufacturing persistent in the environment
Perfluorooctanesulfonic Acid [PFOS] (ppb)	2020	0.0136	ND–0.039	Industrial manufacturing persistent in the environment
Perfluorooctanoic Acid [PFOA] (ppb)	2020	0.0091	ND–0.02	Industrial manufacturing persistent in the environment
o-Phosphate (as PO ₄) (ppm)	2020	2.3	2.0–2.6	Added as a corrosion inhibitor
Potassium (ppm)	2019	1.8	1.1–3.2	Erosion of natural deposits
Sodium (ppm)	2019	48	28–97	Refers to the salt present in the water and is generally naturally occurring
Sulfate (ppm)	2019	100	72–140	Runoff/leaching from natural deposits; industrial wastes
Total Germanium ³ (ppb)	2018	0.32	0.32–0.32	Naturally occurring
Total Organic Carbon [TOC] ³ (ppb)	2020	0.84	0.38–1.7	Natural and man-made sources
Vanadium (ppm)	2019	6.2	ND–8.9	Naturally occurring

¹Federal revised and state Total Coliform Rule.

²Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

³UCMR4 Sampling Results.

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).

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

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