



2019 Annual

Water Quality Report

City of East Palo Alto

PWS ID: CA4110024



AMERICAN WATER

This report contains important information about your drinking water. If you do not understand it, please have someone explain or translate it for you.

Este informe contiene información muy importante sobre su agua potable. Si no lo comprende, favor acudir a alguien que se lo pueda traducir o explicar.

The City of East Palo Alto and American Water Message

The City of East Palo Alto's water system is under a 25-year agreement with American Water. In this agreement with the City of East Palo Alto, American Water provides all operations and maintenance works for the system. American Water reads all meters, provides customer service and billing, and payment collection. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. More information can be found by visiting www.amwater.com.

As a trusted leader in the industry, American Water places a strong emphasis on sharing water quality information with our customers.

The customers of the City of East Palo Alto and American Water are our top priority, and we are committed to providing them with the highest quality drinking water and service possible now and in the years to come. In addition to this report, you can view information about your water system at www.ci.east-palo-alto.ca.us.

Please review this Consumer Confidence Report, which outlines information applicable to your local water system for testing completed between January 2019 through December 2019.

The web sites of United States Environmental Protection Agency's (USEPA) Office of Water, the Centers for Disease Control and Prevention (CDC), and California State Water Resources Control Board (SWRCB) provide a substantial amount of information on many issues relating to water resources, water conservation and public health.

How to Contact Us

For more information about the contents of this report, please contact the American Water Project Manager at (650) 322-2083 or visit us online at <http://www.ci.east-palo-alto.ca.us/>.

Water quality policies are decided at public hearings held at the East Palo Alto Government Center 2415 University Ave- First Floor- City Council Chamber. For more information, visit <http://www.ci.east-palo-alto.ca.us/>. Water Quality: Contaminants and Regulations

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. Such substances are called contaminants. 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.

In order to ensure that tap water is safe to drink, the USEPA and SWRCB's Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline 800-426-4791 or at www.epa.gov/safewater.

Water Information Sources

The City of East Palo Alto is supplied water by the San Francisco Regional Water System (SFRWS), which is owned and operated by the San Francisco Public Utilities Commission (SFPUC). Its major water source originates from spring snowmelt flowing down the Tuolumne River to storage in Hetch Hetchy Reservoir. The well protected Sierra water source is exempt from filtration requirements by the USEPA and SWRCB-DDW. Water from the Hetch Hetchy reservoir receives the following treatment to meet appropriate drinking water standards: disinfection by ultraviolet light and chlorine, corrosion control by adjustment of the water pH value, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing disinfection byproduct formation.

Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the 35,000-acre Alameda Watershed in Alameda and Santa Clara counties are collected in the Calaveras and San Antonio reservoirs and delivered to the Sunol Valley Water Treatment Plant (SVWTP). Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in the Crystal Springs, San Andreas and Pilarcitos reservoirs, and are delivered to the Harry Tracy Water Treatment Plant. In addition to these local sources, the SWRCB-DDW approved the SFPUC to use the surface water in Lake Eleanor, Lake Cherry and the associated creeks all conveyed via the Lower Cherry Aqueduct, Early Intake Reservoir and Tuolumne River (collectively known as Upcountry Non-Hetch Hetchy Sources, or UNHHS) as additional drinking water sources to the SFRWS. The UNHHS water, if used, will be treated at the SVWTP prior to service to customers. In 2016, the SFRWS did not use UNHHS. Water at the two local treatment plants is subject to filtration, disinfection, fluoridation, and pH adjustment for corrosion control optimization.

Protecting Our Watersheds

The SFPUC conducts watershed sanitary surveys for the Hetch Hetchy source annually and local water sources every five years. The last local sanitary survey was done in 2016. The SFPUC conducted a special watershed sanitary survey for UNHHS in 2015 as part of its drought response plan efforts. These surveys evaluate the sanitary condition, water quality, potential contamination sources and the results of watershed management activities and were completed with support from partner agencies including National Park Service and US Forest Service.

These surveys identified wildlife, stock, and human activities as potential contamination sources. You may contact the San Francisco District office of SWRCB-DDW at 510-620-3474 to review these reports.

What is a Water Quality Report?

To comply with SWRCB and USEPA regulations, American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to provide you an overview of last year's (2016) drinking water quality. It includes details about where your water comes from and what it contains. We hope the report will raise your understanding of drinking water issues and awareness of the need to protect your drinking water sources. For more information, please contact the Project Manager at (650) 322-2083

You may visit these sites as well as American Water's website at the following addresses:

Centers for Disease Control and Prevention

www.cdc.gov

California State Water Resource Control Board

http://www.waterboards.ca.gov/drinking_water/programs/index.shtml

United States Environmental Protection Agency
www.epa.gov/safewater

American Water
www.amwater.com

American Water Works Association
www.awwa.org

Safe Drinking Water Hotline: (800) 426-4791

How is Your Water Treated?

Your water receives the following treatment to meet appropriate drinking water standards: disinfection by ultraviolet light and chlorine, filtration, corrosion control by adjustment of the water pH value, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing disinfection byproduct formation.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important information with water users at their location who are not billed customers of the City of East Palo Alto and therefore do not receive this report directly.

Fluoridation and Dental Fluorosis

Mandated by State law, water fluoridation is a widely accepted practice proven to be safe and effective for preventing and controlling tooth decay. The SFPUC's fluoride target level in the water is 0.7 milligram per liter, consistent with the May 2015 State regulatory guidance on optimal fluoride level. Infants fed formula mixed with water containing fluoride at this level may still have a chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. The CDC considers it safe to use optimally fluoridated water for preparing infant formula. To lessen this chance of dental fluorosis, you may choose to use low fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste and dental products.

Contact your health provider or SWRCB-DDW if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the CDC website www.cdc.gov/fluoridation or SWRCB-DDW website www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml

Water Conservation Alert & Tips

Following another historically dry winter, we continue to ask all customers to voluntarily reduce water usage. Also in accordance with the State of California emergency water restrictions, voluntary reductions in outdoor irrigation of ornamental landscape and turf are still in place.

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing

Cryptosporidium

Cryptosporidium is a single cell microbial organism found in surface water throughout the US. During its life cycle it matures into resistant cells called oocysts that can be shed in feces. The disease caused by *Cryptosporidium* is called Cryptosporidiosis and is caused by infection with oocysts. People can be exposed to oocysts from other people, animals, water, swimming pools, fresh food, soils, and any surface that has not been sanitized after exposure to feces. Symptoms range from a mild to incapacitating diarrhea, cramps, loss of appetite, weight loss, nausea, and low-grade fever.

Cryptosporidium can be removed through commonly used filtration methods; US EPA issued a new rule in January 2006 that requires systems with higher *Cryptosporidium* levels in their source water to provide additional treatment. The EPA created this rule (Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) to provide for increased protection against microbial pathogens, such as *Cryptosporidium*, in public water systems that use surface water sources.

Substances Expected to be in Drinking Water

Generally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, 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. Such substances are called contaminants, and may be present in source water as:

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, which 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, which can be naturally occurring or 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 800-426-4791, or at www.epa.gov/safewater.

Information about Lead

Is there lead in my water?

Although we regularly test lead levels in your drinking water, it is possible that lead and/or copper levels at your home are higher because of materials used in your plumbing. If present, elevated levels of lead can cause serious 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 City of East Palo Alto 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 and copper exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. You can also use cold water for cooking, drinking, or making baby formula; use low lead containing faucets; and when replacing or working on pipes, use lead-free solder. If you are concerned about lead in your drinking 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 National Lead Information Center (800-LEAD-FYI) or the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

How to Read the Data Tables

The City of East Palo Alto conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2016, certain substances are required to be monitored less than once per year and represent the most current results available. For help with interpreting this table, see the "Table Definitions" section.

Starting with **Detected Contaminants**, please read across:

Year Sampled is usually in 2016 or year prior

MCL shows the highest level of substance (contaminant) allowed.

MCLG is the goal level for that substance (this may be lower than what is allowed).

Average Amount Detected represents the measured amount (less is better).

Range tells the highest and lowest amounts measured.

A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements.

Typical Source tells where the substance usually originates.

Unregulated substances are measured, but maximum allowed contaminant levels have not been established by the government.

Table Definitions and Abbreviations

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

BPQL (Below Practical Quantitative Limit): Below the minimum concentration of a substance can be measured and reported with 99 percent confidence that the true value is greater than zero.

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 disinfectant routinely allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of 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 contamination.

mrem/year: Millirems per year (a measure of radiation absorbed by the body).

NA: Not applicable.

ND: Not detected.

NTU - Nephelometric Turbidity Units: Measurement of the clarity, or turbidity, of water.

Turbidity - A water clarity indicator that measures cloudiness of the water and is used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.

pCi/L (picocuries per liter): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

pH: A measurement of acidity, 7.0 being neutral.

PHG: the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs are not regulatory standards.

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

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

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

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

Water Quality Statement

The City of East Palo Alto is required to sample for many different contaminants in your drinking water annually. The tables below only contain sample results for contaminants that were detected in your drinking water. Some contaminants are required to be sampled for less than annually and in these cases, the most recent sample results are provided below and the year they were collected.

REGULATED CONTAMINANTS FROM SAN FRANCISCO PUBLIC UTILITIES COMMISSION (PURCHASED WATER)

Detected Contaminants	YEAR	UNIT	MCL	PHG OR (MCLG)	Range or Level Found	Average OR [Max]	Major Sources in Drinking Water
TURBIDITY							
Unfiltered Hetch Hetchy Water	2019	NTU	5	N/A	0.3- 0.7 ⁽²⁾	[2.1]	Soil Runoff

Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	2019	NTU	1 ⁽²⁾ Min 95% of samples ≤ 0.3 NTU ⁽²⁾	N/A	- 99.89% - 100%	[1] -	Soil Runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	2019	NTU	1 ⁽²⁾ Min 95% of samples ≤ 0.3 NTU ⁽²⁾	N/A	- 100%	[0.1] -	Soil Runoff
DISINFECTANT BYPRODUCTS AND PRECURSOR							
Total Organic Carbon ⁽³⁾	2019	ppm	TT	N/A	1.6 - 2.6	2.2	Various natural and man-made sources
Total Trihalomethanes	2019	ppb	80	N/A	18.4 - 57.1	42.9	Byproduct of drinking water disinfection
Chloramines	2019	ppm	MRDL = 4.0	MRDLG = 4.0	2.78 - 3.07	2.84	Byproduct of drinking water disinfection
MICROBIOLOGICAL							
Giardia lamblia	2019	cyst/L	TT	(0)	0 - 0.09	0.02	Naturally present in the environment
INORGANICS							
Fluoride (source water) ⁽⁴⁾	2019	ppm	2.0	1	ND - 0.09	0.3 ⁽⁵⁾	Erosion of natural deposits; water additive to promote strong teeth
<p>1. These are monthly average turbidity values measured every 4 hours daily</p> <p>2. There is no turbidity MCL for filtered water. The limits are based on the TT requirements for filtration systems.</p> <p>3. Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.</p> <p>4. In May 2015, the SWRCB recommended an optimal fluoride level of 0.7 ppm be maintained in the treated water. In 2016, the range and average of the fluoride levels were 0.5 ppm - 0.8 ppm and 0.6 ppm, respectively.</p> <p>5. The natural fluoride level in the Hetch Hetchy supply was ND. Elevated fluoride levels in the SVWTP and HTWTP raw water are attributed to the transfer of fluoridated Hetch Hetchy water into the local reservoirs.</p>							

CONSTITUENTS WITH SECONDARY STANDARDS							
	YEAR	UNIT	SMCL	PHG	Range	Average	Major Sources of Contaminant
Chloride	2019	ppm	500	N/A	<3 - 17	8.7	Runoff / leaching from natural deposits
Color	2019	unit	15	N/A	<5 -10	<5	Naturally occurring organic materials
Specific Conductance	2019	µS/cm	1600	N/A	32 - 234	158	Substances that form ions when in water
Sulfate	2019	ppm	500	N/A	1 - 2.9	15	Runoff / leaching from natural deposits
Total Dissolved Solids	2019	ppm	1000	N/A	<20 - 119	76	Runoff / leaching from natural deposits
Turbidity	2019	NTU	5	N/A	ND - 0.5	0.2	Soil runoff

OTHER WATER QUALITY PARAMETERS						
	YEAR	UNIT	ORL	Range	Average	
Alkalinity (as CaCO ₃)	2019	ppm	N/A	3.5-97	46	
Boron	2019	ppb	1000 (NL)	ND - 107	ND	
Bromide	2016	ppb	N/A	<5 - 27	7	
Calcium (as Ca)	2019	ppm	N/A	3.3 - 20	12	
Chlorate ⁽⁷⁾	2019	ppb	800 (NL)	40 - 220	84	
Chromium VI	2019	ppb	-	0.04 - 0.19	0.12	
Hardness (as CaCO ₃)	2019	ppm	N/A	8.9 - 77	47	
Magnesium	2019	ppm	N/A	0.2 - 6.6	4.2	
pH	2019	-	N/A	8.8 - 10.1	9.3	
Phosphate (Ortho)	2016	ppm	N/A	<0.03 - 0.11	0.04	
Potassium	2019	ppm	N/A	0.3 - 1.2	0.8	
Silica	2019	ppm	N/A	4.9 - 8	6.1	
Sodium	2019	ppm	N/A	2.8 - 21	14	
Strontium	2019	ppb	N/A	12 - 230	107	

7. The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.

REGULATED CONTAMINANTS FROM THE CITY OF EAST PALO ALTO DISTRIBUTION SYSTEM

Substance (units)	Year Sampled	UNIT	MCL	PHG OR (MCLG)	Range OR Level Found	Average OR Max	Major Sources of Contaminant
DISINFECTANT AND DISINFECTION BY-PRODUCTS							
Total Trihalomethanes	2019	ppb	80	<40	18.4 - 57.1	45.3 avg	Byproduct of drinking water disinfection
Haloacetic Acids	2019	ppb	60	N/A	7.7 - 37	27 avg	Byproduct of drinking water disinfection
Chloramines	2019	ppm	MRDL = 4.0	MRDLG = 4.0	2.78 - 3.07	2.84 avg	Drinking water disinfectant added for treatment
MICROBIOLOGICAL CONTAMINANTS							
Substance (units)	Year Sampled	UNIT	MCL	MCLG	Tested Positive	Typical Source	
Coliform, Total	2019	-	No more than 1 positive monthly sample.	0	0	Naturally present in the environment	
LEAD AND COPPER							
Substance (units)	Year Sampled	UNIT	AL	PHG	90th Percentile	Sites Above AL	Typical Source
Lead	2017	ppb	.015	0.2	0	0	Corrosion of household plumbing; Erosion of natural deposits
Copper	2017	ppm	1.3	0.3	0.041	0	Corrosion of household plumbing; Erosion of natural deposits

REGULATED SECONDARY CONTAMINANTS FROM THE CITY OF EAST PALO ALTO TREATED GROUNDWATER

Substance (units)	Year Sampled	UNIT	MCL	PHG OR (MCLG)	Range OR Level Found	Average OR Max	Major Sources of Contaminant
Total Dissolved Solids	2019	ppm	1000	N/A	270 - 380	380 max	Runoff / leaching from natural deposits
Chloride	2019	ppm	500	N/A	110 - 120	120 max	Runoff / leaching from natural deposits
Iron	2019	ppm	0.3	0.15	ND - 0.014	0.014 max	Erosion of natural deposits
Manganese	2019	ppm	0.05	0.0025	ND - 0.002	0.002 max	Erosion of natural deposits
Color	2019	CU	15	N/A	ND - <5	<5 max	Erosion of manmade/natural deposits
Odor	2019	TON	3	N/A	<1	<1 max	Erosion of manmade/natural deposits
Turbidity	2019	NTU	5	N/A	<0.10 - .28	0.28 max	Erosion of manmade/natural deposits

UNREGULATED CONTAMINANTS MONITORING RULE (UCMR4) FROM THE CITY OF EAST PALO ALTO

Substance (units)	Year Sampled	UNIT	Highest Level Detected	PHG OR (MCLG)	Range OR Level Found	Average OR Max	Typical Sources of Contaminant
Dichloroacetic Acid	2019	ug/L	8.5	N/A	.2 - 8.5	8.225 avg	By-product / drinking water disinfection
Trichloroacetic Acid	2019	ug/L	10	N/A	.5 - 10	9.875 avg	By-product / drinking water disinfection
Total Haloacetic Acid	2019	ug/L	19	N/A	.2 - 19	18.5 avg	By-product / drinking water disinfection
Total Haloacetic Acid UCMR4	2019	ug/L	19	N/A	.2 - 19	18.5 avg	By-product / drinking water disinfection
Total Haloacetic Acid Br	2019	ug/L	.34	N/A	.2 - .34	.34 max	By-product / drinking water disinfection
Bromochloroacetic Acid	2019	ug/L	.34	N/A	.3 - .34	.34 max	By-product / drinking water disinfection

KEY					
</≤	= Less than / Less than or equal to	AL	= Action Level	Max	= Maximum
Min	= Minimum	N/A	= Not Applicable	ND	= Non - Detect
NL	= Notification Level	NoP	= Number of Coliform Positive Samples	NTU's	= Nephelometric Turbidity Units
ORL	= Other regulatory Level	ppb	= parts per billion	ppm	= parts per million