

CITY OF WHITTIER 2018 ANNUAL WATER QUALITY REPORT



Water Conservation Tips

Water Conservation has become a new way of life. Water Conservation habits that are developed when there is ample snowpack will help sustain the water supply through growth and dry years. We suggest the continuation of the following water conservation habits:

Water between
6 p.m. and 10 a.m.



Adjust watering frequency according to the weather and season. Try to set sprinkler systems for multiples short cycles for each station and allow 30 to 60 minutes for the water to soak into the soil between cycles

Check and repair
leaking pipes,
hoses, sprinklers,
and toilets



Install water-saving
shower heads and toilets

Use a broom to
clean driveways and
sidewalks



Cross Connections and You

Did you know common hazards in and around your house can contaminate your drinking water as well as your neighbors?

These hazards are known as cross-connections, and can result in contaminated water back-flowing into your home's drinking supply without you even knowing.



TWO COMMON CROSS-CONNECTIONS ARE:

Any hose is a cross-connection when left submerged in a swimming pool, laundry sink, or car wash bucket.

To protect your water from these cross connections, make sure to have air vacuum breakers installed on each of your hose bibs.

These simple devices are inexpensive and can be purchased from your local hardware store. They are easy to install; you just screw them on.

Your in-ground irrigation system is also a cross connection so make sure to do the following:

1. Confirm your irrigation system has a back flow assembly device, if not, get one installed.
2. Test the backflow prevention device annually.
3. Turn in your results to the City of Whittier Water Department.

If you have any questions, please contact the Cross Connection Specialist at 562-567-9551.

This report is intended to provide information for all water users. If received by an absentee landlord, a business or school, please share the information with tenants, employees or students. We will be happy to make additional copies of this report available for review by the public upon request.

If you would like additional information regarding water quality, please call Mr. Kyle Cason, at (562) 567-9500.

Our City Council meets on the second and fourth Tuesday of each month at 6:30 p.m. in the City Council Chambers located in City Hall at 13230 Penn Street. Please feel free to participate in these meetings.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Este informe contiene información muy importante sobre su agua potable. Para más información ó traducción, favor de contactar a Mr. Kyle Cason. Telefono: (562) 567-9500.

Sincerely,

David Schickling, PE, Director of Public Works

DEAR CUSTOMER, The City of Whittier is committed to keeping you informed on the quality of your drinking water. This report is provided to you annually. It includes information describing where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards. During 2018, the drinking water provided by the City of Whittier to its service area complied with all Federal and State drinking water quality standards. We remain dedicated to providing you with a safe and reliable supply of high quality drinking water.

The information that follows represents only a fraction of the activity in which the City of Whittier engages to provide you, the consumer, a high level of confidence in the water that you drink. We, along with our State-certified laboratories, routinely scrutinize our water supplies for the entire range of elements that have the potential to degrade the quality of your 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 United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline (1-800-426-4791).



Some people, however, may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplants and people with HIV/AIDS or other immune system disorders, some elderly and infants are among those that may be more vulnerable and 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 USEPA Safe Drinking Water Hotline (1-800-426-4791). Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. As noted below, the City of Whittier's source water does not include surface water; therefore, monitoring for cryptosporidium is not applicable to the City of Whittier.

What kind of contaminants might be found in drinking 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 surfaces 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 storm 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 gasoline stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas productions and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board, Division of Drinking Water (DDW) 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 must provide the same protection for public health.

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 Whittier 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 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 (1-800-426-4791) or at: <https://www.epa.gov/lead>.

This Consumer Confidence Report reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The USEPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

Disinfectants and disinfection byproducts

According to USEPA, disinfection of drinking water is one of the major public health advances in the 20th century. However, the disinfectants themselves can react with naturally-occurring materials in the water to form byproducts, which may pose health risks. Amendments to the Federal Safe Drinking Water Act in 1996 require USEPA to develop rules to balance the risks between microbial pathogens and disinfection byproducts (DBPs). The City of Whittier is required to monitor for DBPs (total trihalomethanes and haloacetic acids) in your drinking water. During 2018, the drinking water provided by the City of Whittier to its service area complied with the Disinfectants and Disinfection Byproducts Rule.

Where does your water come from?

During 2018, the City of Whittier pumped 100 percent of our source water from four (4) active deep wells located in the Whittier Narrows area. These wells draw water from the Main San Gabriel groundwater basin and the Central groundwater basin. This water is then treated, pressurized and delivered to the City of Whittier's eleven reservoirs for your use. In addition, the City of Whittier assists in the operation of a groundwater treatment facility located in the Central Basin and receives treated water from the Central Basin Plant as a drinking water supply. The treatment facility removed Volatile Organic Chemicals (VOCs) to non-detectable levels.

Water conservation should remain a priority in Southern California. Conservation as a way of life will help ensure the continued availability of our water supply. For a list of current water restrictions in the City of Whittier service area, please visit our website at www.cityofwhittier.org or call our Customer Service Desk at (562) 567-9530.



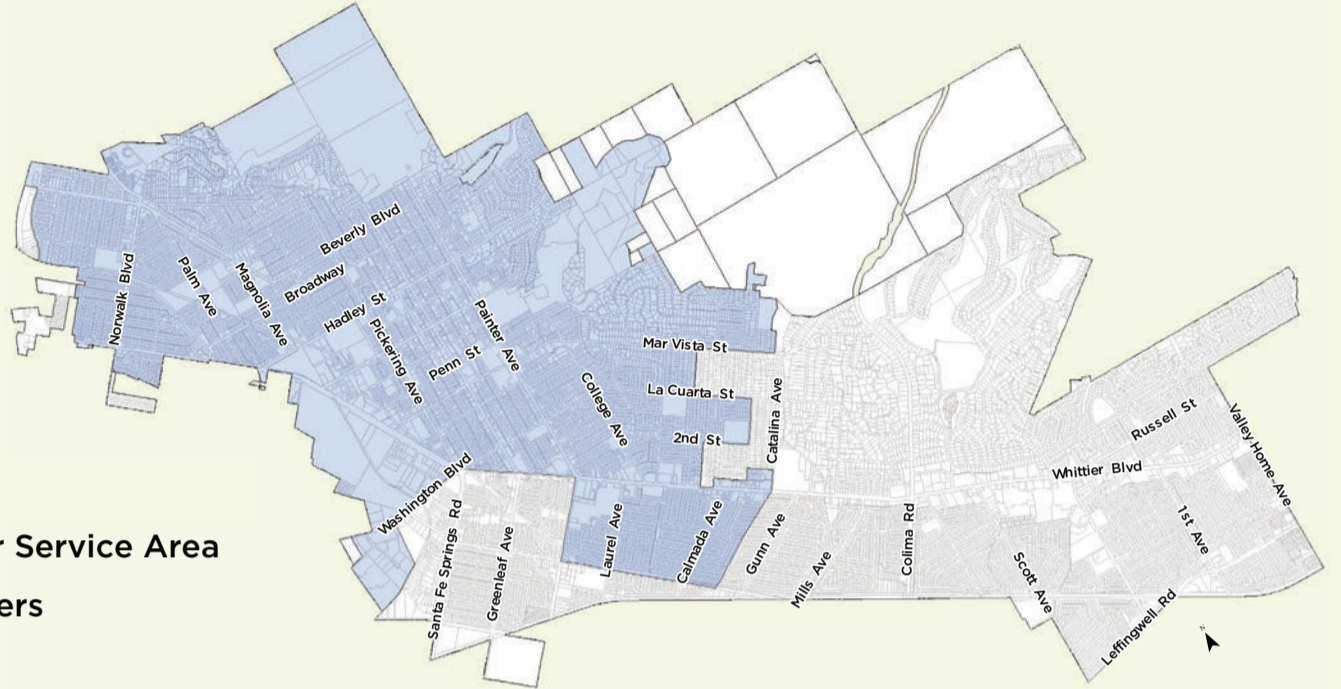
What is in your drinking water?

The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2018 or from the most recent tests. The State allows the City of Whittier to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater do not change frequently. Some of our data, although representative, are more than one year old. The chart lists all the contaminants detected in your drinking water that have Federal and State drinking water standards. Detected unregulated contaminants of interest are also included.

Drinking water source assessment

In accordance with the Federal Safe Drinking Water Act, an assessment of the drinking water sources for the City of Whittier was completed in December 2002. The assessment concluded that the City of Whittier's sources are considered vulnerable to the following activities or facilities associated with contaminants detected in the water supply: research laboratory, known VOC contamination plumes, and parking lots/mall. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: research laboratories and parks. A copy of the complete assessment is available at the City of Whittier Public Works counter at 13230 Penn Street, Whittier, California 90602. You may request a summary of the assessment to be sent to you by contacting Customer Service at (562) 567-9530.

Whittier Water Service



City of Whittier Water Service Area
 Water Service By Others

CITY OF WHITTIER 2018 ANNUAL WATER QUALITY TABLE

CONSTITUENT AND (UNITS)	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	DLR	GROUNDWATER SOURCES		MCL Violations?	Most Recent Sampling Date	TYPICAL ORIGINS
				Results (a)	Range (Min-Max)			
PRIMARY DRINKING WATER STANDARDS--Health-Related Standards								
ORGANIC CHEMICALS								
Tetrachloroethylene (PCE) (µg/l)	5	0.06	0.5	0.63	ND - 5.3	No	Monthly	Discharge from industrial activities
DISINFECTANT AND DISINFECTION BYPRODUCTS (b)								
Total Trihalomethanes (TTHM) (µg/l)	80	NA	1	41	15 - 45	No	Quarterly	Byproduct of drinking water chlorination
Haloacetic acids (five) (HAA5) (µg/l)	60	NA	1 - 2	5.6	2 - 6.7	No	Quarterly	Byproduct of drinking water chlorination
Chlorine Residual (mg/l)	[4]	[4]	NA	0.71	0.1 - 1.6	No	Weekly	Drinking water disinfectant
INORGANIC CHEMICALS								
Copper (mg/l) (c)	AL = 1.3	0.3	0.05	0.39	0 / 30 Samples Exceeded the AL	No	2016	Corrosion of household plumbing system
Fluoride (mg/l)	2	1	0.1	0.23	0.2 - 0.28	No	2018	Erosion of natural deposits
Lead (µg/l) (c)	AL = 15	0.2	5	<5	0 / 30 Samples Exceeded the AL	No	2016	Corrosion of household plumbing system
Nitrate as N (mg/l)	10	10	0.4	2.7	1.4 - 3.8	No	2018	Runoff and leaching from fertilizer use
BACTERIOLOGICAL								
Coliform Bacteria (d)	5.0%	(0)	NA	2.5%	--	No	Weekly	Naturally present in the environment
RADIOACTIVE CHEMICALS								
Gross Alpha (pCi/l)	15	(0)	3	<3	ND - 11.4	No	2018	Erosion of natural deposits
Uranium (pCi/l)	20	0.43	1	1.7	1.2 - 2.3	No	2018	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS--Aesthetic Standards, Not Health-Related								
Chloride (mg/l)	500	NA	NA	100	91 - 120	No	2018	Erosion of natural deposits
Odor (TON)	3	NA	1	1.2	1 - 2	No	2018	Naturally occurring organic materials
Specific Conductance (µmho/cm)	1,600	NA	NA	930	850 - 990	No	2018	Substances that form ions in water
Sulfate (mg/l)	500	NA	0.5	120	100 - 140	No	2018	Erosion of natural deposits
Total Dissolved Solids (mg/l)	1,000	NA	NA	530	480 - 570	No	2018	Erosion of natural deposits
ADDITIONAL CHEMICALS OF INTEREST/UNREGULATED								
Alkalinity, total as CaCO3 (mg/l)	NA	NA	NA	170	150 - 180	NA	2018	Erosion of natural deposits
Calcium (mg/l)	NA	NA	NA	84	75 - 91	NA	2018	Erosion of natural deposits
Hardness, total as CaCO3 (mg/l)	NA	NA	NA	270	250 - 290	NA	2018	Erosion of natural deposits
Magnesium (mg/l)	NA	NA	NA	16	13 - 17	NA	2018	Erosion of natural deposits
pH (pH units)	NA	NA	NA	7.7	7.3 - 7.9	NA	2018	Hydrogen ion concentration
Sodium (mg/l)	NA	NA	NA	74	64 - 87	NA	2018	Erosion of natural deposits

UNREGULATED CHEMICALS REQUIRING MONITORING

CONSTITUENT AND (UNITS)	NL	Results	Range (Min-Max)	Most Recent Sampling Date
AT ENTRY POINT TO THE DISTRIBUTION SYSTEM				
1,4-Dioxane (µg/l)	1	0.52	0.52	2014
Chlorate (µg/l)	800	46	46	2014
Chromium, Hexavalent (µg/l)	NA	0.92	0.92	2014
Chromium, Total (µg/l) (e)	MCL = 50	0.97	0.97	2014
Cobalt, Total (µg/l)	NA	2.5	2.5	2014
Molybdenum, Total (µg/l)	NA	1.1	1.1	2014
Strontium, Total (µg/l)	NA	570	570	2014
Vanadium, Total (µg/l)	50	4	4	2014
IN DISTRIBUTION SYSTEM				
Chlorate (µg/l)	800	33	33	2014
Chromium, Hexavalent (µg/l)	NA	0.67	0.67	2014
Chromium, Total (µg/l) (e)	MCL = 50	0.7	0.7	2014
Cobalt, Total (µg/l)	NA	2.6	2.6	2014
Molybdenum, Total (µg/l)	NA	1.6	1.6	2014
Strontium, Total (µg/l)	NA	590	590	2014
Vanadium, Total (µg/l)	50	3.8	3.8	2014

NOTES

DLR = Detection Limit for Purposes of Reporting
 < = Average is less than the DLR
 NA = No Applicable Limit
 ND = Not Detected at DLR
 NL = Notification Level
 NTU = Nephelometric Turbidity Units
 pCi/l = picoCuries per liter
 TON = Threshold Odor Number
 mg/l = parts per million or milligrams per liter
 µg/l = parts per billion or micrograms per liter
 µmho/cm = micromhos per centimeter
 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 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 California Environmental Protection Agency.

MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
 REGULATORY ACTION LEVEL (AL): The concentration of a contaminant which, if exceeded, triggers a treatment or other requirements which a water system must follow.
 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 STANDARD: MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
 NOTIFICATION LEVEL (NL): An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, county board of supervisors).

(a) The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2018 or from the most recent tests, except for Coliform Bacteria, Chlorine Residual, TTHM, HAA5, Lead, and Copper which are described below.
 (b) Samples were collected in the distribution system. For Chlorine Residual, TTHM, and HAA5, the running annual average is reported as "Results" while the maximum and minimum of the individual results are reported as "Range."
 (c) Concentrations were measured at the tap every 3 years. The 90th percentile concentration is reported in the table. None of the thirty sampling locations for Lead and Copper exceeded the Action Levels. The samples were collected in 2016. In 2018, no school submitted a request to be sampled for lead.

(d) Over seven hundred (700) Coliform Bacteria samples were collected in the distribution system in 2018. Two of 81 samples were positive for Coliform Bacteria in July 2018 (2.5%), and one of 63 samples was positive for Coliform Bacteria in August 2018 (1.6%). The result in the chart is the highest percentage of Coliform-positive samples out of all samples collected in any month the detection was made. Coliform Bacteria are used as an indicator that if present, indicates other potentially harmful microorganisms may be present. No more than 5.0% of the monthly samples may be Coliform-positive; therefore, the MCL was not violated in 2018.
 (e) Total chromium is regulated with an MCL of 50 µg/l but was not detected, based on the DLR of 10 µg/l. Total chromium was included as part of the unregulated chemicals requiring monitoring.