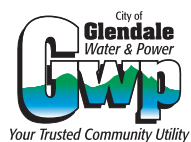


# WQR.18

## City of Glendale Water & Power 2017 Water Quality Report to our Customers

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The water delivered to you by Glendale Water & Power continuously passes tough State and Federal quality standards. This booklet is a detailed report on the water we delivered to you in 2017.



### State and Federal Regulation

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

### Customer Participation and Assistance

Comments from the public are welcome and may be presented at the Glendale Water & Power Commission meetings held the first Monday of each month, at 4:00PM, in the Glendale City Council Chambers, 613 E. Broadway. Please write to: James Saenz, Water Quality Manager, Water Quality Section, Glendale Water & Power 141 N. Glendale Ave., Level 4, Glendale, CA 91206 or call (818) 548-2011. This report can also be downloaded on GWP's website [www.GlendaleCA.gov/waterqualityreports](http://www.GlendaleCA.gov/waterqualityreports)



## A Message from General Manager Stephen M. Zurn



Glendale Water & Power continued to meet all federal, state and local water quality standards in 2017. Maintaining safe and reliable water service in the City of Glendale requires a team of professionals focused on service to the community. GWP's staff take more than 5,700 water quality samples every year and they monitor the testing and compliance of over 2,200 backflow prevention assemblies that help ensure contamination

A major benefit of MWD's support for the California WaterFix is the improvement in the quality of the raw water delivered through the State Water Project to MWD's surface water treatment plants that serve Glendale. Water traveling to the State Water Project system will be able to bypass the Bay Delta and reduce the amount of organic material it absorbs from plants and wildlife in the delta. This makes the treatment process more efficient and reduces the effort needed by GWP staff to maintain the water quality once the water enters GWP's system. So, the California WaterFix does more than secure water supplies for Glendale, it also makes maintaining the water in our system easier.

GWP is Glendale owned and Glendale focused, and this focus extends to GWP's team of water professionals and the work they do to ensure the quality of all of the City's sources of water.

Best regards,  
Steve Zurn



### Frequently Asked Questions

#### My drinking water is reddish brown. Why?

The drinking water pipes in the street, those leading to your home, or those in your home may be rusting, creating rusty-brown water. Also, your hot water tank might be rusting. If you are having trouble and your neighbors are not, then your pipes or water heater are probably rusting. Let your water run until it clears up before using it.

#### Should I install a home water treatment device?

This is a personal decision. These devices are not needed to make the water meet federal, state, or local standards. In fact, if the devices are not properly maintained, they may cause problems of their own. You may consider a home treatment device if you desire to change the taste of your water.

#### How is the inside of a pipe cleaned after a water main break?

After the work is done, the inside of the pipes are disinfected with a chlorine solution to kill off germs. In some cases, a high velocity of water is flushed out by opening a fire hydrant which also allows the water main to be cleaned.

#### Why do GWP crews let water run down the street?

One way GWP maintains water quality is by cleaning pipelines using a flushing process to clean out sediment and minimize the potential for stagnant water. This process maintains disinfectant residuals and reduces the chances of bacterial growth in the water distribution system. Pipeline cleaning is an important, routine process and a non-wasteful, beneficial use of water.

#### My water often looks cloudy when taken from a faucet and then clears up. Why?

The cloudy water is caused by tiny air bubbles. After a while, the bubbles rise to the top and are gone. The cloudiness occurs more often in the winter when the drinking water is cold.

#### How can I find out if my water is supplied through lead pipes?

Glendale Water and Power's water mains are not made of lead. Most of our water mains are cast iron or steel. Using lead piping in homes has been banned since 1986 and is unlikely to be found in newer homes. In older homes, the pipes might be made of lead. Joints on lead pipes are very bulky in comparison to the neat fittings of copper and galvanized iron. If you are in doubt, please call a plumber to evaluate your plumbing system.

#### Why does my water smell like a rotten egg?

The most common cause of the rotten egg or sewage smell is from the gases released by bacterial growth in drain pipes. When you run your faucets, the water enters the drain pipe and forces these gases out, resulting in the smell. To determine if the smell is coming from the sink drain or the water, fill a glass with water, take it into another room and smell the water in the glass. If you do not smell the same odor in the water in the glass, then the odor is coming from the drain.

#### Why does my water smell like chlorine?

State and Federal regulations require that water utilities, including GWP, maintain a disinfectant residual throughout the distribution system. The purpose is to prevent water-borne illnesses by suppressing the growth of bacteria and other potential contaminants. GWP, like many other utilities, uses chlorine and chloramines to comply with these requirements. You may, at times, experience a chlorine taste or odor.



### Cross-Connection Control Program

To protect drinking water systems from potential contamination, State law requires that utilities like GWP, maintain an effective Cross-Connection Control Program. A cross-connection can occur when a potable water line is directly or indirectly connected to a non-potable supply. Regulations require installation of backflow prevention devices at all locations where actual or potential cross-connections exist. An unprotected or inadequately protected cross-connection could contaminate the City's drinking water supply. Examples include fire protection,

lawn irrigation, cooling systems and high pressure boilers. Implementing an effective cross-connection control program involves conducting facility inspections, evaluating the degree of potential hazard to public health, identifying the appropriate protection device, and providing training for onsite supervisors. Once devices are installed, there is a need for regular inspections and testing to ensure their proper operation as well as maintenance of accurate and up-to-date records. Glendale has never experienced contamination due to a cross-connection.



### Recycled Water

The drought in the late 1980's paved the way for Glendale to develop an alternative source of water for non-potable uses. This alternative source is recycled water. Within Glendale, we have two separate water systems, one for drinking water and one for recycled water. Recycled water is domestic wastewater that undergoes extensive treatment. Glendale's supply of recycled water comes from the Los Angeles/Glendale Water Reclamation Plant which produces 14 million gallons of recycled water per day. Even though the end product of all of this treatment meets Federal and State drinking water standards, recycled water cannot be used for human consumption. Glendale's recycled water system helps minimize the impacts of drought and helps conserve our valuable sources of drinking water. Currently, recycled water use in Glendale is 7% of the total annual water used. GWP has 83 service connections that provide recycled water for public area irrigation, cooling towers, street cleaning, dust abatement, and flushing urinals and toilets in several dual-plumbed buildings. Glendale businesses and agencies using recycled water save significant costs over the use of drinking water. As the importance of water conservation becomes greater than ever, increasing our use of recycled water will improve our chances of meeting our water conservation goals while still meeting the water needs of all our customers. This will also reduce the costs of purchasing imported water and help Glendale become less dependent on imported sources of water.





UNREGULATED CONTAMINANTS DETECTED AT GLENDALE’S WATER SOURCES										
	Units	Noti- fication Level	State DLR [PHG]		MWD Weymouth Plant	MWD Jensen Plant	Glendale Treatment Plant	Glorietta Wells	Foothill Well	Major Sources of Contaminants in Drinking Water
CONTAMINANTS WITH NO MCLs										
Boron	ppb	1,000	100	Range	110	190	170-230 196	NA	NA	Runoff/leaching from natural deposits; industrial wastes
				Average						
Chlorate (j)	ppb	800	20	Range	34	28	88 - 110 99	NA	NA	By-product of drinking water chlorination; industrial processes
				Average						
1,4 - Dioxane	ppb	1	1	Range	NA	NA	1 1	NA	NA	Solvent used in a number of industrial and commercial applications.
				Average						
N-Nitrosodimethylamine (NDMA)	ppt	10	2	Range	ND	ND - 3.2	ND	NA	NA	By-product of drinking water chloramination; industrial processes
				Average						
Vanadium	ppb	50	3	Range	4	ND	3.7 - 5.0 4.5	NA	NA	Naturally-occurring; industrial waste discharge
				Average						

LEAD AND COPPER RULE (d)							
	Units	Action Level	PHG	No. of Samples	90th Percentile	No. of sites exceeding action level	Major Sources of Contaminants in Drinking Water
SAMPLES FROM CUSTOMERS’ TAPS (COLLECTED EVERY 3 YEARS)							
Copper (e)	ppb	1300	170	54	170	0	Internal corrosion of household pipes; erosion of natural deposits; wood preservative leaching
Lead	ppb	15	0.20	54	ND	0	Internal corrosion of household pipes; discharges from industrial manufacturer; erosion of natural deposits

CITYWIDE SAMPLING						
	Units	State MCL [MRDL]	MCLG [MRDLG] (PHG)	Citywide Average	Range	Major Sources of Contaminants in Drinking Water
SAMPLES FROM DISTRIBUTION SYSTEM						
Total Coliform Bacteria	%	5.0 (c)	0	0.04	0.0 - 0.5	Naturally present in the environment
Total Trihalomethanes (TTHM) (g)	ppb	80	NS	38	12 - 62	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (g)	ppb	60	NS	8.6	1 - 13	By-product of drinking water disinfection
Total Chlorine Residual	ppm	[4]	[4]	1.19	0.01 - 3.1	Drinking water disinfectant added for treatment
Bromate (m)	ppb	10	(0.1)	7.4 (i) NA (ii)	3.3 - 8.9 2.6 - 5.0	By-product of drinking water ozonation

WATER CONSTITUENTS OF INTEREST TO THE PUBLIC							
	Units		MWD Weymouth Plant	MWD Jensen Plant	Glendale Treatment Plant	Glorietta Wells	Foothill Well
Alkalinity	ppm	Range	42 - 71 57	85 - 86 86	190 190	180 - 210 195	170 170
		Average					
Calcium	ppm	Range	14 - 35 24	27	98 98	90.4 - 109 100.2	70 - 79 75
		Average					
Corrosivity (I) Aggressive Index	Al	Range	11.9 - 12.1 12	12 - 12.1 12	NA	11.5 - 11.9 11.7	11.4 - 11.8 11.6
		Average					
Corrosivity Saturation Index	Al	Range	0.18 - 0.35 0.26	0.15 - 0.26 0.2	NA	NA	NA
		Average					
Hardness (h)	ppm	Range	58 - 152 105	118 - 120 119	345 345	357 - 430 395	272 - 301 291
		Average					
Magnesium	ppm	Range	6.2 - 16 11	12 - 14 13	24 24	31.9 - 39.6 35.9	24 - 27 26
		Average					
pH	pH Units	Range	8.4 - 8.7 8.5	8.2 - 8.3 8.3	7.8 - 8.2 8.1	6.5 - 7.6 7.6	6.6 - 8.4 7.1
		Average					
Potassium	ppm	Range	2.2 - 3.2 2.7	3.1 - 3.2 3.2	4.7 4.7	3.2 - 4.1 3.6	4.0 - 4.6 4.3
		Average					
Sodium	ppm	Range	35 - 64 50	58 - 80 69	51 51	40 - 52 46	29 - 33 31
		Average					
Total Organic Carbon (TOC)	ppm	Range	2.0 - 2.9 2.5	2.3 - 3.1 2.5	0.40 0.40	NA	NA
		Average					

Water Quality Terms 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 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 CalEPA.

Primary Drinking Water Standard (PDWS):

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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.

Regulatory Action Level:

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

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

Source Water Contaminants

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. Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, 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 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 can, come from gas stations, urban storm water runoff, agricultural application, and septic systems.

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

Disinfection By-Products, which include Trihalomethanes (THMs) and Haloacetic Acids (HAAs), are generated by the interaction between naturally occurring matter and disinfectants, such as chlorine.



Sources of Glendale’s Water

In 2017 Glendale Water and Power delivered 7.6 billion gallons of potable water to our customers. 65% was purchased from the Metropolitan Water District, after being imported and treated from Northern California and the Colorado River. 35% came from local groundwater sources extracted from the Verdugo and San Fernando Basins. In addition, 7% of total water used in 2017 was recycled water delivered by the Los Angeles-Glendale Water Reclamation Plant. The plant’s highly treated waste water meets or exceeds the water quality standards for recycled water and is used ONLY for irrigation and industrial processes.

Important Information for People with Compromised Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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).

Explanation Regarding 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. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).





Your Trusted Community Utility

Glendale Water & Power  
141 North Glendale Ave., Level 4  
Glendale, CA 91206

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# WQR.18

## City of Glendale Water & Power 2017 Water Quality Report to our Customers

Follow us on:



COGwaterpower



GlendaleWaterAndPower

**This information is very important.** Please have someone translate it for you.

**Esta informacion es muy importante.** Por favor pidale a alguien que se lo traduzca.

Այս տեղեկությունը շատ կարևոր է: Խնդրում ենք, որ մեկին թարգմանել տաք այն:

此資訊十分重要。請您找人幫您翻譯。

यह सूचना अत्यंत ही महत्त्वपूर्ण है। कृपया किसी से इसका अनुवाद करा लीजिए।

これは非常に重要な情報です。どなたかに翻訳をお願いしてください。

이 정보는 매우 중요합니다. 누군가에게 번역해달라고 하십시오.

**Napakahalaga ang impormasyon na ito.** Mangyaring ipasalin ninyo para sa inyong pang unawa.



### Glendale Water and Power

Glendale Water and Power's (GWP) water utility was established in 1914. GWP provides water service to almost all residential, commercial and industrial consumers located within the incorporated areas of the City. GWP is the retail provider of water service to all consumers in the city except for a small areas in the northern portion served by Crescenta Valley Water District. GWP currently has approximately 33,700 service connections within 31 square miles. The potable water system has seven main pressure zones and consists of 397 miles of water mains, 28 pumping stations, 30 reservoirs and tanks, and 2 treatment plants: Verdugo Park Water Treatment Plant and Glendale Water Treatment Plant.