City of Downey

2018 Annual Water Quality Report

This report is available for electronic viewing at http://www.downeygis.org/wqr/2018.pdf
To request a paper copy of the 2018 report be mailed to your home, please call (562) 904-7202

A Message from the Downey Utilities Division

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. As new challenges to drinking water quality emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. This report summarizes information regarding water sources used, any detected contaminants, compliance, and educational information. We are always available to assist you with any questions or concerns you may have about your water by calling us at 562-904-7202.

In 2018 the City of Downey water system delivered more than 4.8 billion gallons of potable (i.e. drinking) water for domestic use and fire protection to approximately 112,800 residential, commercial, and industrial customers via 23,500 metered connections. In an effort to conserve water, the City utilizes recycled water to offset potable water needs by as much as 5.2% of the City's overall water demand through the application of recycled water for landscaping irrigation, dual-plumbed buildings, lakes, and ponds at 88 sites located throughout the City.

Committed to Providing Quality Water

The City's water supply and distribution system is operated by the City of Downey Department of Public Works Utilities Division. Our water supply and distribution system is composed of 20 groundwater wells located throughout the City and approximately 276 miles of distribution pipeline with diameters ranging from 4 to 24 inches. Our groundwater wells provide one hundred percent of our domestic water supply. As a result, City of Downey residents are able to enjoy one of the least expensive water rates in Southern California.

Prevent Pollution

Polluted runoff flows to storm drains directly into our rivers, bays, beaches, and the ocean. Contaminated runoff can pollute our beaches, and also harm fish and wildlife. As a community it is important to prevent chemicals, automobile fluid, and trash from entering our storm drains.

Source Water Assessment

An assessment of the City's drinking water sources was completed in 2003 by the State Department of Drinking Water. The sources are considered most vulnerable to the following activities: automobile gas stations, dry cleaners, injection wells, dry wells, sumps, finishing, fabricating, metal plating, fleet truck, bus terminals, furniture repair, manufacturing, machine shops, and National Pollutant Discharge Elimination System (NPDES)/ Waste Discharge Requirement permitted discharges. A copy of the complete assessment is available by contacting the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) at (818) 551-2004 or by calling the City of Downey Utilities Division at (562) 904-7202.

Contaminants That May Be Present in Source Water Include

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, wildlife, and agricultural livestock operations.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

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

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Your Water Supply

Downey's groundwater is pumped from the Central Groundwater Basin. The Central Basin is a series of large natural aquifers below the ground that stretch from Los Angeles to Orange County.

The City of Downey conveniently overlies the Central Basin. Groundwater from the Central Basin is pumped from 20 wells located within the City's boundaries and provides the City with its principal source of potable water. The City's service area is shown on the map to the left.

The Central Basin receives natural inflows from the conservation of rainfall and snow melt, artificial inflows from imported and recycled water, as well as groundwater underflow from adjacent basins. Surface water slowly percolates through the ground to the aquifers and the ground acts as a natural filter to clean the water.

Spreading Grounds

Spreading grounds located at the major inflows from the Rio Hondo and San Gabriel Rivers of the Montebello Forebay, allow water from various sources to artificially seep down into the Central Basin aquifers. The ground acts as a natural filter to clean the water as it percolates through the aquifers.

Trained water distribution system operators operate, inspect, repair, and replace critical components of our drinking water infrastructure.

276 miles of potable water main

23,500 Water Meters

1,500 Isolation Valves

1,800 Fire Hydrants

Federal and State Water Quality Regulations

In order to ensure that tap water is safe to drink, the U.S. EPA and the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

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. Additional information on bottled water is available on the California Department of Public Health website: https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx

Drinking water, including bottled water, may reasonably be expected to contain at least 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 U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

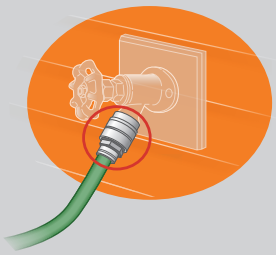
Lead and Copper

Lead can cause serious health problems if present at elevated levels, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Lead can be released when your tap water comes in contact with pipes and plumbing fixtures containing lead. The City of Downey 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 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 800-426-4791 or at http://www.epa.gov/safewater/lead

Important Health Information

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. U.S. EPA 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 800-426-4791.

Protecting Our Water from Cross Connections:

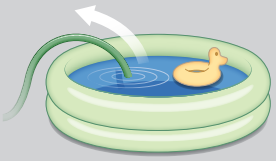


Protect Your Home With Air Vacuum Breakers

Over half of the Nation's cross-connections involve unprotected garden hoses. Check to see if you have air vacuum breakers installed on each of your hose bibbs. They prevent water from getting back into the drinking water system. These simple devices are inexpensive and can be purchased from your local hardware store. They are easy to install, you just simply screw them onto the hose bibb.

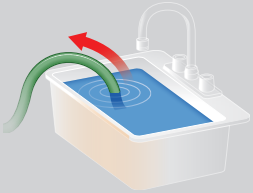
Did you know?

Common hazards in and around your house can contaminate your drinking water? The City's Public Works Department Utilities Division, through its Backflow Prevention Program, goes to great lengths to protect the water entering your home. However, we need your help to protect the water on your home's property.



Avoid putting the garden hose into swimming pools or buckets to fill. Water can flow back into the hose and into your home.

Avoid connecting your garden hose to a plant fertilizer or bug spray unit. This can cause harmful chemicals to flow back into your home.



Avoid putting the garden hose down the drain to flush debris when it's backed up. This can cause a serious health hazard. Contaminated water can be drawn back into your home's water supply.

Water Conservation Tips

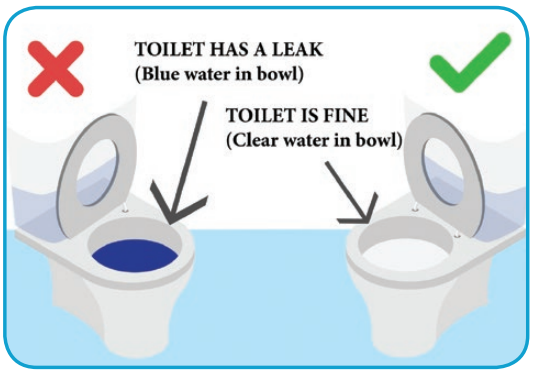
The City of Downey is committed to supporting conservation efforts as part of our plan to provide a reliable water supply for today and tomorrow. The City encourages everyone to look closely at their water usage habits and for ways to use less water. Whether we are in a dry or wet year, there are always actions we can take to increase long-term water use efficiency.

Benefits of Adding Mulch in Gardens

Applying mulch to the top of the soil around plants will increase water retention and reduce the amount of water lost to evaporation by blocking the sun which evaporates water from your soil. This keeps your soil cooler. Organic mulches may also fertilize the soil, provide visual appeal, and help cut down on weeds. The best water savings advantages are gained by applying between 2 to 4 inches of mulch around plant beds.

Making Long-Term Changes to Water Use

During the most recent drought, many residents living in the City of Downey instituted long-term changes to their water use by replacing turf areas with low-water using plants, replacing older appliances and fixtures with water and energy efficient models, and making changes in everyday water use habits.



Quick Method to Detect Toilet Leaks

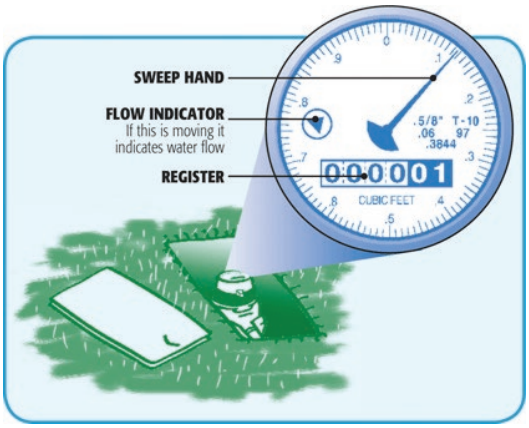
Toilet leaks may be easy to repair, but detecting them can be a challenge. Here is a very quick and easy method to help you detect a toilet leak.

1: Take off the tank lid.

2: Add 10 drops of food coloring liquid or a commercially available blue leak detector tablet into tank.

3: Wait 15 to 20 minutes (do not flush the toilet)

4: Check toilet bowl. If there is colored water in the toilet bowl, you have a leak!



How to Check Your Water Meter

A water meter is a device that measures the volume of water delivered to a property. Checking the water meter can help you determine if there is a water leak.

(Note: Make sure no water is being used inside or outside your home while performing this test).

1: Locate your water meter box and carefully remove the lid. (Be cautious of insects or other small animals).

2: Check your water meter to see if the flow indicator or sweep hand is moving.

3: A moving leak indicator or sweep hand shows that water is either being used or wasted.

4: Be sure to securely reattach the meter lid to prevent trip hazards.

5: If leak is detected, repair leak within 48 hours.

City of Downey Outdoor Water Schedule

FALL/WINTER: October 1 - April 30	**SPRING/SUMMER:** May 1 - September 30
No more than 2 days per week	No more than 3 days per week

ODD Numbered Addresses: (Ending in 1, 3, 5, 7, 9)
Mondays, Wednesdays and/or Fridays

EVEN Numbered Addresses: (Ending in 0, 2, 4, 6, 8)
Tuesday, Thursday, and/or Saturdays

NO WATERING BETWEEN 8AM AND 7PM
*Penalties up to $500 per day for noncompliance may be enforced

Water Quality Sample Testing Results

During 2018, we tested our water for over 100 regulated contaminants in order to determine the presence of any biological, inorganic, volatile organic or synthetic organic, and radioactive contaminants. The following table includes those contaminants that were detected in the water. Both federal and state regulations require us to monitor 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.

City of Downey 2018 Ground Water Data [1]

Substance (Unit)	MCL (SMCL)	PHG (MCLG)	Average	Range (Low-High)	Violation	Typical Source of Contaminant
Primary Standards (Monitored for Health Concerns)						
Radiologicals						
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND - 6.0	NO	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	1.2	ND - 3.7	NO	Erosion of natural deposits
Volatile Organic Compounds						
Tetrachloroethylene (PCE) (ppb)	5	0.06	ND	ND - 2.7	NO	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE) (ppb)	5	1.7	ND	ND - 0.84	NO	Discharge from metal degreasing sites and other factories
Inorganic Compounds						
Arsenic (ppb)	10	0.004	ND	ND - 3.5	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1	2	ND	ND - 0.12	NO	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2	1	0.35	0.25 -0.40	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	10	10	2.9	0.9 - 4.9	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Secondary Standards (Monitored for aesthetic qualities) [2]						
Chloride (ppm)	(500)	n/a	72	31 - 92	NO	Runoff and leaching from natural deposits
Copper (ppm)	(1)	0.3	ND	ND - 0.2	NO	Erosion of natural deposits; leaching from wood preservatives
Iron (ppb)	(300)	n/a	ND	ND- 260	NO	Leaching from natural deposits; industrial wastes
Odor (Units)	(3)	n/a	ND	ND - 1.0	NO	Naturally occurring soluble mineral
Specific Conductance (µS/cm)	(1600)	n/a	753	290 - 920	NO	Substances that form ions when in water; seawater influence
Sulfate (ppm)	(500)	n/a	106	33 -150	NO	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	(1000)	n/a	482	220 - 660	NO	Runoff/leaching from natural deposits
Turbidity (NTU)	(5)	n/a	0.2	ND - 1.0	NO	Soil runoff
Water Characteristics (No MCL or MRDL but state or federal monitoring required)						
Alkalinity (ppm)	n/a	n/a	185	60-260	NO	Runoff and leaching from natural deposits
Calcium (ppm)	n/a	n/a	77	15 - 120	NO	Abundant naturally occurring element
Magnesium (ppm)	n/a	n/a	15	3.3 - 23	NO	Abundant naturally occurring element
pH (units)	(6.5 - 8.5)	n/a	7.6	7.2 - 8.1	NO	Hydrogen ion concentration
Potassium (ppm)	n/a	n/a	4.2	2.8 - 6.1	NO	Runoff or leaching from natural deposits
Sodium (ppm)	n/a	n/a	57	40 - 79	NO	Erosion of natural deposits
Total Hardness (grains per gallon)	n/a	n/a	15	3.0 - 22.8	NO	“Hardness” is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring

City of Downey 2018 Distribution System Water Data

Substance (Unit)	MCL (SMCL)	PHG (MCLG)	Highest Monthly Average	Range (Low-High)	Violation	Typical Source of Contaminant
Microbiological						
Total Coliform Bacteria (%) (State Total Coliform Rule)	5	(0)	15.2	0 - 15.2	YES [3]	Naturally present in the environment

Substance (Unit)	Action Level (AL)	PHG	90th Percentile	Above AL	Violation	Typical Source of Contaminant
Lead and Copper Levels at Residential Taps [4] Lead and Copper analyses are based on triennial monitoring within residential taps throughout the community. Results are based on 2017 monitoring.						
Lead (ppb)	15	0.2	3.4	0 out of 52	NO	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	1.3	0.3	0.26	0 out of 52	NO	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

Number of Schools that requested lead sampling in 2018: A total of 1 school submitted requests to be sampled for lead during 2018.

Substance (Unit)	MCL (SMCL)	PHG (MCLG)	Average	Range (Low-High)	Violation	Typical Source of Contaminant
Federal Unregulated Contaminants Rule 4 (UCMR 4) [5]						
Manganese (ppb)	(50)	n/a	1.1	ND - 2.2	NA	Leaching from natural deposits

Substance (Unit)	MCL (SMCL)	PHG (MCLG)	Average	Range (Low-High)	Violation	Typical Source of Contaminant
Detected Unregulated Contaminants [6]						
Hexavalent Chromium (ppb)	n/a	0.02	ND	ND - 1.0	NO	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits

Glossary of Terms/Abbreviations

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 (SMCLs) are set to protect 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 U.S. EPA.

Detection Limits for Purposes of Reporting (DLR): The DLR is a parameter that is set by regulation by each reportable analyte. It is not laboratory specific and it is independent of the analytical method used (in cases where several methods are approved). It is expected that a laboratory can achieve a Reporting Limit that is lower than or equal to the DLR set by the State. This is also known as the Minimum Reporting Level (MRL).

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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 California Environmental Protection Agency.

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

Level 1 Assessment: A Level 1 Assessment is a study of a water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.

Level 2 Assessment: A Level 2 Assessment is a detailed study of a water system to identify potential problems and determine (if possible) why an (Escherichia coli) (E. coli) MCL violation has occurred and/or why total coliform bacteria have been found in the water system on multiple occasions.

NA: Contaminant or property was not analyzed.

ND: Contaminant was not detected. The contaminant is less than the DLR.

n/a: Not applicable

Units of Measurement:

ppm: parts per million

ppb: parts per billion

pCi/L: picocuries per liter

µS/cm: micro Siemens per centimeter

%: percent

Footnotes:

1. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. In these cases the most recent data available is used.
2. There are no PHGs, MCLGs, or mandatory health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
3. During the months of February, March, and September of 2018, bacteriological quality of water served did not meet the requirements of the Total Coliform Rule. Coliform bacteria were detected in small portions of the distribution system. Upon precautionary flushing and chlorination, repeat samples eventually determined that the water was total coliform free. Appropriate public notification was provided at the time, in compliance with regulations. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we identified potential issues, requiring us to take 6 corrective actions. We completed all 6 of these actions. During the past year one Level 2 Assessment was required to be completed for our water system. One Level 2 Assessment was completed. In addition, we were required to take 14 corrective actions and we completed 14 of these actions.
4. Lead and Copper testing results are based on triennial monitoring within residential taps. Results are based on 2017 monitoring.
5. Data from City of Downey Wells were collected in 2018 for Unregulated Chemical Monitoring Rule 4. Unregulated contaminant monitoring helps USEPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.
6. There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.

For additional questions about your water quality please contact:
Bridgeth Tapia at (562) 904-7202
9252 Stewart & Gray Rd, Downey, CA 90241

Questions? We are Available to Assist You!

Water Quality
Bridgeth Tapia at (562) 904-7202
9252 Stewart & Gray Rd,
Downey, CA 90241

Rebates & Conservation Tips:
bewaterwise.com (888) 376-3314

Report Water Waste
Public Works Utilities Division (562) 904-7202

USEPA Safe Drinking Water Hotline
https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline
(800) 426-4791

Public Health Related Issues
www.publichealth.lacounty.gov
www.epa.gov/watrhome
www.cdc.gov

State Water Resources Control Board
http://www.waterboards.ca.gov/drinking_water/
(818) 551-2004

City of Downey Water Conservation & Restrictions
http://www.downeyca.org/depts/pw/utilities/water_conservation.asp

Important Information

This report contains important information about your drinking water. Please contact the City of Downey Public Water System at 562-904-7202 for assistance.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse con City of Downey Water System al numero 562-904-7202 para asistirlo en español.

Ang pag-uulat na ito ay naglalaman ng ma-halagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa City of Downey Water System o tumawag sa 562-904-7202 para matulungan sa wikang Tagalog.

이 보고서는 당신의 식수에 관한 중요한 정보를 포함하고 있습니다한국어로 된 도움을 원하시면 City of Downey

Public Involvement

You are welcome to attend the following public meetings at City Hall, 11111 Brookshire Ave.

City Council Meetings
Held on the second and fourth Tuesday of each month at 6:30 p.m.

Public Works Committee Meetings
Held on the third Thursday of each month at 4:00pm.

City of Downey

City of Downey | Department of Public Works

Utilities Division

11111 Brookshire Ave | Downey, CA 90241

Important Information Inside