



City of Downey

2017 Annual Water Quality Report



A Message from the Downey Utilities Division

The City's water supply and distribution system is operated by the City of Downey Department of Public Works. 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.

In 2017, the City of Downey water system delivered more than 4.7 billion gallons of potable (i.e. drinking) water to approximately 112,500 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 5.1% of the City's overall water demand through the application of recycled water for landscaping irrigation, dual-plumbed buildings, lakes, and ponds at 96 sites located throughout the City. Trained water distribution system operators, operate, inspect, repair, and replace these critical components of our drinking water infrastructure.

Committed to Providing Quality Water

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2017. 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.

During 2017, as in years past, your tap water met all U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) health standards. There were no violations of a contaminant level or of any other water quality standard during 2017. 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.

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, metal plating, finishing, fabricating, 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 SWRCB-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

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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

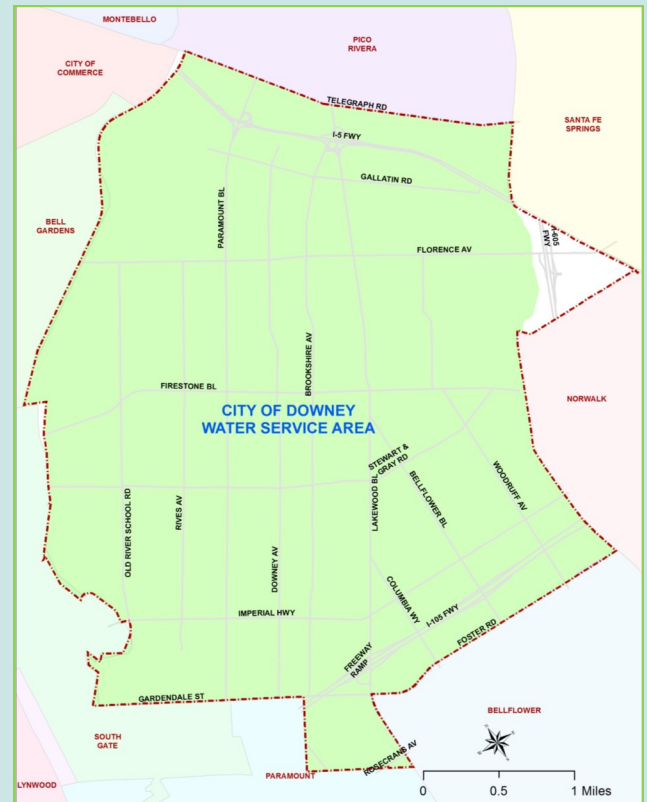
Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

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 right.

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 to the aquifer.



Thank you for doing your part in conserving water and helping to protect our local groundwater!



During the past year over, 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.

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 at (1-800-426-4791) 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 at (1-800-426-4791)



Federal and State Water Quality Regulations

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Water Board regulations 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 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 (1-800-426-4791). 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.

Additional information regarding 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>

Substances that Could Be in Water

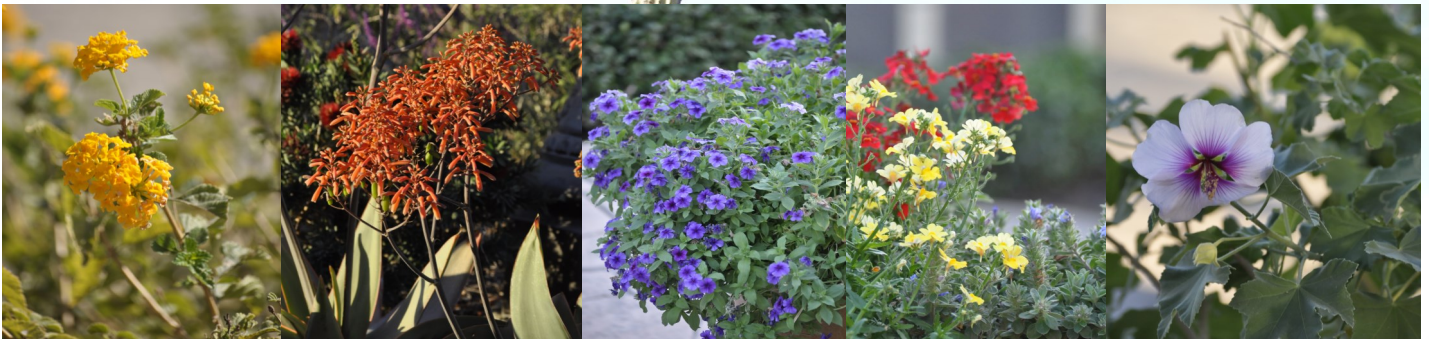
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Water Conservation Tips

As California continues to deal with the effects of the drought, the City of Downey encourages everyone to look closely at their water usage habits and for ways to use less water and help meet the State's latest conservation requirements.

Use Drought Tolerant Landscaping

For every square foot of grass lawn replaced with attractive drought tolerant landscaping, 40-60 gallons of water can be saved annually.



Mulch Around your Plants

Mulch helps retain maximum moisture. Mulch reduces water lost to evaporation. Up to 80% of rainwater will evaporate where no mulch is used.

Find and Fix Leaks

Locate your water meter and check the leak indicator. Make sure no water is being used inside or outside your home at this time. If the leak indicator is spinning, this means you may have found a leak. Leaks should be repaired within 48 hours.

Low Flow Fixtures

By installing low-flow aerators that utilize a maximum of 1.5 gallons per minute you can help reduce a sink's water used by 30% or more from the standard flow of 2.2 gallons per minute.

Only Water What Is Necessary

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 7 PM

***PENALTIES UP TO \$500 PER DAY FOR NON-COMPLIANCE MAY BE ENFORCED**

City of Downey 2017 Water Quality Analyses Results

Primary Standards (Monitored for Health Concerns)

| Substance (Unit) | MCL (SMCL) | PHG (MCLG) | Average | Range (Low-High) | Violation | Typical Source of Contaminant |
|--|------------|------------|---------------------------------|--------------------------------|-----------|---|
| Microbiological | | | | | | |
| Total Coliform Bacteria (%) (State Total Coliform Rule) | 5 | (0) | Highest Monthly Average= (2.2%) | Water System Range = (0 - 2.2) | NO | Naturally present in the environment |
| Radiologicals | | | | | | |
| Gross Alpha Particle Activity (pCi/L) | 15 | (0) | ND | ND - 4.54 | NO | Erosion of natural deposits |
| Uranium (pCi/L) | 20 | 0.43 | 2.1 | ND - 3.8 | NO | Erosion of natural deposits |
| Volatile Organic Compounds | | | | | | |
| Tetrachloroethylene (PCE) (ppb) | 5 | 0.06 | ND | ND - 3.0 | NO | Discharge from factories, dry cleaners, and auto shops (metal degreaser) |
| Trichloroethylene (TCE) (ppb) | 5 | 1.7 | ND | ND - 1.0 | NO | Discharge from metal degreasing sites and other factories |
| cis-1,2- Dichloroethylene (ppb) | 6 | 100 | ND | ND - 0.3 | NO | Discharge from industrial chemical factories; major biodegradation byproduct of TCE & PCE groundwater contamination |
| 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 -0.43 | NO | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate as N (ppm) | 10 | 10 | 2.2 | ND - 3.7 | NO | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |

Secondary Standards (Monitored for aesthetic qualities)

| | | | | | | |
|------------------------------|--------|-----|-----|-----------|----|---|
| Chloride (ppm) | (500) | n/a | 68 | 31 - 91 | 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 |
| Specific Conductance (µS/cm) | (1600) | n/a | 739 | 290 - 920 | NO | Substances that form ions when in water; seawater influence |
| Sulfate (ppm) | (500) | n/a | 105 | 33 -150 | NO | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (ppm) | (1000) | n/a | 480 | 220 - 660 | NO | Runoff/leaching from natural deposits |

Water Characteristics (No MCL or MRDL but state or federal monitoring required)

| | | | | | | |
|------------------------------------|-------------|-----|------|------------|----|--|
| Alkalinity (ppm) | n/a | n/a | 163 | 49 - 230 | NO | Naturally occurring soluble mineral |
| Calcium (ppm) | n/a | n/a | 74 | 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 | 7.5 | 7.2 - 8.1 | NO | Hydrogen ion concentration |
| Potassium (ppm) | n/a | n/a | 4 | 2.8 - 6.1 | NO | Runoff or leaching from natural deposits |
| Sodium (ppm) | n/a | n/a | 56 | 37 - 79 | NO | Erosion of natural deposits |
| Total Hardness (grains per gallon) | n/a | n/a | 14.4 | 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 |

State Unregulated Contaminants with No MCL

| | | | | | | |
|---------------------------|-----|------|----|---------|----|---|
| Hexavalent Chromium (ppb) | n/a | 0.02 | ND | ND -1.1 | NO | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
|---------------------------|-----|------|----|---------|----|---|

Federal Unregulated Contaminants Rule UCMR3 Data

(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)

| | | | | | | |
|--|-----|-------|------|------------|----|--|
| 1, 4 Dioxane (ppb) | n/a | n/a | 1.75 | 0.54 - 2.8 | NA | Used in many products including paint strippers, dyes, greases, varnishes, and waxes; also found as an impurity antifreeze and aircraft deicing fluids and in some consumer products (deodorants, shampoos, and cosmetics) |
| Chlorate (ppb) | n/a | n/a | 21.3 | ND - 54 | NA | Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide |
| Chromium, Total (ppb) | 50 | (100) | 0.7 | 0.43 - 1.2 | NO | Discharge from steel and pulp mills and chrome plating; Erosion of natural deposits |
| Molybdenum (ppb) | n/a | n/a | 1.92 | ND - 2.4 | NA | Naturally present in the environment |
| Perfluoro-1-octanesulfonate (PFOS) (ppb) | n/a | n/a | 0.01 | ND - 0.05 | NA | Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps |
| Strontium (ppb) | n/a | n/a | 524 | 410 - 620 | NA | Naturally present in the environment |
| Vanadium (ppb) | n/a | n/a | 2.65 | 2.3 - 3.4 | NA | Naturally present in the environment |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

| Substance (Unit) | Action Level (AL) | PHG | 90th Percentile | Above AL | Violation | Typical Source |
|------------------|-------------------|-----|-----------------|-------------|-----------|---|
| 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 2017

A total of 21 schools submitted requests to be sampled for lead during 2017. Up to 5 samples were collected at each school.

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.

Units of Measurement:

ppm= parts per million

ppb= parts per billion

pCi/L = picocuries per liter

μS/cm=micro Siemens per centimeter

% = percent

NA: Contaminant or property was not analyzed.

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

n/a: Not applicable

Questions About Your Water? We are available to assist you!

For Rebates & Conservation tips:
bewaterwise.com® (888) 376-3314



Residential
Rebates

To 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

For Information on Water
Resources, Drinking Water Issues,
and Public Health
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

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

City Council Meetings on the second and
fourth Tuesday of each month at 6:30 p.m.
Public Works Committee meetings on the
third Thursday of each month at 4:00 p.m.



Visit us at www.downeyca.org
For Additional questions about your water quality
please contact:
Bridgeth Tapia at (562) 904-7202
9252 Stewart & Gray Rd,
Downey, CA 90241

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.



City of Downey

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito.
Mangyaring ipasalin ito

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

This report is available for electronic viewing at

<http://www.downeygis.org/wqr/2017.pdf>

If you would like a paper copy of the 2017 report mailed to your home, please call (562) 904-7202.



City of Downey

Department of Public Works
Utilities Division
9252 Stewart & Gray Rd
Downey, CA 90241

Important Information Inside