

# **Annual Water Quality Report**

## **REPORTING YEAR 2015**

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 사용하십시요.

This report is available for electronic viewing at <u>http://www.downeygis.org/wqr/wqr2015.pdf</u> If you would like a paper copy of the 2015 report mailed to your home, please call (562) 904-7202. PWS ID# 1910034



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



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.

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

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



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/ gov/pw/utilities/water\_ conservation.asp

To Report Water Waste (562) 904-7202 (Public Works Utilities) USEPA Safe Drinking Water Hotline (800) 426-4791 http://water.epa.gov/ drink/hotline For Information on Water Resources, Drinking Water Issues, and Public Health www.epa.gov/watrhome www.cdc.gov



# 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, 2015. 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 2015, as in years past, your tap water met all USEPA and state water health standards. There were no violations of a contaminant level or of any other water quality standard during 2015. Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

#### **ABOUT US**

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 270 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 2015, the City of Downey water system delivered more than 4.5 billion gallons of potable (i.e. drinking) water to approximately 112,500 residential, commercial, and industrial customers via 23,000 metered connections. Well pump operators ensure reliability and adequate system pressure to satisfy customer demands. In an effort to conserve water, the City utilizes recycled water to offset potable water needs by as much as 4.7% of the City's overall water demand through the application of recycled water for landscaping irrigation, dual-plumbed buildings, lakes, and ponds at 63 sites located throughout the City.

Our Utilities Division conducts regular water quality monitoring to ensure that the water served meets USEPA and Sate Water Resource Control Board (SWRCB) drinking water standards. We are committed to maintaining the reliability of our water system and the quality of the water delivered to you!

#### **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 Central Groundwater 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.

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.

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. As surface water slowly percolates through the ground to the aquifers, the ground acts as a natural filter to clean the water.



*Rio Hondo Spreading Grounds full after a storm* 

# Downey's drinking water comes from local, deep groundwater wells that supply our service area shown on the map.



#### **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, which 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 can 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 Contaminant** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.

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



#### **GLOSSARY OF TERMS AND 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.

**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**=microsiemens per centimeter

% = percent

## WATER QUALITY SAMPLE TESTING RESULTS

#### PRIMARY STANDARDS (Monitored for Health Concerns)

PRIMARY STANDAR				-			
Substance (Unit)	MCL	PHG/MCLG	DLR/MRL	Average	Range (Low-High)	Violation	Typical Source of Contaminant
Radiologicals							
Gross Alpha Particle Activity (pCi/L)	15	n/a	3	1.26	<dlr -="" 3.2<="" td=""><td>NO</td><td>Erosion of natural deposits</td></dlr>	NO	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	1	2.6	1.9 - 3.4	NO	Erosion of natural deposits
Volatile OrganicCompounds							
Tetrachloroethylene (PCE) (ppb)	5	0.06	0.5	0.15	<dlr -="" 3<="" td=""><td>NO</td><td>Discharge from factories, dry cleaners, and auto shops (metal degreaser)</td></dlr>	NO	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE) (ppb)	5	1.7	0.5	0.04	<dlr -="" 0.95<="" td=""><td>NO</td><td>Discharge from metal degreasing sites and other factories</td></dlr>	NO	Discharge from metal degreasing sites and other factories
Inorganic Compounds							
Arsenic (ppb)	10	0.004	2	0.9	<dlr -="" 2.4<="" td=""><td>NO</td><td>Erosion of natural deposits; runoff from orchards; glass and electronics production wastes</td></dlr>	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppb)	1000	2000	100	22.7	<dlr- 120<="" td=""><td>NO</td><td>Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits</td></dlr->	NO	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2	1	0.1	0.3	0.2 - 0.4	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	45	45	2	10.6	5.2 - 16	NO	Runoff and leaching from fertilizera use; leaching from septic tanks and sewage; erosion of natural deposits
Chromium VI (ppb)	10	0.02	1	0.2	<dlr -1.4<="" td=""><td>NO</td><td>Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refactory production, and textile manufacturing facilities; erosion of natural deposits</td></dlr>	NO	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refactory production, and textile manufacturing facilities; erosion of natural deposits
Microbiological							
Total Coliform Bacteria (%)	5	0	n/a	0.43	0 - 4.2	NO	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	DLR/MRL	90th Percentile	Sites Above AL/ Total Sites	Violation	Typical Source
Lead (ppb)	15	0.2	5	0.2	0 out of 50	NO	Internal corrosion of household water plumbing systems; discharges fromindustrial manufacturers; erosion of natural deposits
Copper (ppm)	1.3	0.3	0.05	4.1	0 out of 50	NO	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
SECONDARY STANDARDS (Monitored for aesthetic gualities)							
Substance (Unit)	SMCL	PHG/	DLR/MRL	Average	Range	Violation	Typical Source of Contaminant
		MCLG/AL	,		(Low-High)		21 ·····
Chloride (ppm)	500	n/a	n/a	70	39 - 91	NO	Runoff and leaching from natural deposits
Color (units)	15	n/a	n/a	0.1	0.1 - 2.5	NO	Naturally-occuring organic materials
Iron (ppb)	300	n/a	n/a	27	ND-290	NO	Leaching from natural deposits; industrial wastes
Manganese (ppb)	50	n/a	n/a	0.1	ND - 1.9	NO	Leaching from natural deposits
Odor-Threshold (units)	3	n/a	1	0.3	ND - 1	NO	Naturally-occuring organic materials
Specfic Conductance (µS/cm)	1600	n/a	n/a	732	480 - 920	NO	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	n/a	0.5	110	69-150	NO	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1000	n/a	n/a	460	280 - 600	NO	Runoff/leaching from natural deposits
Unregulated and Other Substances							
Alkalinity (ppm)	n/a	n/a	n/a	158	100 - 200	NO	n/a
Calcium (ppm)	n/a	n/a	n/a	74	41 - 110	NO	n/a
Magnesium (ppm)	n/a	n/a	n/a	15	8.5 - 22	NO	n/a
pH (units)	6.5 - 8.5	n/a	n/a	7.7	7.4 - 8.1	NO	n/a
Potassium (ppm)	n/a	n/a	n/a	4	3.1 - 4.6	NO	n/a
Sodium (ppm)	n/a	n/a	n/a	54	37 - 70	NO	n/a
Total Hardness (grains per gallon)	n/a	n/a	n/a	14.3	8.2 - 21	NO	n/a
FEDERAL UNREGULATED CONTAMINANTS Monitoring Rule UCMR 3 Data							
1, 4 Dioxane (ppb)	n/a	n/a	1	1.75	0.54 - 2.8	NA	n/a
Chlorate (ppb)	n/a	n/a	n/a	21.3	ND - 54	NA	n/a
Chromium, Total (ppb)	50	100	0.2	0.7	0.43 - 1.2	NO	Erosion of natural deposits
Molybdenum (ppb)	n/a	n/a	n/a	1.92	ND - 2.4	NA	Naturally present in the environment
Perfluoro-1- octanesulfonate (PFOS) (ppb)	n/a	n/a	n/a	0.01	ND - 0.05	NA	n/a
Strontium (ppb)	n/a	n/a	n/a	524	410 - 620	NA	Naturally present in the environment
Vanadium (ppb)	n/a	n/a	n/a	2.65	2.3 - 3.4	NA	Naturally present in the environment
(PPD)	.,, d		, si	2.00			

#### 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. The Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (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)

#### **Substances That Could Be in Water**

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

#### **Federal and State Water Quality Regulations**

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California State Water Resources Control Board, Division of Drinking Water (SWRCB-DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

The State regulations also establish limits for contaminants in bottled water that must 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 the USEPA's Safe Drinking Water Hotline, (800) 426-4791.



# Protecting Our Water from Cross Connections:

**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.

#### Here are some ways you can create a cross-connection at home. Protect your home from cross connections by avoiding the following:



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 bibs. They prevent water from getting back into the drinking water system. These sample 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 bib.



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**

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





### LOW FLOW FIXTURES

Installing low-flow faucet aerators that use a maximum of 1.5 gallons per minute can reduce a sink's water used by 30 % or more



## **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.



#### ONLY WATER WHAT'S NECESSARY Water only what needs to be watered. Adjust your sprinklers.

Reduce the time on your sprinklers if run-off is noticed. A maximum of 6 minutes per sprinkler station is allowed. If you do not have sprinklers, a spray nozzle with a positive shutoff nozzle is allowed.



# 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.

# **Understand Your Designated Watering Days**

# CITY OF DOWNEY OUTDOOR WATER SCHEDULEFALL/WINTER: October 1 - April 30SPRING/SUMMER: May 1 - September 30No more than 2 days per weekNo 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