2013 Water Quality Report

Department of Public Works – Utilities Division
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562-904-7202

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.

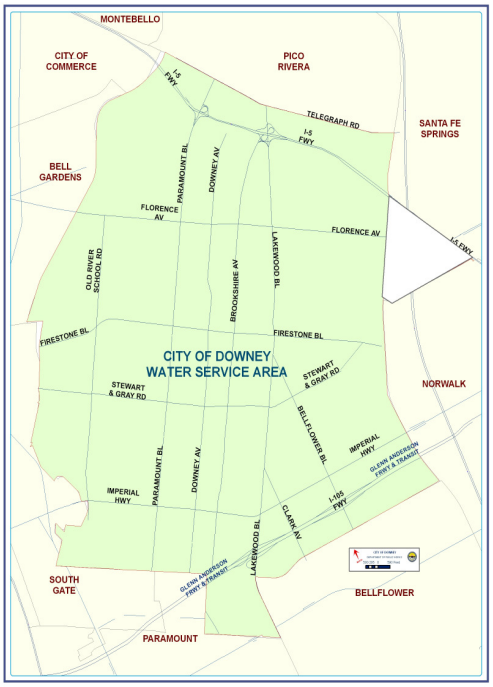
Meeting the Challenge

We are once again proud to present our annual water quality report covering all testing performed in 2013. Over the years we have dedicated ourselves to providing drinking water that meets all state and federal standards. We are committed to delivering you the best quality drinking water possible. As new challenges to drinking water safety and reliability 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. Please share with us your thoughts or concerns about the information in this report. After all, well informed customers are our best allies. For more information about this report, or for any questions relating to your drinking water, please contact us at (562) 904-7202.

Where Does My Tap Water Come From?

Your tap water comes from local, deep groundwater wells that supply our service area shown on the map at the right. The City of Downey Department of Public Works, Utilities Division is responsible for providing water services. Highlights of the Downey Water System include:

- One hundred percent groundwater produced from 20 deep groundwater wells.
- Approximately 270 miles of distribution pipelines with diameters ranging from 4 to 24 inches.
- Providing more than 5 billion gallons of water annually to over 110,000 residents, commercial and industrial customers via 22,500-meter connections.
- More than 4% of water supply is recycled water used at 55 sites primarily for landscape irrigation as well as in several parks and golf course lakes.
- One of the least expensive waters served in Southern California.



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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH 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 small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

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 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 Contaminants, 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.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791 or http://water.epa.gov/drink/hotline.

Water Quality Sample Testing Results

During the past year we have taken thousands of water samples in order to determine the presence of any biological, inorganic, volatile organic or synthetic organic, and radioactive contaminants. The following tables show only 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.

Regulated Substances with Primary Standard

Substance (Unit)	MCL	PHG (MCLG)	Average Detected	Range Low-High	Violation	Typical Source
Arsenic (ppb)	10	0.004	1.0	ND - 2.7	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	2.0	1	0.4	0.3 - 0.4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	15	(0)	2.0	ND - 6.0	No	Erosion of natural deposits
Nitrate (ppm)	45	45	11	5 - 14	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene [PCE] (ppb)	5	0.06	0.3	ND - 2.4	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Total Coliform Bacteria (% of positive samples)	More than 5.0% of monthly samples are positive	(0)	NA	0 – 4.5	No	Naturally present in environment
Uranium (pCi/L)	20	0.43	2.6	1.9 – 3.4	No	Erosion of natural deposits

Substance (Unit)	AL	PHG (MCLG)	Amount Detected (90th per-centile)	Sites Above AL /Total Sites	Violation	Typical Source
Copper* (ppm)	1.3	0.3	0.26	0/50	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead* (ppb)	15	0.2	6.0	0/50	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

*water samples were collected from taps of 50 residential homes throughout the City

Regulated Substances with Secondary (Non-health) Standards

Substance (Unit)	SMCL	Average Detected	Range Low-High	Violation	Typical Source
Chloride (ppm)	500	71	51 - 90	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	300	117	ND - 1300	No	Leaching from natural deposits; industrial wastes
Specific Conductance (uS/cm)	1,600	752	530 - 920	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	111	73 - 150	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	471	350 - 600	No	Runoff/leaching from natural deposits

Unregulated Substances

Substance (Unit)	Average Detected	Range (Low – High)
1,4-Dioxane (ppb)	0.7	ND – 2.6
Calcium (ppm)	76	50 - 110
Hardness (grains/gal)	14.8	9.4 – 21.1
Magnesium (ppm)	16	9 - 22
Potassium (ppm)	4.4	3.6 – 5.0
Sodium (ppm)	58	44 - 69
pH (Units)	7.8	7.6 - 8.2

Glossary of Terms/Abbreviations	
AL (Regulatory Action Level)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Grains/Gal (grains per gallon)	Grains of substance per gallon of water.
MCL (Maximum Contaminant Level) and SMCL (Secondary 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 the odor, taste and appearance of drinking water.
MCLG (Maximum Contaminant Level Goal)	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.
NA (Not applicable)	Not applicable
ND (Not detected)	Indicates that the substance was not found by laboratory analysis.
pCi/L (picocuries per liter)	A measure of radioactivity.
PDWS (Primary Drinking Water Standard)	MCLs and other limits for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
PHG (Public Health Goal)	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 EPA.
ppb (parts per billion)	One part substance per billion parts water (or micrograms per liter).
ppm (parts per million)	One part substance per million parts water (or milligrams per liter).
µS/cm (microsiemens per centimeter)	A unit expressing the amount of electrical conductivity of a solution.

Source Water Assessment

An assessment of the City's drinking water sources was completed in 2003 by CDPH. 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/Waste Discharge Requirement permitted discharges. A copy of the complete assessment is available by contacting CDPH LA Office at (818) 551-2004 or City of Downey Utilities Division at (562) 904-7202.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health 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. We are 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 before using water for drinking or cooking. 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 www.epa.gov/safewater/lead.

Fixtures With Green Stains

A green or blue-green stain on kitchen or bathroom fixtures can be caused by tiny amounts of copper that dissolve in your home's copper plumbing system when the water sits unused overnight. Copper staining may be the result of a leaky faucet or a faulty toilet flush valve, so be sure your plumbing is in good working order.

Copper stains may also be caused by overly hot tap water. Generally speaking, you should maintain your water temperature at a maximum of 120 degrees Fahrenheit. You should consult the owner's manual for

your heater or check with your plumber to determine your current heat setting. Lowering your water temperature will reduce the staining problem and save you money on your energy bill.

Also keep in mind that a tap that is used often throughout the day usually will not produce copper stains. So if you flush the tap for a minute or so before using the water for cooking or drinking, copper levels will be reduced.

Tap Water vs. Bottled Water

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced many that water purchased in bottles is a healthier alternative to tap water. However, according to a four year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water. For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.

Total Coliform Monitoring

As you may know, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms such as E. coli that can cause disease. Throughout the year, the City tested more than 3,000 samples for coliform bacteria and E. coli. Our tests indicate no E. coli. has ever been detected from any samples.

California Drought and Water Conservation

Calendar year 2013 was the driest year in recorded history for many areas of California, and the severe drought is continuing in 2014. On January 17, Gov. Edmund G. Brown Jr. declared a drought state of emergency. Many resources and tools are available to assist you with conserving water including various rebates for water efficient appliances and devices. To view the latest update on the drought and to learn how to conserve water, you can consult the following websites:

http://www.water.ca.gov/waterconditions/

http://www.bewaterwise.com/

http://www.h2ouse.org/

http://www.centralbasin.org/en/conservation/

The California Water Conservation Act of 2009 requires urban water suppliers such as the City to reduce per capita water use 20% by 2020 in order to protect this public resource.

The City also recently raised its water rates for the first time in 16 years. As a result, the City strongly encourages everyone to look closely at their water usage habits and ways to use less water whenever possible. Doing so will reduce your water bill and help us meet our 20% reduction goal. This year's rate increase is the fourth of a five year plan to make up for a Water Fund deficit. By properly managing your water usage you can make a lasting impact by reducing money owed on your water bill. It is not difficult to conserve water. Here are a few tips:

- Water your lawn and garden in the early morning (before 6 am) or late evening (after 10 pm) to reduce water lost to evaporation and exposure to wind
- Reduce the number of days and length of time that you water your landscaping. Most landscaping only needs to be watered 2-3 days per week and 6-7 minutes per cycle.
- Use mulch, drip irrigation, and drought resistant native landscaping where possible.
- Check pools and ponds for leaks as they can be significant sources of water loss
- Install high efficiency toilets (1.28 gallons per flush or less) and appliances, water saving showerheads, and low-flow (2.5 gallons per minute or less) faucet aerators
- Only run full loads in your dishwasher and washing machine. Half-full loads waste water and money.
- Turn off the faucet while brushing your teeth and shaving, and avoid long showers.
- Check every faucet for leaks. Even a slow drip can waste 15 to 20 gallons a day.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. After 30 minutes (without flushing) check to see if any of the color shows up in the bowl. Invisible toilet leaks can waste 100 gallons of water a day.
- Use your water meter to check for leaks. With all faucets and water-using appliances turned off, check your water meter reading. Then check the meter again in 30 minutes. If the reading has changed, you have a leak.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources and conservation, and public health. Also, the CDPH Division of Drinking Water and Environmental Management has a web site (http://www.cdph.ca.gov/programs/Pages/DDWEM.aspx) that provides complete and current information on water issues in California, including valuable information about our watershed.

Community Participation

You are welcome to attend the following public meetings at City Hall, 11111 Brookshire Avenue:

- 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.