

Key Water Quality Terms

Noted on the adjacent water quality table are definitions of key terms that refer to the standards and goals for water quality described below:

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. The California Environmental Protection Agency sets the PHGs.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. The USEPA set the MCLGs.

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 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.

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

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

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

Turbidity: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2014. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Drinking Water Source Assessment

In March 2003 a drinking water source assessment was completed. The assessment showed that five of Daly City's six municipal production wells assessed as being highly protected from potential pathways of contamination. Well #4's assessment showed it as being moderately protected. With the activation of the new Sullivan well in 2015, Well #4 will be designated as an emergency standby well. Daly City's municipal wells are considered most vulnerable to automotive repair activities, roadway contaminants, and railways. A copy of the complete assessment is available from the State Water Resources Control Board, Division of Drinking Water, 850 Marina Bay Parkway, Building P, 2nd Floor, Richmond, CA 94804. You may also obtain a summary of the assessment by contacting either State Board District Engineer Eric Lacy at (510) 620-3453, or Daly City's Director of Water and Wastewater Resources Patrick Sweetland at (650) 991-8200.



Daly City staff at work for the community

Fluoridation Program. Mandated by State law, water fluoridation is a widely accepted practice proven safe and effective for preventing and controlling tooth decay. The SFPUC has fluoridated drinking water for more than 50 years. Since June 2004, Daly City fluoridates the blended well water supply throughout the entire community in keeping with the optimum level established by the SWRCB. Blended water, into your home, is optimally fluoridated at 0.7 mg/L. Average dosage for 2016 was 0.0 to 0.8. For additional information visit the SWRCB website: www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

Special Health Needs. 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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, 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 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 at www.epa.gov/safewater.

Water Conservation

Drought conditions during 2016 required residents and business owners to take proactive steps to reduce urban water use consumption from 8% to 4% during the year, as measured against 2013 baseline usage. Residents and businesses have continued practicing the strong water conservation behavior they demonstrated since June, 2015. Governor Brown's Executive Order in April 2017 ended California's Drought Emergency. As a result, imposition of individual mandated household targets is not presently anticipated. However, the State Water Resources Control Board continues to have agencies report conservation standards. Because it is impossible to predict whether or not drought conditions will return, Daly City residents are encouraged to continue to use water wisely. Continued wise water uses aimed at avoiding unreasonable waste of water include:

Avoiding application of potable water to outdoor landscapes in a manner that eliminates runoff of water flowing onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.

Use of a hose fitted with a positive shut-off nozzle to wash motor vehicles, so it ceases dispensing water immediately when not in use.



Never applying potable water to wash down driveways and sidewalks — use a broom instead.

Using a recirculation pumping system in fountains or other decorative water features.

Serving of drinking water by dining establishments only on customer request ... including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food and drinks are served.

Common sense practices like these will enable us to continue to responsibly do our share in conserving precious water resources.

Free Water Conservation Devices and Cash Rebates

To assist our customers in on-going conservation efforts, the **Department of Water and Wastewater Resources** offers a variety of free water saving devices, publications, rebates, and school programs for residents, commercial users, and students. For more information, contact **Department of Water and Wastewater Resources** at (650) 991-8200.

For additional water conservation information, visit: www.dalycity.org

Your water quality is important. If you have questions, or would like more information ...

Contacts for Your Questions

For questions regarding:

Your water bill and starting or stopping service, contact **Utility Billing** at (650) 991-8082.

Leaks, service problems, water quality information, technical data or any other water related questions, contact the **Department of Water and Wastewater Resources** at (650) 991-8200.

For questions regarding this report, contact Patrick Sweetland, Director of the **Department of Water and Wastewater Resources**, at (650) 991-8200.

If English is Not Your Primary Language

This report contains important information regarding your health and drinking water. Call the **Daly City Water and Wastewater Resources Department** (650) 991-8200 should you require assistance in Chinese, Spanish, or Tagalog.

Este reporte contiene información muy importante de su salud y el agua que toma. Llame a Daly City Water and Wastewater Resources Department a (650) 991-8200 si necesita asistencia en Español.

此報告包括有關您的健康和食水的重要資料。如需華語協助，請來電大市水務及廢水資源部，電話 (650) 991-8200

Ang ulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong kalusugan at sa inumin ninyong tubig. Mangyari po lamang na tawagan ang Daly City Water and Wastewater Resources Department sa numero (650) 991-8200 kung kinakailangan ninyo ng tulong o interpretasyon sa wikang Tagalog.



City of Daly City
Department of Water and Wastewater Resources
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2016 Daly City Water Quality Report

To our water customers:

This 2016 Water Quality Report contains required regulatory information about Daly City's water supply and how it complies with State standards. It is your right to know this information and to become an informed customer of your public water system. The City of Daly City is pleased to present this report to you.

2016 Daly City Water Quality Report

Your drinking water undergoes a rigorous monitoring program. Daly City staff vigilantly safeguards its water supplies and we are proud to report that your water once again meets or surpasses every drinking water requirement set by the State Water Resources Control Board (State Board), Division of Drinking Water and the United States Environmental Protection Agency (USEPA) drinking water health standards. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to state standards. We are committed to providing you with this information because we strongly believe in keeping our customers fully informed.

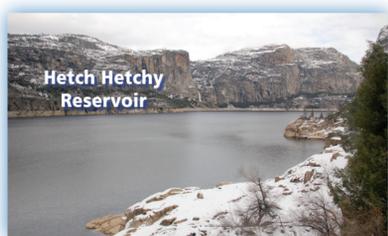
Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, 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. Such substances are called 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. In order to ensure that tap water is safe to drink, the USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. You can obtain additional information about contaminants and potential health effects by calling the USEPA's Safe Drinking Water Hotline: **800-426-4791**.



The Daly City water system has two sources of water supply: surface water from the San Francisco Public Utilities Commission (SFPUC), and groundwater produced by local Daly City wells. These two sources are blended. SFPUC supplies approximately 70.3 percent of Daly City's average daily demand. The remaining 29.7 percent of Daly City's water supply comes from local groundwater wells, from an average depth of 300 feet below ground from a large underground aquifer known as the Westside Basin. In 2016, all of Daly City's water came from SFPUC as Daly City is participating in a Ground Water Storage Program. This

effort aims to recharge the ground water basin by not using any ground water when there is a surplus of regional surface water in order to preserve the local water supply for use during dry years. The Westside Basin serves a large portion of the northern San Mateo Peninsula and extends north to Golden Gate Park in San Francisco. In many ways groundwater is a better protected water source than surface water due to its closed environment. Because of the good water quality test results of our local well water, injection of disinfection chemicals is only required prior to pumpage into the drinking water distribution system.



Hetch Hetchy, impounded in Yosemite National Park, is supplemented with surface water from two local watersheds. Rainfall and runoff from the 35,000-acre Alameda Watershed in Alameda and Santa Clara counties are collected in the Calaveras and San Antonio reservoirs, and delivered to the Sunol Valley Water Treatment Plant (SVWTP). Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in the Crystal Springs, San Andreas, and Pilarcitos reservoirs, and are delivered to the Harry Tracy Water Treatment Plant. In addition to these local sources, the SFPUC received approval to use the surface water collected in Lake Eleanor, Lake Cherry, and the associated creeks ... all conveyed via the Lower Cherry Aqueduct, Early Intake Reservoir, and Tuolumne River (collectively known as Upcountry Non-Hetch Hetchy Sources, or UNHHS) ... as additional drinking water sources. This water, if used, will be treated at the SVWTP prior to service to distribution. In 2016, the UNHHS Water was not used. Water at the two regional treatment plants are subject to filtration, disinfection, fluoridation, and pH adjustment for corrosion control optimization.

How You Can Become Involved

Daly City welcomes your comments and suggestions on how to improve your municipal water system and better preserve our resources. Daly City conducts City Council meetings beginning at 7:00 p.m. on the second and fourth Mondays of each month. These meetings are open to the public and are located on the second floor of City Hall, 333-90th Street in the Council Chambers. Important customer information is also available on Daly City's website: www.dalycity.org.

City of Daly City - Water Quality Data for 2016⁽¹⁾

Data based on Hetch Hetchy water, effluent from both SVWTP and HTWTP, and Daly City wells, which are currently off line for ground water recharge.

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
TURBIDITY						
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.3- 0.5 ⁽²⁾	[3.2]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 ⁽³⁾	N/A	—	[1]	Soil runoff
	—	Min 95% of samples ≤ 0.3 NTU ⁽³⁾	N/A	98% - 100%	—	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 ⁽³⁾	N/A	—	[0.06]	Soil runoff
	—	Min 95% of samples ≤ 0.3 NTU ⁽³⁾	N/A	100%	—	Soil runoff

DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	7.97 - 65.53	[42.4] ⁽⁴⁾	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	1.6 - 58.3	[35.7] ⁽⁴⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁵⁾	ppb	TT	N/A	1.6 - 5.3	2.4	Various natural and man-made sources

MICROBIOLOGICAL						
Total Coliform ⁽⁶⁾	—	NoP ≤ 5.0% of monthly samples	(0)	—	[0.00%]	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	0 - 0.11	0.03	Naturally present in the environment

INORGANICS						
Fluoride (source water) ⁽⁷⁾	ppm	2.0	1	ND - 0.8	0.3 ⁽⁸⁾	Erosion of natural deposits; water additive to promote strong teeth
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	2.1 - 2.6	2.4 ⁽⁹⁾	Drinking water disinfectant added for treatment
Nitrate as N	ppm	10	10	2.3 - 9.2	6.3	Sample results taken from individual Daly City wells prior to blending
Hexavalent Chromium	ppb	10	10	1.9 - 17.0	9.8	Sample results taken from individual Daly City wells prior to blending

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Major Sources of Contaminant
Aluminum ⁽¹⁰⁾	ppb	200	600	ND - 55	ND	Erosion of natural deposits; some surface water treatment residue
Chloride	ppm	500	N/A	<3 - 16	8.8	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 11	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	31 - 218	146	Substances that form ions when in water
Sulfate	ppm	500	N/A	1 - 30	16	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	<20 - 95	63	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	ND - 0.5	0.2	Soil runoff

LEAD AND COPPER	Unit	AL	PHG	Range	90th Percentile	Major Sources in Drinking Water
Copper	ppb	1300	300	<50 - 96 ⁽¹¹⁾	58	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<4 - 53 ⁽¹²⁾	4	Internal corrosion of household water plumbing systems

OTHER WATER QUALITY PARAMETERS:	Unit	ORL	Range	Average	KEY:
Alkalinity (as CaCO ₃)	ppm	N/A	7 - 112	39	< / ≤ = less than / less than or equal to
Boron	ppb	1000 (NL)	ND - 123	ND	AL = Action Level
Bromide	ppb	N/A	<5 - 19	8	Max = Maximum
Calcium (as Ca)	ppm	N/A	2 - 18	10	Min = Minimum
Chlorate (13)	ppb	800 (NL)	47 - 250	143	N/A = Not Available
Hardness (as CaCO ₃)	ppm	N/A	8 - 76	44	ND = Non-detect
Magnesium	ppm	N/A	0.2 - 6	3.6	NL = Notification Level
pH	-	N/A	8.2 - 9.8	9.4	NoP = Number of Coliform-Positive Sample
Phosphate (Ortho)	ppm	N/A	<0.03 - 0.11	0.04	NTU = Nephelometric Turbidity Unit
Potassium	ppm	N/A	0.2 - 1	0.6	ORL = Other Regulatory Level
Silica	ppm	N/A	5.1 - 5.7	5.3	ppb = part per billion
Sodium	ppm	N/A	2.6 - 17	11	ppm = part per million
Strontium	ppb	N/A	13 - 204	95	µS/cm = microSiemens/centimeter

FOOTNOTES:

- All results met State and Federal drinking water health standards.
- These are monthly average turbidity values measured every 4 hours daily.
- There is no turbidity MCL for filtered water. The limits are based on the TT requirements for filtration systems.
- This is the highest locational running annual average value.
- Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
- Two routine samples detected Total Coliform. Re-samples were found to be negative.
- In May 2015, the SWRCB recommended an optimal fluoride level of 0.7 ppm be maintained in the treated water. In 2016, the range and average of the fluoride levels were 0.5 ppm - 0.8 ppm and 0.6 ppm, respectively.
- The natural fluoride level in the Hetch Hetchy supply was ND. Elevated fluoride levels in the SVWTP and HTWTP raw water are attributed to the transfer of fluoridated Hetch Hetchy water into the local reservoirs.
- This is the highest running annual average value.
- Aluminum also has a primary MCL of 1,000 ppb.
- The most recent Lead and Copper Rule monitoring was in 2016. 0 of 58 site samples collected at consumer taps had copper concentrations above the AL.
- The most recent Lead and Copper Rule monitoring was in 2016. 02 of 58 site samples collected at consumer taps had lead concentrations above the AL.
- The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.

Additional water quality data may be obtained by calling the Daly City Department of Water and Wastewater Resources at (650) 991-8200.

Water Quality Data

The table to the left lists drinking water contaminants detected in 2016. Contaminants below federally established detection limits, such as arsenic, perchlorate, MTBE, and others, are not listed. The table contains the name of each contaminant, the applicable drinking water standards or regulatory action levels, the ideal goals for public health, the amount detected, the typical contaminant sources, and footnotes explaining the findings. The State allows the San Francisco Public Utilities Commission (SFPUC) to monitor for some contaminants less than once per year because their concentrations do not change. For certain other contaminants that were absent in the water, based on many years of monitoring, the SFPUC received a monitoring waiver from the State.



Results from Hexavalent Chromium at some of Daly City Wells are in excess of the maximum contaminant level of 10 parts per billion; however, the blended average in the distribution system always remains under the MCL whenever wells are in use. Nitrate in drinking water

at levels above 45 parts per million is a health risk for infants less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 parts per million may also affect the ability of the blood to carry oxygen for other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or pregnant, you should seek advice from your health care provider. Additionally, nitrate levels may rise quickly for short periods of time due to rainfall or agricultural activity.

In an effort to ensure a safe drinking water supply, the USEPA published the third Unregulated Contaminant Monitoring Rule (UCMR3) in May of 2012 that lists a total of 28 chemical contaminants and two viruses for monitoring by selected public water systems between 2013 and 2015. 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. Daly City was required to monitor the 28 chemical

contaminants, and complete the four quarters of the UCMR3 by November 2014. Of the 28 contaminants analyzed, five (shown below) were detected. In the absence of identifiable industrial sources other than chlorate, these contaminants are naturally

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 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 also come from gas stations, urban storm water runoff, agricultural application, and septic systems; and
- Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

Unregulated Contaminant Monitoring Rule (UCMR3) Completed Sample Results (2014)						
DETECTED CONTAMINANTS	Unit	MCL ¹	PHG or (MCLG)	Range	Average	Typical Sources in Drinking Water
Chlorate	ppb	800 (NL)	n/a	50-230	113.17	Degradation of disinfectant
Chromium-total ²	ppb	50	(100)	<0.2-14	2.49	Erosion of natural deposits; industrial discharges
Chromium-6 ³	ppb	10	0.02	<0.03-14	2.31	Erosion of natural deposits; industrial discharges
Strontium	ppb	n/a	n/a	13-240	88.42	Erosion of natural and pipe deposits
Vanadium	ppb	50 (NL)	n/a	<0.2-6.5	1.26	Erosion of natural and pipe deposits

- For definitions of these water quality terms, please see the contaminants listing above.
- This MCL was established by CDPH. USEPA has a MCL of 100 ppb.
- CDPH has proposed a MCL of 10 ppb for chromium-6.

occurring in the watersheds. Chlorate is a degradation product of the disinfectant used by SFPUC for water treatment, and is a common contaminant found in the water treatment facilities throughout the nation. The next UCMR is tentatively scheduled for 2018. A list of the 28 contaminants is available at USEPA's website: <http://water.epa.gov> and at: <http://www.swrcb.ca.gov>

Reducing Lead from Plumbing Fixtures

Lead in drinking water, which has received national attention in Flint, Michigan, is primarily from materials and components associated with service lines and home plumbing. There are no known lead service lines in the Daly City water distribution system. In August 2016, the of Daly City participated in a triennial Lead and Copper Monitoring effort. The Department of Water and Wastewater resources used a predetermined list of residences approved by the State Division of Drinking Water, in which participating residences meet the criteria of being built after 1982. 58 samples were taken with two internal results reported above the action level. A subsequent resample yielded a "No Detect" lead result. A concurrent water system sample taken within the area also yielded a sample with a "No Detect" result for lead. The overall result for Daly City's 2016 Lead and Copper Monitoring event concluded that Daly City's overall 90th percentile result was below the action level recommend by the EPA.



The City is responsible for providing high-quality drinking water (please see water quality footnote 12 in the adjacent Water Quality Data table), but cannot control the variety of materials used in plumbing components. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population. If you are concerned about lead levels in your water, you may wish to test your water with a home test kit. You can further minimize the potential for lead exposure in water that's been sitting for several hours, by flushing your cold water tap for 30 seconds to two minutes before using water for drinking or cooking. Additional 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 800-426-4791**, or at www.epa.gov/safewater/lead.