



City of
South Pasadena
PUBLIC WORKS



2016
Water Quality Report

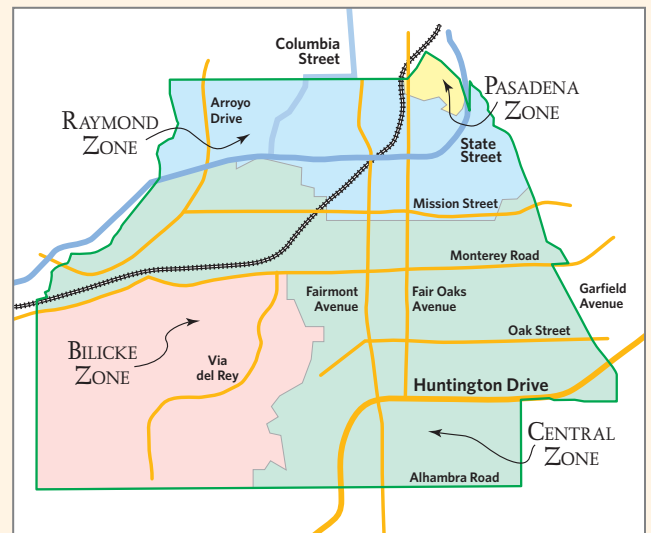
Your 2016 South Pasadena Water Quality Report

Introduction

The City of South Pasadena (City) is committed to keeping you informed about the quality of your drinking water. This report is provided to you annually. It includes information describing where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards.

Where Does My Drinking Water Come From?

The water supply for the City comes from three sources: (1) groundwater pumped from wells in the Main San Gabriel Groundwater Basin, (2) surface water imported by Metropolitan Water District of Southern California (Metropolitan) from the Colorado River and from Northern California, and (3) groundwater from the City of Pasadena, which includes Metropolitan water, that is supplied to only the City's Pasadena Zone. Metropolitan filters imported surface water and adds chloramines, a combination of chlorine and ammonia, as a residual disinfectant. The City adds chlorine without ammonia, called free chlorine, to groundwater pumped from wells. A residual amount of free chlorine and chloramines in the distribution system helps prevent microorganisms from growing in the pipes.



City of South Pasadena — Water System Pressure Zone Map

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.

Para mas información o traducción, favor de contactar a

Mr. Anteneh Tesfaye: (626) 441-4024

這份報告包含有關閣下飲用水水質的重要資訊，請找他人為你翻譯及解釋清楚。如果您有任何問題，或是須要更多資訊，請聯絡

Questions about your water? Contact us for answers.

For more information or questions regarding this report, please contact Mr. Anteneh Tesfaye at (626) 441-4024.

Regularly scheduled meetings of the City of South Pasadena City Council are held on the first and third Wednesday of each month at 7:30 p.m. at 1424 Mission Street, South Pasadena, California 91030. The meetings provide an opportunity for public participation in decisions that may affect the quality of your drinking water.

The Quality of Your Water is Our Primary Concern

What Is in My Drinking Water?

Your drinking water is tested by certified professional water system operators and certified laboratories to ensure its safety. The City routinely tests drinking water from its wells and distribution system pipes for bacterial and chemical contaminants while Metropolitan is responsible for testing its treated surface water purchased by the City.



Garfield Reservoir under construction

The City of Pasadena is responsible for testing its groundwater purchased by the City for only the Pasadena Zone. The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2016 or from the most recent tests.

The State Water Resources Control Board, Division of Drinking Water (DDW) allows the City to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater do not change frequently. Some of our data, although representative, are more than one year old.

The chart lists all the contaminants **detected** in your

ABOUT SOUTH PASADENA PUBLIC WORKS

We Provide Far More Than Just Water!

The Public Works Department is responsible for streets, public buildings, water, sewer systems, street lighting and park maintenance.

For a name change, or to start water service, call the Finance Department at (626) 403-7259.

Because California's main water sources have been severely impacted by record dry conditions in recent years, we encourage everyone to become more conservation conscious. Visit www.bewaterwise.com to learn more about water savings, and the **South Pasadena Public Works** website for additional information about smart gardening and drought tolerant plants:

www.southpasadenaca.gov.



drinking water that have federal and state drinking water standards. Detected unregulated contaminants of interest are also included. We are proud to report that during 2016, the drinking water provided by the City to your home met or surpassed all federal and state drinking water standards. We remain dedicated to providing you with a reliable supply of high quality drinking water.

What Contaminants May be Present in the Sources of My Drinking Water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, 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.

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.
- **Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **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.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application and septic systems.



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.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Federal and State Water Quality Regulations

WATER QUALITY ISSUES THAT COULD AFFECT YOUR HEALTH

Are There Any Precautions the Public Should Consider?

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.

USEPA/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 (1-800-426-4791).

About Lead in Tap Water

If present, elevated levels of lead can cause serious 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. The City 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.

DDW enforces the Lead and Copper Rule, which follows the USEPA's Lead and Copper Rule, and is used to protect the public's drinking water from metals that can adversely affect public health. The Lead and Copper Rule requires water systems to monitor lead and copper levels at the consumers' taps. In accordance with the Lead and Copper Rule, the City collected the latest lead and copper samples from 33 residences during 2015; lead was detected in the samples collected from two residences but none exceeded the regulatory Action Level (copper was detected in the samples collected

from 27 residences but none exceeded the regulatory Action Level). Therefore, the City is in compliance with the Lead and Copper Rule.

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 USEPA Safe Drinking Water Hotline or at www.epa.gov/lead.

Drinking Water Fluoridation

Metropolitan joined a majority of the nation's public water suppliers by adding fluoride to drinking water in order to prevent tooth decay. The average fluoride level in Metropolitan's treated water is 0.7 milligrams per liter (mg/L). The City does not add additional fluoride to the local water because fluoride occurs naturally in groundwater.

As shown on the water quality chart, the average fluoride concentration in the City's groundwater is 0.63 mg/L, while the average fluoride concentration in the City of Pasadena's groundwater that is supplied to only the Pasadena Zone is 0.9 mg/L.



Nitrate in Tap Water

Although nitrate in your drinking water never exceeds the MCL of 10 milligrams per liter (mg/L), nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies.

If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

Understanding the Water Quality Tables

Source Water Assessments

Imported (Metropolitan) Water Assessment

Every five years, Metropolitan is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

The most recent watershed sanitary surveys for Metropolitan's source waters are the Colorado River Watershed Sanitary Survey – 2015 Update, and the State Water Project Watershed Sanitary Survey – 2011 Update.

Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater.

USEPA also requires Metropolitan to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. Metropolitan completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling Metropolitan at (800) CALL-MWD (225-5693).

Groundwater Assessment

In accordance with the federal Safe Drinking Water Act, an assessment of the drinking water sources for the City was completed in December 2002.

The assessment concluded that the City's groundwater wells are considered most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: dry cleaners, gasoline stations, automobile repair shops, high density housing and medical/dental office/clinics. In addition, the groundwater wells are considered most vulnerable to the following facility not associated with contaminants detected in the water supply: leaking underground storage tanks.

A copy of the complete assessment is available at the City of South Pasadena Water Department at 1414 Mission Street, South Pasadena, California 91030.

You may request a summary of the assessment to be sent to you by contacting Mr. Anteneh Tesfaye at (626) 441-4024.



Want Additional Information?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general, especially the drought and conservation. Some good sites – both local and national – to begin your own research are:

City of South Pasadena Water
www.southpasadenaca.gov

U.S. Environmental Protection Agency
www.epa.gov/safewater

State Water Resources Control Board,
Division of Drinking Water
[www.waterboards.ca.gov/
drinking_water/certlic/drinkingwater/
publicwatersystems.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml)

Metropolitan Water District
of Southern California
www.mwdh2o.com

Drought and Water Conservation Tips
www.BeWaterWise.com
www.SaveOurWater.com

Rebate Information,
Water Saving Resources
www.SoCalWaterSmart.com

What are Water Quality Standards?

In order to ensure that tap water is safe to drink, the USEPA and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- ◆ **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.
- ◆ **Primary Drinking Water Standard:** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- ◆ **Regulatory Action Level (AL):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
- ◆ **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- ◆ **Notification Level (NL):** An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, board of directors, and county board of supervisors).

How are Contaminants Measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- ◆ parts per million (ppm) or milligrams per liter (mg/L) (3 drops in 42 gallons – a large bathtub)
- ◆ parts per billion (ppb) or micrograms per liter (µg/L) (1 drop in 14,000 gallons – an average swimming pool)
- ◆ parts per trillion (ppt) or nanograms per liter (ng/L) (1 drop in 14,000,000 gallons – an average lake)

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- ◆ **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 USEPA.
- ◆ **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.
- ◆ **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.

City of South Pasadena 2016 Water Quality (Table 1 of 2)

| Constituents and Measurement Units | MCL or [MRDL] | PHG (MCLG) or [MRDLG] | DLR | SOUTH PASADENA GROUNDWATER | | | PASADENA GROUNDWATER (Pasadena Zone Only) | | | METROPOLITAN IMPORTED WATER | | | Typical Origins | |
|---|--|-----------------------|------|----------------------------|--------------------------------|------------------|--|------------|------------------|--|---------------|------------------|---|-------------|
| | | | | Result ^(a) | Range | Most Recent Test | Result ^(a) | Range | Most Recent Test | Result ^(a) | Range | Most Recent Test | | |
| Primary Drinking Water Standards – Health-Related Standards | | | | | | | | | | | | | | |
| Filter Effluent Turbidity (NTU) ^(b) | TT = 1 NTU TT = 95% of samples ≤0.3 NTU | NA | NA | | NR | | | NR | | | 0.03 | – | | Soil runoff |
| | | | | | | | | | | | 100% | – | Continuous Testing | |
| Microbiological | | | | | | | | | | | | | | |
| Total Coliforms | 5% | (0) | NA | 0% | 0% | Weekly | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | Naturally present in the environment | |
| Disinfectant and Disinfection Byproducts^(c) | | | | | | | | | | | | | | |
| Total Trihalomethanes (TTHM) (µg/L) | 80 | NA | 1 | 3,3 | ND – 4.6 | Quarterly | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | By-product of drinking water disinfection | |
| Haloacetic acids (five) (HAA5) (µg/L) | 60 | NA | 1.2 | 0,7 | ND | Quarterly | | | | | | | By-product of drinking water disinfection | |
| Chloramines Residual as Cl2 (mg/L) | [4] | [4] | NA | 1.2 | 0.2 – 1.9 | Weekly | | | | | | | Drinking water disinfectant | |
| Chlorine Residual as Cl2 (mg/L) | [4] | [4] | NA | 0.46 | 0.2 – 0.5 | Weekly | | | | | | | Drinking water disinfectant | |
| Organic Chemicals | | | | | | | | | | | | | | |
| Carbon Tetrachloride (ng/L) ^(d) | 500 | 100 | 500 | ND | ND | Weekly | 230 | ND – 1,290 | 2016 | ND | ND | 2016 | Discharge from industrial activities | |
| cis-1,2-Dichloroethylene (µg/L) | 6 | 100 | 0.5 | ND | ND | Weekly | ND | ND – 1.8 | 2016 | ND | ND | 2016 | Discharge from industrial activities | |
| Tetrachloroethylene (PCE) (µg/L) | 5 | 0.06 | 0.5 | 2.1 | 1.6 – 2.6 | Weekly | 1.3 | ND – 5 | 2016 | ND | ND | 2016 | Discharge from industrial activities | |
| Trichloroethylene (TCE) (µg/L) | 5 | 1.7 | 0.5 | 1.2 | 0.94 – 1.6 | Weekly | 1.9 | ND – 6.4 | 2016 | ND | ND | 2016 | Discharge from industrial activities | |
| Inorganic Chemicals | | | | | | | | | | | | | | |
| Aluminum (mg/L) | 1 | 0.6 | 0.05 | ND | ND | 2016 | ND | ND – 0.17 | 2016 | 0.159 | 0.077 – 0.22 | 2016 | Used for filtration treatment of surface water | |
| Arsenic (µg/L) | 10 | 0.004 | 2 | ND | ND | 2016 | 1.1 | 1.1 – 2 | 2016 | ND | ND | 2016 | Erosion of natural deposits | |
| Barium (mg/L) | 1 | 2 | 0.1 | ND | ND | 2016 | <0.1 | ND – 0.15 | 2016 | 0.144 | 0.144 | 2016 | Erosion of natural deposits | |
| Copper (mg/L) ^(e) | AL = 1.3 | 0.3 | 0.05 | 0.47 | 0 / 33 Samples Exceeded the AL | 2015 | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | | NR | | Corrosion of household plumbing system | |
| Chromium, Hexavalent (µg/L) | 10 | 0.02 | 1 | 3.4 | 2.9 – 3.7 | 2016 | 3.2 | 1.8 – 4.9 | 2016 | ND | ND | 2016 | Erosion of natural deposits, industrial waste discharge | |
| Fluoride (mg/L) Naturally-occurring | 2 | 1 | 0.1 | 0.63 | 0.38 – 0.79 | 2016 | 0.9 | 0.4 – 1.5 | 2016 | | NR | | Erosion of natural deposits | |
| Fluoride (mg/L) Treatment-related | Optimal Range | 0.6 – 1.2 mg/L | | | NR | | | NR | | 0.7 | 0.6 – 1 | 2016 | Water additive for dental health | |
| Lead (µg/L) ^(e) | AL = 15 | 0.2 | 5 | ND | 0 / 33 Samples Exceeded the AL | 2015 | MCL Compliance Determined from Testing in the South Pasadena Distribution System | | | | NR | | Corrosion of household plumbing system | |
| Nitrate as N (mg/L) ^(d) | 10 | 10 | 0.4 | 5.4 | 4.9 – 6.2 | Weekly | 6.1 | 3.2 – 13 | 2016 | ND | ND | 2016 | Leaching from fertilizer use | |
| Perchlorate (µg/L) ^(d) | 6 | 1 | 4 | ND | ND | Weekly | 8.6 | ND – 14 | 2016 | ND | ND | 2016 | Discharge from industrial activities | |
| Radioactivity | | | | | | | | | | | | | | |
| Gross Alpha Particle Activity (pCi/L) | 15 | (0) | 3 | 4 | ND – 6.5 | 2016 | 6.7 | ND – 17 | 2015 | ND | ND – 4 | 2014 | Erosion of natural deposits | |
| Gross Beta Particle Activity (pCi/L) | 50 | (0) | 4 | | NR | | 4.4 | 3.2 – 6.1 | 2013 | 5 | 4 – 6 | 2014 | Decay of natural and man-made deposits | |
| Uranium (pCi/L) | 20 | 0.43 | 1 | 3.2 | 1.4 – 6.5 | 2016 | 7.3 | 4.2 – 15 | 2015 | 3 | 2 – 3 | 2014 | Erosion of natural deposits | |
| Secondary Drinking Water Standards – Aesthetic Standards, Not Health-Related | | | | | | | | | | | | | | |
| Aluminum (µg/L) ^(f) | 200 | 600 | 50 | ND | ND | 2016 | ND | ND | 2016 | 159 | 77 – 220 | 2016 | Used for treatment of MWD surface water | |
| Color (Units) | 15 | NA | NA | ND | ND | 2015 | 1.7 | ND – 4 | 2016 | 1 | 1 | 2016 | Naturally occurring organic materials | |
| Chloride (mg/L) | 500 | NA | NA | 32 | 19 – 55 | 2015 | 43 | 16 – 98 | 2016 | 103 | 103 | 2016 | Runoff/leaching from natural deposits | |
| Odor-Threshold (Units) | 3 | NA | 1 | <1 | ND – 2 | 2015 | ND | ND – 2 | 2016 | 2 | 2 | 2016 | Naturally occurring organic materials | |
| Specific Conductance (µmho/cm) | 1,600 | NA | NA | 540 | 400 – 790 | 2015 | 671 | 495 – 844 | 2016 | 1,035 | 1,020 – 1,050 | 2016 | Substances that form ions in water | |
| Sulfate (mg/L) | 500 | NA | 0.5 | 54 | 37 – 82 | 2015 | 73 | 17 – 160 | 2016 | 258 | 256 – 259 | 2016 | Runoff/leaching from natural deposits | |
| Total Dissolved Solids (mg/L) | 1,000 | NA | NA | 320 | 240 – 470 | 2016 | 413 | 276 – 568 | 2016 | 665 | 650 – 659 | 2016 | Runoff/leaching from natural deposits | |
| Turbidity (NTU) | 5 | NA | 0.1 | <0.1 | ND – 0.11 | 2015 | 0.4 | 0.05 – 0.9 | 2016 | ND | ND | 2016 | Soil runoff | |

City of South Pasadena 2016 Water Quality (Table 2 of 2)

| Constituents and Measurement Units | MCL or [MRDL] | PHG (MCLG) or [MRDLG] | DLR | SOUTH PASADENA GROUNDWATER | | | PASADENA GROUNDWATER (Pasadena Zone Only) | | | METROPOLITAN IMPORTED WATER | | | Typical Origins |
|--|---------------|-----------------------|-----|----------------------------|-------------|------------------|---|-----------|------------------|---|-----------|---|---------------------------------------|
| | | | | Result ^(a) | Range | Most Recent Test | Result ^(a) | Range | Most Recent Test | Result ^(a) | Range | Most Recent Test | |
| Unregulated Chemicals | | | | | | | | | | | | | |
| Alkalinity (mg/L) | NA | NA | NA | 140 | 110 – 200 | 2015 | 168 | 116 – 202 | 2016 | 118 | 113 – 124 | 2016 | Runoff/leaching from natural deposits |
| Calcium (mg/L) | NA | NA | NA | 50 | 31 – 86 | 2015 | 59 | 38 – 86 | 2016 | 77 | 75 – 79 | 2016 | Runoff/leaching from natural deposits |
| Magnesium (mg/L) | NA | NA | NA | 15 | 9.6 – 24 | 2015 | 60 | 36 – 88 | 2016 | 26 | 25 – 27 | 2016 | Runoff/leaching from natural deposits |
| pH (pH units) | NA | NA | NA | 8.1 | 8 – 8.1 | 2015 | 7.6 | 7.3 – 7.9 | 2016 | 8.1 | 8.1 | 2016 | Runoff/leaching from natural deposits |
| Potassium (mg/L) | NA | NA | NA | 2 | 1.7 – 2.5 | 2015 | 2.6 | 1.5 – 3.3 | 2016 | 5.1 | 5 – 5.1 | 2016 | Runoff/leaching from natural deposits |
| 1,2,3-Trichloropropane (ng/L) ^(g) | NL = 5 | 0.7 | 5 | 15 | ND – 26 | Quarterly | ND | ND – 12 | 2016 | NR | | Discharge from industrial or agricultural activities | |
| Other Constituents of Interest | | | | | | | | | | | | | |
| Hardness as CaCO ₃ (mg/L) | NA | NA | NA | 180 | 120 – 300 | 2015 | 271 | 157 – 411 | 2016 | 300 | 293 – 306 | 2016 | Runoff/leaching from natural deposits |
| Sodium (mg/L) | NA | NA | NA | 36 | 32 – 38 | 2015 | 31 | 23 – 36 | 2014 | 105 | 104 – 106 | 2016 | Runoff/leaching from natural deposits |
| Unregulated Chemicals Requiring Monitoring | | | | | | | | | | | | | |
| Chlorate (µg/L) | NL = 800 | NA | NA | 65 | 36 – 94 | 2014 | 61 | 61 – 130 | 2013 | NR | | By-product of drinking water chlorination; industrial processes | |
| Chlorodifluoromethane (HCFC-22) (µg/L) | NA | NA | NA | 0.21 | 0.19 – 0.23 | 2014 | ND | ND | 2013 | NR | | Refrigerant | |
| Chromium, Hexavalent (µg/L) ^(h) | 10 | 0.02 | NA | 4.2 | 3.8 – 4.6 | 2014 | ND | ND | 2013 | NR | | Erosion of natural deposits, industrial waste discharge | |
| Chromium, Total (µg/L) ⁽ⁱ⁾ | 50 | (100) | NA | 3.8 | 3.7 – 3.9 | 2014 | ND | ND | 2013 | NR | | Erosion of natural deposits | |
| Molybdenum (µg/L) | NA | NA | NA | 11 | 9.9 – 12 | 2014 | 12 | ND – 16 | 2013 | NR | | Runoff/leaching from natural deposits | |
| Strontium (µg/L) | NA | NA | NA | 280 | 270 – 280 | 2014 | 351 | 300 – 440 | 2013 | NR | | Runoff/leaching from natural deposits | |
| Vanadium (µg/L) | NL = 50 | NA | NA | 7.2 | 6.2 – 8.1 | 2014 | 11 | 6.8 – 15 | 2013 | NR | | Naturally-occurring industrial waste discharge | |
| Unregulated Chemicals Requiring Monitoring in the Distribution System | | | | | | | | | | | | | |
| Chlorate (µg/L) | NL = 800 | NA | NA | 95 | 79 – 110 | 2014 | Testing in the South Pasadena Distribution System | | | Testing in the Metropolitan Distribution System | | By-product of drinking water chlorination; industrial processes | |
| Chromium, Hexavalent (µg/L) ^(h) | 10 | 0.02 | NA | 3.8 | 3.7 – 3.8 | 2014 | | | | | | Erosion of natural deposits, industrial waste discharge | |
| Chromium, Total (µg/L) ⁽ⁱ⁾ | 50 | (100) | NA | 3.5 | 2.9 – 4 | 2014 | | | | | | Erosion of natural deposits | |
| Molybdenum (µg/L) | NA | NA | NA | 12 | 11 – 12 | 2014 | | | | | | Runoff/leaching from natural deposits | |
| Strontium (µg/L) | NA | NA | NA | 320 | 310 – 320 | 2014 | | | | | | Runoff/leaching from natural deposits | |
| Vanadium (µg/L) | NL = 50 | NA | NA | 7.6 | 6.7 – 8.4 | 2014 | | | | | | Naturally-occurring industrial waste discharge | |

NOTES:

mg/L = parts per million or milligrams per liter; **AL** = Action Level; **ND** = Not Detected at DLR; **µg/L** = parts per billion or micrograms per liter; **DLR** = Detection Limit for Purposes of Reporting; **NA** = No Applicable Limit or Data; **ng/L** = parts per trillion or nanograms per liter; **pCi/L** = picoCuries per liter; **MCL** = Maximum Contaminant Level; **NL** = Notification Level; **µmho/cm** = micromhos per centimeter; **MCLG** = Maximum Contaminant Level Goal; **MRDL** = Maximum Residual Disinfectant Level; **PHG** = Public Health Goal; **NTU** = Nephelometric Turbidity Units; **NR** = Not Required to be Sampled; **MRDLG** = Maximum Residual Disinfectant Level Goal

- The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2016 or from the most recent tests, except for filter effluent turbidity, TTHM, HAA5, chlorine residual, chloramine residual, lead, and copper which are described below.
- Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms that are difficult to detect, such as the parasites *Giardia* and *Cryptosporidium*. Consistently low turbidity in Metropolitan's filtered water indicates complete removal of any harmful microorganisms that may be present. The table gives the highest single turbidity measurement that was recorded and the lowest monthly percentage of samples meeting the requirements of the surface water treatment technique.
- Samples were collected in the City of South Pasadena distribution system. The running annual averages and the range of the individual results for chlorine residuals, TTHM and HAA5 are reported.

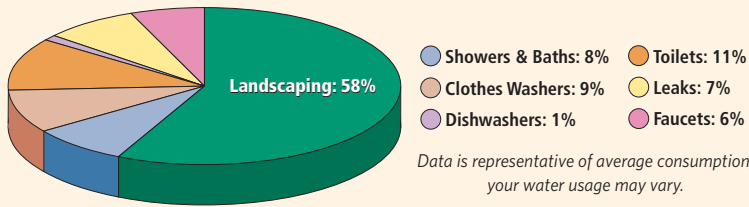
- The City of Pasadena well water is either blended with Metropolitan water or treated at the Monk Hill Treatment System before being delivered to the customers. Once blended or treated, the chemical was well below the MCL.
- Thirty-three lead and copper samples were collected in September 2015 at residential taps. The 90th percentile concentration is reported in the table. Out of 33 residences sampled, copper was detected at or above the DLR in 27 samples but none exceeded the Action Level. Out of 33 residences sampled, lead was detected above the DLR in two samples but none exceeded the Action Level.
- Aluminum also has a secondary MCL of 200 µg/L.
- 1,2,3-Trichloropropane (1,2,3-TCP) was detected at two City of South Pasadena wells at concentrations above the Notification Level (NL). 1,2,3-TCP was also detected above the NL in the City of Pasadena groundwater. The NL is an advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside. Water from these wells was blended with water that had no 1,2,3-TCP detection. The highest concentration of 1,2,3-TCP detected in the distribution system was about five times the NL. The State Water Resources Control Board, Division of Drinking Water (DDW) recommends source removal if 1,2,3-TCP is detected over 100 times the NL.
- Hexavalent chromium was included as part of the unregulated chemicals requiring monitoring.
- Total chromium is regulated with an MCL of 50 µg/L but was not detected, based on the detection limit for purposes of reporting of 10 µg/L. Total chromium was included as part of the unregulated chemicals requiring monitoring.

For more information or questions, please contact Mr. Antehem Tesfaye, City of South Pasadena, 825 Mission Street, South Pasadena, California 91030. Telephone: (626) 441-4024

Where Do We Use Water the Most?

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By reducing your outdoor water use — by either cutting back on irrigation or planting more drought tolerant landscaping — you can dramatically reduce your overall water use.

Save the most where you use the most: Make your outdoor use efficient.

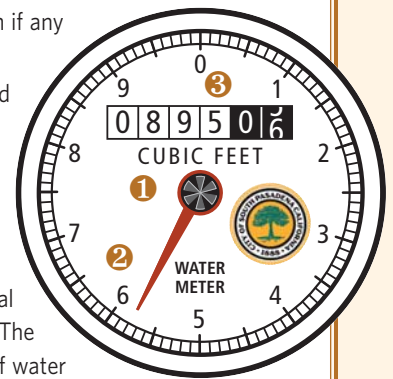


How to Read Your Residential Water Meter

Your water meter is usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole in the lid and then carefully lift the cover. The meter reads straight across, like the odometer on your car. Read only the white numbers (0895).

If you are trying to determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the red or black triangular dial for any movement of the low-flow indicator. If there is movement, that indicates a leak between the meter and your plumbing system.

- Low-Flow Indicator** — The low flow indicator will spin if any water is flowing through the meter.
- Sweep Hand** — Each full revolution of the sweep hand indicates that one cubic foot of water (7.48 gallons) has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of one cubic foot.
- Meter Register** — The meter register is a lot like the odometer on your car. The numbers keep a running total of all the water that has passed through the meter. The register shown here indicates that 89,505 cubic feet of water has passed through this meter.



For Your Information . . .

Disinfection: Water provided by the City contains chlorine used for disinfection and chloramines used by Metropolitan, also for disinfection purposes. Customers on kidney dialysis should consult their physicians.



Fish or Amphibians: If you have fish or amphibians, make sure to remove any chloramines and chlorine before changing or adding water to the tanks. Remember, allowing drinking water to stand will not remove chloramines.

Consult your local aquarium store for products that will remove the disinfectants.

Hot Water Heaters: Many odor complaints may be traced to the home's hot water heater. Remember to follow manufacturer's instructions and flush hot water heaters regularly. This will flush out any sediments that may have accumulated, provide good water turnover to maximize water quality, and help keep your unit in good working order.

Point of Use or Home Water Filtration Units: Be vigilant in changing or cleaning any filters or media on your home units. Always follow the manufacturers instructions. Remember, the water is only as clean as the filter allows. Improperly maintained filters can deliver very poor quality water.

The Need to Conserve Water Remains A High Priority Throughout California

This winter's wet weather, while welcome, has not alleviated the State's water situation. One good season can't overcome the effects of five dry years. Southern California has an arid climate and the need for wise water use must remain a part of everyone's daily lives. Simple water saving acts like the ones listed here can save countless gallons of water every day.

- Soak pots and pans instead of letting water run while you scrub them clean. **This both saves water and makes the job easier.**
- Keep a pitcher of drinking water in the refrigerator. **This can save gallons of water every day and it's always cold!**
- Plug the sink instead of running water to rinse your razor or wet your toothbrush. **This can save upwards of 300 gallons of water a month.**
- Use a broom instead of a hose to clean off sidewalks and driveways. **It takes very little time to sweep and the water savings quickly adds up.**
- Check your sprinkler system for leaks, overspray, and broken sprinkler heads and repair promptly. **This can save countless gallons each time you water.**
- Water plants in the early morning. **It reduces evaporation and ensures deeper watering.**