

2020

Consumer Confidence Report on Water Quality



PASADENA
Water & Power

SERVING THE COMMUNITY SINCE 1906



Arroyo Seco



Pasadena
Reservoir



Pasadena Water and Power is committed to delivering safe and reliable water to our customers and the communities we serve 24/7.

Message from the General Manager

Pasadena Water and Power (PWP) is pleased to present the **2020 Consumer Confidence Report on Water Quality** and inform you that Pasadena's tap water is monitored daily and assessed by the standards established by the U.S Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW).

The Pasadena community uses approximately 26 million gallons of water each day, and PWP is proud to have the responsibility to ensure that Pasadena has a sufficient, safe and high-quality water supply. PWP offers a wide range of programs, incentives, and free workshops to educate customers on how to use water wisely. With less rainfall expected for the upcoming years, it is especially important to reduce outdoor water use, given that outdoor watering makes up 60% of the water used by an average residential household.

Pasadena receives its water from two sources: local groundwater in the Raymond Basin aquifer, and imported water from the Colorado River and

Sacramento Delta. When the Pasadena community's water needs increase, more imported water — that is generally more costly — must be purchased. However, major efforts are underway by PWP to ensure a more sustainable and resilient water source can be locally captured, to meet our city's water needs. Investments in critical infrastructure are being proposed to capture more rainwater, efforts to pilot test small scale repurposed water for irrigation are underway, as well as the rehabilitation of reservoirs and wells to efficiently transfer water throughout the city are being planned and built.

This report is provided annually and includes information about your drinking water sources, constituents found in your drinking water and how the quality of water compares to regulatory standards. Pasadena's water complies with all federal and state drinking standards.

To learn more, visit

PWPweb.com/WaterQuality

Sincerely,
Gurcharan S. Bawa
General Manager

Questions about your water?

PWP welcomes your comments, questions, and participation.

For information about this report, or your water quality in general, please contact:

David E. Kimbrough, Ph.D. (626) 744-3704 (in English),
or **Tony Estrada (626) 744-3838** (en Español).

Public comments are also welcomed at the weekly Pasadena City Council meetings, held every Monday at 6:30 p.m. at City Hall, 100 N. Garfield Avenue.

This report is available electronically at **PWPweb.com/CCR2020**. Previous years' reports and additional water quality information are available at **PWPweb.com/WaterQuality**.

If you would like a copy of this report mailed to you, please call **(626) 744-3704**.

Pasadena Citizen Service Center: (626) 744-7311

Water Waste Hotline

(626) 744-8888
ww5.CityofPasadena.net/311

Rebates and Conservation Tips

(626) 744-6970 • PWPweb.com/SaveWater

Metropolitan Water District of Southern California

(213) 217-6000 • mwdh2o.com

State Water Resources Control Board, Division of Drinking Water

(818) 551-2004
www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml

U.S. Environmental Protection Agency Safe Drinking Water Hotline

(800) 426-4791 • epa.gov/safewater

Hazardous Waste Disposal and Recycling

(888) CLEAN-LA • 888CleanLA.com

The
Colorado
River

Constant Monitoring Ensures Continued Excellence

Pasadena's Water Supply

In 2020, PWP provided 31,182 acre-feet or 10.16 billion gallons of water annually, to serve more than 168,000 consumers in Pasadena, portions of the unincorporated areas of Altadena, East Pasadena and San Gabriel. Approximately 39 percent of the water supply was pumped from local groundwater, whereas 61 percent came from imported surface water purchased from the Metropolitan Water District (MWD). Less than 1 percent was purchased from neighboring agencies that combine surface water and groundwater.

The Monk Hill Treatment Facility continues to operate and successfully remove perchlorate and volatile organic compounds from two groundwater wells in the northwest portion of Pasadena. The treatment system, combined with continued conservation and strategic local supply planning, helped decrease Pasadena's reliance on imported water. PWP continues to explore possible opportunities to maximize use of local water supplies in a sustainable manner.



PWP's groundwater is pumped from the Raymond Groundwater Basin, a natural water-bearing zone underlying the communities of Pasadena, Altadena, La Cañada Flintridge, and portions of San Marino, Arcadia and Sierra Madre. Surface water from streams and precipitation enters the basin area through the natural water cycle. As surface water slowly percolates through the ground to the basin, the ground acts as a natural filter to strip the water of most contaminants.

PWP's water is disinfected with chlorine and chloramines (chlorine plus ammonia) prior to being distributed to customers.

MWD is a consortium of 26 cities and water agencies that import water from the Colorado River and from Northern California (State Water Project) to serve nearly 19 million people in Southern California. MWD supplies PWP with water treated at the Weymouth Filtration Plant in La Verne. MWD also uses chloramines to disinfect its water.

Drinking Water 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.

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

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.

- **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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants** can be naturally-occurring or be the result of oil and gas production and mining activities.

Water Quality

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



Water Quality Issues that Could Affect Your Health

FEDERAL AND STATE REGULATIONS THAT IMPACT HEALTH & WATER QUALITY

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those 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 individuals should seek advice from their health care providers about drinking tap water. 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, (800) 426-4791.



Fluoride

Your purchased water is fluoridated. MWD, which supplies about 61 percent of PWP's drinking water, adds fluoride to their water supply to the level of 0.6 to 0.8 parts per million (ppm). Before drinking water is delivered to your home or business tap, the fluoridated water is blended with PWP's groundwater. Since PWP's groundwater has naturally occurring fluoride levels of 0.5 to 1.1 ppm, the resulting concentration of fluoride is an average of 0.8 ppm. At this range, fluoride has been proven to be effective in preventing tooth decay. For more information about fluoridation, oral health, and current issues, please visit PWPweb.com/WaterQualityFAQ.

Hardness

Water becomes hard as it passes over or through certain geological formations that contain calcium or magnesium. For example, groundwater becomes hard as it percolates down to the water table through limestone deposits containing calcium, or through dolomite and other magnesium bearing minerals that dissolve into water. Surface water imported to Pasadena is hard because it has passed over similar formations as it flows hundreds of miles from the Colorado River and Northern California. Hard water causes white, scaly deposits on plumbing fixtures, cooking utensils, and dishwashers. It reduces the cleaning power of soap and detergent and causes buildup in water heaters, thus reducing its effective lifetime. PWP's water hardness ranges from 200 to 400 ppm or 11 to 23 grains per gallon. The average is approximately 250 ppm or 14.5 grains per gallon.



Though hardness causes aesthetic disadvantages, our bodies require calcium and magnesium and therefore there is no known negative health effect that is caused by hard water.



Nitrates

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 advice from your health care provider.

Lead and Copper

Under the Lead and Copper Rule (LCR), PWP tests the water at the tap of dozens of its customers every three years. Most testing occurs at the source of drinking water, such as wells, streams, and lakes. However, LCR samples are collected at the tap because lead and copper are almost never found in source waters and they occur most frequently in tap water because of the corrosion of household fixtures, such as brass in faucets.

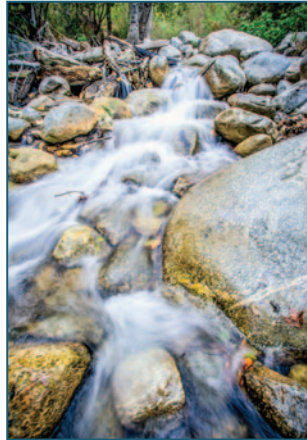
The results of our testing indicate that the water does not exceed the Action Levels set in the LCR.

If you are concerned about the presence of lead or copper in your tap water, you can minimize the potential for lead and copper exposure by flushing your tap for 5 seconds before using water for drinking or cooking.



Arroyo Seco Canyon Project

Recently, PWP undertook a project to repair and improve infrastructure at the Arroyo Seco Canyon in an effort to better capture runoff and restore a vital tool for groundwater recharge. This project will renovate existing diversion facilities in the Arroyo Seco Canyon that, over time and due to storm damage, have fallen into disrepair. Once restored, Pasadena will be able to benefit from:



- Capturing excess runoff in the Arroyo Seco from large storms otherwise lost to the ocean
- Recharging the groundwater basin
- Increasing overall water supply reliability
- Reducing dependence on imported water supply
- Improving conditions for future fish population in the Arroyo Seco
- Adding acres of new natural habitat to a space that was formerly a paved parking lot

In addition to conducting an Environmental Impact Report, PWP and its team of expert consultants have completed a number of studies in the field of hydraulics, geology and biology to ensure that the renovations to the Arroyo Seco diversion facilities will improve not only water management, but the natural environment as well.

To learn more about this project, and its current status, visit:

PWPweb.com/Arroyo

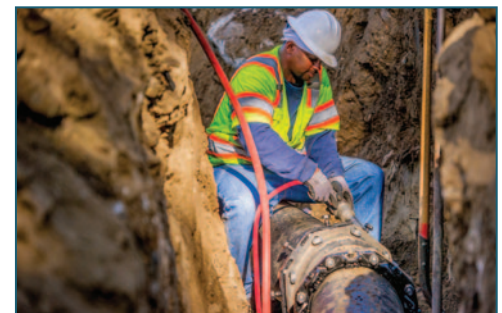
We Must Protect and Improve Our Infrastructure

Since 1912, PWP has been providing the Pasadena community with high quality and reliable water services. With over 100 years of experience, we are well versed in the needs and challenges our city faces, as well as the responsibility we bear to our residents and businesses. As a historic city, parts of the original water system remain in service today including 58 miles of water mains; this makes up approximately 11 percent of PWP's total 510 miles of pipeline. PWP is making essential investments to these water assets through new development and capital improvements; all of which are vital to continuing successful water service.

Keeping aging pipes in service requires a vigilant monitoring and maintenance program. Technicians are regularly deployed to evaluate and restore pipes in order to improve efficiency and effectiveness. Our crews can be found working in the high heat of the summer installing new infrastructure, or late at night repairing the system to ensure our standard of reliability does not waiver. It is a service we are committed to providing, from the pumping of our wells, or the testing in our lab, to the ease with which you turn on the faucet to hydrate; PWP is here every step of the way.

To learn more about capital improvement projects visit:

PWPweb.com/CapitalImprovement



Important Information

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

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

Mahalaga ang impormasyon na nilalaman nito. Mangyaring ipasalin ito.

Այս գեղեցագիրը պարունակում է շատ կարևոր տեղեկություն Ձեր խմելու ջրի վերաբերյալ. Թարգմանեք կամ խոսացեք որևիցե անձի հետ որը կըմասկանա գեղեցագիրը:

この情報は重要です。翻訳を依頼してください。

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है। कृपा करके किसी से :सका अनुवाद कराये।

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시오.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

City of Pasadena 2020 Groundwater and MWD Treated Surface Water Data

Parameter	MCL	PHG / MCLG	DLR / MRL	Pasadena Sources Typical Range		MWD Weymouth Plant Typical Range		MCL Violation	Typical Source of Contaminant
Primary Standard (Monitored for health concerns)									
Radiologicals (pCi/L) ⁽¹⁾									
Gross Alpha Particle Activity	15	n/a	3	8	5 – 11	ND	ND	No	Erosion of natural deposits
Uranium	20	0.43	1	10	3 – 15	2	1 – 3	No	Erosion of natural deposits
Combined Radium	5	0	1	ND	ND – 1.4	ND	ND	No	Erosion of natural deposits
Organic Compounds									
Tetrachloroethylene (PCE) (ppb)	5	0.06	0.5	ND	ND – 1.3	ND	ND	No	Discharge from factories, dry cleaners, and autoshops
Trichloroethylene (TCE) (ppb)	5	1.7	0.5	ND	ND – 1.4	ND	ND	No	Discharge from metal degreasing sites and other factories
Inorganic Compounds									
Aluminum (ppb)	1000	600	50	ND	ND	Highest Average 80 – 210 (RAA)= 149		No	Erosion of natural deposits
Arsenic (ppb)	10	0.004	2	ND	ND – 2.1	ND	ND	No	Erosion of natural deposits, runoff from orchards and industrials process
Barium (ppb)	1000	2000	100	ND	ND – 140	105	105	No	Erosion of natural deposits
Fluoride (ppm)	2	1	0.1	0.8	0.5 – 1.1	0.7	0.6 – 0.8	No	Water additive for dental health, erosion of natural deposit
Nitrate as N (ppm)	10	10	0.4	4.8	ND – 7.6	ND	ND	No	Runoff and leaching from fertilizer use, erosion of natural deposits
Perchlorate (ppb)	6	1	4	ND	ND – 4.1	ND	ND	No	Industrial waste discharge
Secondary Standard (Monitored for aesthetic qualities such as taste, color, odor) ⁽²⁾									
Chloride (ppm)	500	n/a	n/a	61	19 – 96	93	93	No	Runoff and leaching from natural deposits
Color (Units)	15	n/a	n/a	0	0	1	1	No	Naturally-occurring organic materials
Iron (ppb)	300	n/a	100	ND	ND – 310	ND	ND	No	Erosion of natural deposits;industrial wastes
Odor (Units)	3	n/a	1	0	0	2	2	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1600	n/a	n/a	661	500 – 890	966	963 – 968	No	Substances that form ions when in water
Sulfate (ppm)	500	n/a	0.5	107	33 – 211	213	211 – 215	No	Runoff and leaching from natural deposits
Total Dissolved Solids (ppm)	1000	n/a	n/a	409	300 – 560	590	587 – 593	No	Runoff and leaching from natural deposits
Turbidity (NTU)	5	n/a	0.1	0.7	0.15 – 1.8	ND	ND	No	Soil runoff
Other Parameters									
Alkalinity (ppm)	n/a	n/a	n/a	175	120 – 200	118	118 – 119	No	n/a
Calcium (ppm)	n/a	n/a	n/a	71	58 – 100	65	65	No	n/a
Corrosivity (LSI)	n/a	n/a	n/a	-0.8	-0.8 – -0.9	0.6	0.5 – 0.7	No	n/a
Magnesium (ppm)	n/a	n/a	n/a	20	13 – 32	26	25 – 26	No	n/a
pH (pH Units)	n/a	n/a	n/a	6.8	6.6 – 7.0	8.1	8.1	No	n/a
Potassium (ppm)	n/a	n/a	n/a	2.2	1.5 – 2.9	4.6	4.5 – 4.6	No	n/a
Sodium (ppm)	n/a	n/a	n/a	37	24 – 53	95	93 – 97	No	n/a
Total Hardness (ppm)	n/a	n/a	n/a	260	200 – 380	262	256 – 268	No	n/a

Understanding the Water Quality Chart

As in previous years, the Water Quality Report compares the quality of your tap water to state and federal drinking water standards. The report includes information on all regulated and unregulated drinking water contaminants that were detected during calendar year 2020. More than 100 regulated contaminants that were tested for, but not detected, are not included in this report. A number of regulated chemicals and other compounds do not require annual monitoring. Their most recent test results and corresponding test year are footnoted, if applicable. DDW allows PWP to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

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 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 USEPA.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. The addition of a disinfectant is necessary for the control of 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.

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.

Detection Limits for Purposes of Reporting (DLR): The DLR is a parameter that is set by regulation for 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 DDW. This is also known as the Minimum Reporting Level (MRL).

NA: Contaminant or property was not analyzed.

n/a: Not applicable.

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

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

Units of Measurement:

ppm = parts per million

ppb = parts per billion

pCi/L = picocuries per liter

LSI = Langelier Saturation Index

µS/cm = microsiemens per centimeter

NTU = Nephelometric Turbidity Units.

City of Pasadena Water Distribution System

Parameter	MCL	PHG	DLR / MRL	Pasadena Water System		MCL Violation	Typical Source of Contaminant
				Highest Average	Range		
Disinfection By-Products and Disinfectant Residuals (D/DBP) ⁽³⁾							
TTHM [Total Trihalomethanes] (ppb)	80	n/a	n/a	Highest Average (LRAA) = 59	4.5 – 77.2	No	By-products of drinking water disinfection
HAA5 [Haloacetic Acids] (ppb)	60	n/a	n/a	Highest Average (LRAA) = 19	ND – 21.0	No	By-products of drinking water disinfection
Bromate (ppb)	10	0.1	1	n/a	n/a	No	By-products of drinking water oxonation
Total Chlorine Residual (ppm)	MRDL = 4	MRDLG = 4	n/a	Highest Average (RAA) = 1.35	ND – 2.8	No	Drinking water disinfectant added for treatment
Microbiological (%)							
Total Coliform Bacteria (%)	5	0	n/a	Highest Monthly Average = 0.0%	0	No	Naturally present in the environment

City of Pasadena Water Distribution System – Lead and Copper Levels at Residential Taps⁽⁴⁾

Parameter	AL	PHG	DLR / MRL	Pasadena Water System		MCL Violation	Typical Source of Contaminant
				90 th Percentile	Number of Sites Exceeding AL		
Lead (ppb)	15	0.2	5	ND	2 out of 82	No	Internal corrosion of household water plumbing system
Copper (ppm)	1.3	0.3	0.05	0.26	0 out of 82	No	Internal corrosion of household water plumbing system

Detection of Unregulated Contaminants

Parameter	MCL	PHG / MCLG	DLR / MRL	Pasadena Water System		MWD Weymouth Plant		MCL Violation	Typical Source of Contaminant
				Typical	Range	Typical	Range		
Hexavalent Chromium (ppb) ⁽⁵⁾	n/a	0.02	1	4.0	1.7 – 8.8	ND	ND	n/a	Erosion of natural deposits, industrial waste discharge

Federal Unregulated Contaminants Monitoring Rule (UCMR 4)⁽⁶⁾

Parameter	MCL	PHG / MCLG	DLR / MRL	Pasadena Water System		MCL Violation	Typical Source of Contaminant
				Average	Range		
Total Microcystins (ppb)	n/a	n/a	0.30	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-LA (ppb)	n/a	n/a	0.008	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-LF (ppb)	n/a	n/a	0.006	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-LR (ppb)	n/a	n/a	0.02	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-LY (ppb)	n/a	n/a	0.009	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-RR (ppb)	n/a	n/a	0.006	ND	ND	n/a	Produced from cyanobacterial cells
Microcystin-YR (ppb)	n/a	n/a	0.02	ND	ND	n/a	Produced from cyanobacterial cells
Nodularin (ppb)	n/a	n/a	0.005	ND	ND	n/a	Produced from cyanobacterial cells
Anatoxin-a (ppb)	n/a	n/a	0.03	ND	ND	n/a	Produced from cyanobacterial cells
Cylindrospermopsin (ppb)	n/a	n/a	0.09	ND	ND	n/a	Produced from cyanobacterial cells
HAA5 (ppb)	n/a	n/a	0.2	6.7	0.9 – 20	n/a	By-products of drinking water disinfection
HAA6Br (ppb)	n/a	n/a	0.2	7.8	0.8 – 21	n/a	By-products of drinking water disinfection
HAA9 (ppb)	n/a	n/a	0.2	12.8	1.2 – 37	n/a	By-products of drinking water disinfection
Tribromoacetic acid (ppb)	n/a	n/a	2.0	ND	ND – 2.6	n/a	By-products of drinking water disinfection
Trichloroacetic acid (ppb)	n/a	n/a	0.5	1.5	ND – 5.7	n/a	By-products of drinking water disinfection
alpha-hexachlorocyclohexane (ppb)	n/a	n/a	0.01	ND	ND	n/a	By-product of insecticide production
Chlorpyrifos (ppb)	n/a	n/a	0.03	ND	ND	n/a	Used as an insecticide, acaricide and miticide
Dimethipin (ppb)	n/a	n/a	0.2	ND	ND	n/a	Used as an herbicide and plant growth regulator
Ethoprop (ppb)	n/a	n/a	0.03	ND	ND	n/a	Used as an insecticide
Oxyfluorfen (ppb)	n/a	n/a	0.05	ND	ND	n/a	Used as an herbicide
Profenofos (ppb)	n/a	n/a	0.3	ND	ND	n/a	Used as an insecticide and acaricide
Tebuconazole (ppb)	n/a	n/a	0.2	ND	ND	n/a	Used as a fungicide
Total Permethrin (trans & cis) (ppb)	n/a	n/a	0.04	ND	ND	n/a	Used as an insecticide
Tribufos (ppb)	n/a	n/a	0.07	ND	ND	n/a	Used as an insecticide and cotton defoliant
Butylated hydroxyanisole (ppb)	n/a	n/a	0.03	ND	ND	n/a	Used as a food additive (antioxidant)
O-Toluidine (ppb)	n/a	n/a	0.007	ND	ND	n/a	Used in the production of dyes, rubber, pharmaceuticals and pesticides
Quinoline (ppb)	n/a	n/a	0.02	ND	ND	n/a	Used as a pharmaceutical (anti-malarial) and flavoring agent; produced as a chemical intermediate; component of coal
1-Butanol (ppb)	n/a	n/a	2.0	ND	ND	n/a	Used as a solvent, food additive and in production of other chemicals
2-Methoxyethanol (ppb)	n/a	n/a	0.4	ND	ND	n/a	Used in a number of consumer products, such as synthetic cosmetics, perfumes, fragrances, hair preparations and skin lotions
2-Propen-1-ol (ppb)	n/a	n/a	0.5	ND	ND	n/a	Used in the production flavorings, perfumes and other chemicals
Germanium (ppb)	n/a	n/a	0.3	ND	ND	n/a	Naturally present in the environment
Manganese (ppb)	n/a	n/a	0.4	0.4	ND – 1.8	n/a	Naturally present in the environment
Bromide (ppb)	n/a	n/a	5.0	63	44 – 81	n/a	By-products of drinking water disinfection
Total Organic Carbon (TOC) (mg/L)	n/a	n/a	0.3	2.1	1.9 – 2.2	n/a	By-product of decaying natural organic matter

Footnotes:

- 1) The data for Pasadena is collected on a monitoring schedule based on radionuclide Rule (Section 64442, Title 22, California Code of Regulations). Results are based on 2018 monitoring.
- 2) There are no PHGs, MCLGs or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

- 3) The MCL for TTHM and HAA5 are based on the Location Running Annual Average (LRAA) and the MRDL for bromate and total chlorine residual are based on the Running Annual Average (RAA).
- 4) Lead and Copper values are based on triennial monitoring at residential taps. Results are based on 2020 monitoring.
- 5) The previous MCL of 10 ppb was withdrawn on September 11, 2017. There is currently no MCL for hexavalent chromium.

- 6) Data was collected in both 2019 and 2020 for Unregulated Chemical Monitoring Rule 4

For more information or questions about this report, or your water quality in general, please contact David E. Kimbrough, Ph.D. (626) 744-3704 (in English), or Tony Estrada (626) 744-3838 (en Español).

Enhanced Sustainability Will Reduce Our Carbon Footprint

As a community-owned utility, it is our responsibility to ensure we manage your water in a sustainable way.

Currently, PWP receives a little over half of its supply from imported sources — the State Water Project and the Colorado River Aqueduct. The remaining supply is local; it comes from the Raymond Basin, a groundwater aquifer located beneath the San Gabriel Valley.

Unfortunately, imported water means we must build and sustain miles of additional pipelines and other infrastructure, add hundreds of truck miles to our already overloaded highways, while we continue a reliance on large private organizations that work in support of us, and face many overall challenges that impede our desire to reduce our carbon footprint.

This is why PWP is committed to improving local supply

by investing in groundwater recharge, encouraging rainwater harvesting, and shifting our dependence away

from imported water. A number of projects are currently underway to make this goal achievable: the Arroyo Seco Canyon Project, the Non-Potable Water Project, as well as the recently developed Water System and Resources Plan.

With a focus on local water supply, rather than imported, our community will benefit from enhanced natural habitats and expanded green spaces, allowing us the independence to make important water management decisions based on long-term, sustainable and strategic planning. All this will result in a reduction of our overall carbon footprint.

Learn more about our sustainability goals and long-term water management plans at:

PWPweb.com/Water



Reduce Your Use

Pasadena's water is a limited and precious resource. During the summer, PWP encourages customers to be more mindful of their usage, and strive to reduce outdoor water use by 10%. The easiest ways to do this involve tuning up your irrigation system! Here are some useful tips to help get you started:

- Ensure sprinklers water plants, not the pavement
- Avoid overwatering, and shorten sprinkler time
- Install more efficient sprinkler nozzles
- Retrofit your spray system to drip irrigation
- Schedule a check-up with PWP
- Cash in on a rebate for items like rain barrels, and more!

Don't forget to adhere to the PWP Watering Schedule; make sure you only water before 9 AM and after 6 PM as well as on the appropriate days of the week. Together we can help protect and conserve our water. Learn more at:

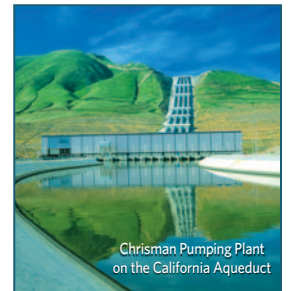
PWPweb.com/SaveWater



Drinking Water Source Assessment

An assessment of the drinking water sources for Pasadena's water system was completed in August 2002. The wells in Pasadena were found to be most vulnerable to contamination from automobile gas stations, repair shops and body shops; and underground storage tanks. A copy of the complete assessment is available at Pasadena Water and Power, 150 S. Los Robles Avenue, Suite 200.

In 2012, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Based upon the vulnerability assessments, the Colorado River and State Water Project supplies are most vulnerable to contamination resulting from recreation, urban/storm water runoff, increasing urbanization in the watershed, and waste water. A copy of the assessment can be obtained by contacting MWD at praadministration@mwdh2o.com.



PASADENA
Water & Power
SERVING THE COMMUNITY SINCE 1906

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