2021 Water Quality Report

Water Resiliency Through Efficiency.

Message from Public Works

Our mission in Public Works is to be able to provide quality services for all who experience the world class City of Beverly Hills, and as we return to normal after maneuvering through the COVID-19 pandemic, we continue to find this mission at the cornerstone of our being.

Over the past two years, Public Works staff continued to provide the community essential services like trash and recycling services, wastewater removal, and drinking water, despite the conditions. And now, as we start to return to a sense of normalcy, we find our community facing yet another challenge... the drought.

The State is experiencing unprecedented drought conditions, with 2020 and 2021 being the driest two-year sequence for precipitation in history. With water supplies for the region impacted — including water supplies from Northern California via the State Water Project as well as from the Colorado River — there is no better time to focus on becoming more resilient to climate change. To strengthen our ongoing ability to provide water despite these challenges, the City has focused on investing in local ground water supplies and conservation measures.

Recently, we completed upgrades to the City's Water Treatment Plant and are delivering local water supplies to customers throughout Beverly Hills and West Hollywood. The operation of the Water Treatment Plant could not have come at a more critical time. As we call for increased water-savings efforts to help preserve our precious water supplies, this treatment plant will diversify our water portfolio for greater water supply resiliency.

Along with the City's continued efforts to bolster resiliency through infrastructure upgrades and expansion, each community member has a role to play in helping conserve water. By simply complying with the prescribed landscape watering schedule and performing regular checks for leaky pipes and faulty toilets and faucets, we can reduce water use at home and in the workplace.

The City has a water tracking program to help you monitor your water use. By signing up for the program at water.beverlyhills.org, you can receive alerts about potential leaks generating higher than normal water usage levels.

Our water is the most precious resource, and together we can implement life-changing habits that will help conserve this resource today to ensure its availability for generations to come.

Sincerely,

Robert Welch, P.E.
Utilities General Manager

The City's residents and businesses have a key role in water system resiliency as well. Water conservation will always be a "Beverly Hills Way of Life," and every drop you save is one less drop needed of imported water or local groundwater.

Keep up the great work!

About this Report

The Consumer Confidence Report (CCR) is an annual water quality report that informs you where your drinking water comes from and what's in it.

The centerpiece of the CCR is a series of tables that list the results of year round monitoring for more than 400 constituents. Included in these tables is the quantity of each constituent found in Beverly Hills' water supply, how it compares with the allowable state and federal limits, and the constituent's likely origin. Bottled water is not covered in this report. Only the constituents that are found in Beverly Hills' water are listed in the data tables.

We encourage you to read this report to learn more about the water provided by Beverly Hills and what the City is doing to ensure the highest quality of water is delivered to you year after year.

The information on the following pages will explain the important elements of the data tables and more.

5,075 Regulatory constituents analyzed

5,179 Monitoring constituents analyzed

7,832 Field tests conducted

100% Met all Quality Standards

The City of Beverly Hills Public Works Department values transparency; we hope you find this report clear and easy to understand. If you have any questions, please call us at 310.285.2467.

100%
Quality Standards Met

Water Sources

Where does Beverly Hills get its water?

Since the Beverly Hills' Water Treatment Plant has been offline for operational improvements until its recent re-opening this year, your water supply in 2021 was provided entirely by Metropolitan Water District (Metropolitan). Metropolitan imports water supplies from two main sources: **(1)** the Sacramento and San Joaquin Rivers through the State Water Project and **(2)** the Colorado River via the Colorado River Aqueduct.

State Water Project

About 30 percent of Southern California's water travels a long distance though a complex delivery system called the California State Water Project. It is the nation's largest state-built water storage and delivery system of reservoirs, aqueducts, power plants and pumping plants, supplying water to 25 million Californians and 750,000 acres of farmland.

Water supplies from Northern California are drawn from the crossroads of the Sacramento and San Joaquin rivers in the Delta region. They are transported in the State Water Project's 444-mile California Aqueduct and serve urban and agricultural customers in the San Francisco Bay Area, as well as Central and Southern California.

444-
Mile
California
Aqueduct

Colorado River

The Colorado River water is conveyed via the 242-mile Colorado River Aqueduct from Lake Havasu on the California-Arizona border, to Lake Mathews near Riverside. Built and operated by Metropolitan, the Colorado River Aqueduct has been the backbone of Southern California's imported water supply for more than 70 years. Together with the State Water Projects, these are the two imported drinking water sources for all of Southern California.

The water from both sources is first treated at the Weymouth Filtration Plant in La Verne and the Joseph Jensen Treatment Plant in Granada Hills before it is delivered to Beverly Hills.

Your Drinking Water

What is in my drinking water?

Your tap water met all Environmental Protection Agency's (U.S. EPA) and State drinking water health standards in 2021. Beverly Hills vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

Water may contain different types of chemicals, microscopic organisms, and radioactive materials, many of which are naturally occurring. Health agencies require monitoring for these constituents. The column marked "Parameter" in each table beginning on page 13 lists the constituents found in the water Beverly Hills delivers.

How are constituents reported?

"Units" describe how a constituent is reported. Usually constituent levels are measured in extremely tiny quantities such as parts per million (ppm), parts per billion (ppb) and in some cases, parts per trillion (ppt). Even small concentrations of certain constituents can be a health concern. That is why regulatory standards are set at very low levels for certain constituents.

What are the maximum allowed levels for constituents in drinking water?

Regulatory agencies have maximum contaminant levels (MCLs) for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters "TT" (treatment technique) in the MCL column of each table because they do not have a numerical MCL. Instead, they have certain treatment requirements that have to be met to reduce their levels in drinking water.

One of the constituents, total chlorine residual, has an MRDL (maximum residual disinfectant level) instead of an MCL. The MRDL is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. While disinfectants are necessary to kill harmful microbes, drinking water regulations protect against too much disinfectant being added.

Another constituent, turbidity, has a requirement that 95 percent of the measurements taken must be below a certain number. Turbidity is a measure of the cloudiness of the water. Metropolitan monitors turbidity because it is a good indicator of the effectiveness of our filtration system.

Why are some of the constituents listed in the section labeled "Primary Standards" and others in the "Secondary Standards"?

Constituents that are grouped in the "Primary Standards" section may be unhealthy at certain levels. In general, no health hazard is reasonably expected to occur when levels of a constituent are below a primary MCL.

Constituents that are grouped under the "Secondary Standards" section can affect the appearance, taste and smell of water, but do not affect the safety of the water unless they also have a primary standard. Some constituents (e.g., aluminum) have two different MCLs, one for health-related impacts, and another for non-health-related impacts.

Your Drinking Water

What are Public Health Goals (PHGs) and Maximum Contaminant Level Goals (MCLGs)?

PHGs and MCLGs are targets or goals set by regulatory agencies for the water industry. They define a constituent level in water that do not pose any known or expected risk to health. Often, it is not possible to remove or reduce constituents to the level of PHGs and MCLGs because it is technologically impossible or the cost for treatment is so expensive that it would make tap water unaffordable.

That is why PHGs and MCLGs are considered goals to work toward, and not realistic standards that can be enforced. Similar goals exist for Maximum Residual Disinfectant Level Goals (MRDLG).

How do I know how much of a constituent is in my water and if it is at a safe level?

With a few exceptions, regulatory requirements are considered satisfied if the average amount of a constituent found in tap water over the course of a year is no greater than the MCL. Some constituents do have special rules described in the footnotes to the water quality tables. These constituents do not have a numerical MCL, but instead a required Treatment Technique that—when satisfied—is listed in the Treatment Plant Effluent column of the Imported Water From Metropolitan table.

The highest and very lowest levels measured over a year are shown in the range. Requirements for safety, appearance, taste and smell are based on the average levels recorded and not the range.

Water agencies have specific procedures to follow if a constituent is found at levels higher than the MCL and considered a potential threat to public health. Information is shared immediately with the regulatory agencies. The regulatory agencies will determine when and how this information is shared with the public.

What are the testing results for the water monitored?

The data tables list monitoring results for the two Metropolitan water treatment plants (Weymouth and Jensen) are listed as well as the monitoring results for the City's water distribution system and lead and copper samplings from residential taps.

How do constituents get into our water supply?

The most likely source for each constituent is listed in the last column of each table. Some constituents are natural and come from the environment, others come from cities and farms, and some result from the water disinfection process itself. Some chemicals have found their way into California's water supplies, making water treatment more difficult. Certain industrial processes—like dry cleaning, fireworks and rocket fuel manufacturing—have left constituents in the environment, as has the use of certain fertilizers and pesticides. Many of these chemicals have since been banned from use.

Potential Sources of Contamination

As you read earlier, water imported by Metropolitan—the regional agency that provides water to Beverly Hills—comes from two sources: the Colorado River and Northern California through the Sacramento-San Joaquin Delta. Each has different water quality challenges.

Water from the Colorado River via the Colorado River Aqueduct 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 via the State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater.

Large agencies are required by the Division of Drinking Water (DDW) to conduct an initial source water assessment, which is then updated through watershed sanitary surveys every five years. Watershed sanitary surveys examine possible sources of drinking water contamination and recommend actions to better protect these source waters.

The most recent surveys for Metropolitan's source waters are the Colorado River Watershed Sanitary Survey – 2015 Update, and the State Water Project Watershed Sanitary Survey – 2016 Update. You can request a copy of the most recent Watershed Sanitary Surveys by calling Metropolitan at 213.217.6000.

The Drinking Water Source Assessment and Protection (DWSAP) Program conducted a source water assessment in August 2000 and completed the report on May 2001 for each groundwater well.

Groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: dry cleaning operations, park areas, residential housing, historical railroad rights-of-way, vehicle repair shops, gasoline stations, confirmed leaking underground storage tanks, utility station, parking lots, and government equipment storage areas.

A copy of the assessment may be viewed at:
DDW Los Angeles District Office
500 N. Central Ave., Suite 500
Glendale, CA 91203

You may request a summary of the assessment be sent to you by contacting the DDW Los Angeles District Office at 818.551.2004. For more details, contact Jason W. Dyogi, Water Quality Specialist, at 310.285.2467.

Steps Beverly Hills Takes To Safeguard Your Groundwater

Water that enters the storm drain system is not treated and typically carries pollutants caused by urbanized activities.

As a result, polluted waters are carried straight to our local watershed, Ballona Creek, which is a tributary to Santa Monica Bay and affecting the environment. As part of our Stormwater Program, the City of Beverly Hills is currently doing its part to improve water quality:

1. Extensive street sweeping in commercial and residential areas.
2. Extensive trash receptacle management program.
3. Cleaning catch basins.
4. Retrofitted catch basins with screens to prevent trash and debris from entering the storm drain system.
5. Inspecting restaurants, gas and car service stations and construction sites that Best Management Practices (BMPs) are in place.
6. Eliminating pollution dumping on streets (illicit discharge) and eliminating illegal connections to the storm drain system.
7. Recovering sewer overflows from the storm drain system.
8. Actively participating in regional efforts by implementing the Ballona Creek Enhanced Watershed Management Program (EWMP) Plan.
9. Educating the community during citywide events.

Water & Your 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 the water poses a health risk.

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.

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, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoffs, agricultural application, and septic systems.

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

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (State Water Board) 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. Additional information on bottled water is available on the California Department of Public Health website at www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx.

People with Weakened Immune Systems

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 or have 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. U.S. EPA/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.

Additional Information of Interest

Why Additional Chemicals Are Added To Your Water.

To Disinfect.

Chloramines. The City is required to disinfect your water to prevent waterborne pathogens by using chloramines, a compound of chlorine and ammonia. This type of disinfectant is very stable and reduces the formation of disinfection by-products in your water. We carefully monitor the amount of chloramine disinfectant to protect the safety of your water.

Chloraminated water is safe for people and animals to drink, and for all other general uses. Three special user groups, including kidney dialysis patients, aquarium owners, and businesses or industries that use water in their treatment process, must remove chloramine from the water prior to use. Hospitals or dialysis centers should be aware of chloramine in the water and should install proper chloramine removal equipment, such as dual carbon adsorption units.

Aquarium owners should use readily available products to remove or neutralize chloramine. Businesses and industries that use water in any manufacturing process or for food or beverage preparation should contact their water treatment equipment supplier regarding special equipment needs.

If you are concerned about fluoride in your drinking water, additional information is available from the Center of Disease Control at: www.cdc.gov/fluoridation/index.html and the American Dental Association at www.bit.ly/ADA_Fluoride.

To Improve Dental Health.

Fluoride. For 70 years, Americans have benefited from drinking water with fluoride, leading to better dental health. Drinking fluoridated water keeps teeth strong and reduces cavities by about 25% in children and adults. Because of these health benefits, the State of California has mandated all large system water suppliers to begin fluoridating their water systems.

The City of Beverly Hills and Metropolitan adjust the natural fluoride concentration in the water to promote dental health. The fluoride levels in your water are maintained within a range of 0.6 to 1.2 parts per million, as required by the Division of Drinking Water. The Centers for Disease Control and Prevention named community water fluoridation 1 of 10 great public health achievements of the 20th century. For more information about fluoridation, oral health, and current issues, you can call Metropolitan's Water Quality Information Hotline at 800.354.4420 or download Metropolitan's fact sheet at www.bit.ly/MWD_Fluoride.

Additional Information of Interest

Lead

The City of Beverly Hills 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 minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, we recommend collecting the flushed water and reusing it for another beneficial purpose, such as watering plants.

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.

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 U.S. EPA Safe Drinking Water Hotline at 800.426.4791 or at www.epa.gov/lead.

Keep Your Fish Healthy & Safe

Adding tap water with chlorine or chloramine to a tank can kill off fish quickly. It can also kill off important bio-filter bacteria. To keep your fish healthy and safe, be sure to specially treat your tap water before using it in your fresh or salt-water aquarium or pond.

Reader's Guide to the Water Quality Tables

You will find two tables, one for each of the following water sources:

- **Metropolitan Treated Surface Water**
- **Beverly Hills Distribution System**

For each table, begin with the Constituent and read across.

1. The column marked **"Parameter"** lists the substances found in the water Beverly Hills delivers.
2. **MCL** is the highest level of substance (contaminant) allowed.
3. **PHG** (or MCLG) is the goal level for that substance below which there is no known or expected health risk (this may be lower than what is allowed).
4. **Range Average** is the highest and lowest levels measured over a year.
5. The monitoring results of a substance at each **treatment plant.**
6. **Major Sources in Drinking Water** tells you where the constituent usually originates.

Note: "Unregulated Constituents" are measured, but maximum allowed contaminant (MCL) levels have not been established by the government.

2021 Tables

The City of Beverly Hills only delivers drinking water that is safe and continuously tested to ensure compliance with state and federal regulatory standards—standards that have been peer-reviewed.

Glossary

Quality Standards

Primary Standards
Mandatory health-related standards that may cause health problems in drinking water. MCLs and MRDLs are listed for contaminants that affect health along with their monitoring, reporting, and water treatment requirements.

Secondary Standards
Aesthetic standards (non health-related) that could cause odor, taste, or appearance problems in drinking water.

Unregulated Contaminants
Information about contaminants that are monitored, but are not currently regulated by state and federal health agencies.

Definition of Terms

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 U.S. Environmental Protection Agency.

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.

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.

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

Abbreviations

AI	Aggressiveness Index
AL	Action Level
Average	Arithmetic mean
CaCO3	Calcium Carbonate
CCPP	Calcium Carbonate Precipitation
CCRDL	Consumer Confidence Report Detection Limit
CFE	Combined Filter Effluent
CFU	Colony-Forming Units
DLR	Detection Limits for Purposes of Reporting
HAA5	Sum of five haloacetic acids
HPC	Heterotrophic Plate Count
LRAA	Locational Running Annual Average is the highest of all Locational Running Annual Averages calculated as an average of all samples collected within a 12-month period
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MFL	Million Fibers per Liter
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NA	Not Applicable
ND	Not Detected at or above DLR or RL
NL	Notification Level to SWRCB
NTU	Nephelometric Turbidity Units
pCi/L	PicoCuries per Liter
PFAS	Per- and polyfluoralkyl substances
PHG	Public Health Goal
ppb	Parts Per Billion or micrograms per liter (µg/L)
ppm	Parts Per Million or milligrams per liter (mg/L)
ppq	Parts Per Quadrillion or picograms per liter (pg/L)
ppt	Parts Per Trillion or nanograms per liter (ng/L)
RAA	Running Annual Average; highest RAA is the highest of all running Annual Averages calculated as an average of all the samples collected within a 12-month period
Range	Results based on minimum and maximum values; range and average values are the same if a single value is reported for samples collected once or twice annually
RL	Reporting Limit
SI	Saturation Index (Langelier)
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TON	Threshold Odor Number
TT	Treatment Technique
TTHM	Total Trihalomethanes
µS/cm	MicroSiemen per Centimeters

Imported Water From Metropolitan Water District

1		2	3		4	5				6
Parameter	Units	State (Federal) MCL	PHG	State DLR/CCRDL LCMRL (RL)	Range Average	Jensen Plant	Weymouth Plant	Most Recent Sampling Date	In Compliance	Major Sources in Drinking Water
PRIMARY STANDARDS–Mandatory Health-Related Standards										
CLARITY										
Combined Filter Effluent (CFE) Turbidity (a)	NTU	TT	NA	NA	Highest	0.06	0.03	2021	Yes	Soil runoff
	%				% ≤ 0.3	100	100			
MICROBIOLOGICAL (b)										
Total Coliform Bacteria (c)	% Positive Monthly Sample	5.0	MCLG = 0	NA	Range	NA	NA	2021	Yes	Naturally present in the environment
					Average					
Escherichia coli (E. coli) (d)	Number	0	MCLG = 0	NA	Number of Positive Samples	NA	NA	2021	Yes	Human and animal fecal waste
Heterotrophic Plate Count (HPC) Bacteria (e)	CFU/mL	TT	NA	(1)	Median Range	ND	ND	2021	Yes	Naturally present in the environment
					Median					
Cryptosporidium	oocysts/200 L	TT	MCLG = 0	(1)	Range	ND	ND	2021	Yes	Human and animal fecal waste
					Average					
Giardia	cysts/200 L	TT	MCLG = 0	(1)	Range	ND	ND	2021	Yes	Human and animal fecal waste
					Average					
INORGANIC CHEMICALS										
Aluminum (h)	ppb	1,000	600	50	Range	ND - 120	ND -240	2021	Yes	Residue from water treatment process; runoff and leaching from natural deposits
					Highest RAA	64	148			
Barium	ppb	1,000	2,000	100	Range	ND	110	2021	Yes	Oil and metal refineries discharge; natural deposits erosion
					Highest RAA					
Fluoride (k)	ppm	2.0	1	0.1	Range	0.6 – 0.8	0.6 – 0.9	2021	Yes	Runoff and leaching from natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	0.7	0.7			
RADIOLOGICALS (m)										
Gross Beta Particle Activity	pCi/L	50	MCLG = 0	4	Range	ND	4 - 6	2021	Yes	Decay of natural and man-made deposits
					Average		5			
Radium-228	pCi/L	NA	0.019	1	Range	ND	ND - 1	2021	Yes	Erosion of natural deposits
					Average		ND			
Uranium	pCi/L	20	0.43	1	Range	ND - 3	1 - 3	2021	Yes	Erosion of natural deposits
					Average	ND	2			
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS (n)										
Total Trihalomethanes (TTHM) (Plant Core Locations and Distribution System) (o)	ppb	80	NA	1.0	Range	13 - 27	26 - 35	2021	Yes	Byproduct of drinking water chlorination
					Highest LRAA	20	30			
Sum of Five Haloacetic Acids (HAA5) (Plant Core Locations and Distribution System)	ppb	60	NA	1.0	Range	1.8 - 4.4	1.5 - 6.1	2021	Yes	Byproduct of drinking water chlorination
					Highest LRAA	3.9	5.4			
Bromate	ppb	10	0.1	1.0	Range	1.2 - 9.8	ND - 7.0	2021	Yes	Byproduct of drinking water ozonation
					Highest LRAA	4.5	ND			
Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range	1.1 - 2.0	1.8 - 2.5	2021	Yes	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
					Highest RAA	2.0	2.4			

Imported Water From Metropolitan Water District (Cont.)

Parameter	Units	State (Federal) MCL	PHG	State DLR/CCRDL LCMRL (RL)	Range Average	Jensen Plant	Weymouth Plant	Most Recent Sampling Date	In Compliance	Major Sources in Drinking Water
SECONDARY STANDARDS - AESTHETIC STANDARDS										
Aluminum (h)	ppb	200	600	50	Range	ND - 120	ND - 240	2021	Yes	Residue from water treatment process; runoff and leaching from natural deposits
					Highest RAA	64	148			
Chloride	ppm	500	NA	(2)	Range	65 - 80	95 - 97	2021	Yes	Runoff/leaching from natural deposits; seawater influence
					Average	72	96			
Color	Color Units	15	NA	(1)	Range	1 - 2	1	2021	Yes	Naturally-occurring organic materials
					Average	2				
Odor Threshold	TON	3	NA	1	Range	1	1	2021	Yes	Naturally-occurring organic materials
					Average					
Specific Conductance	µS/cm	1,600	NA	NA	Range	519 - 598	962 - 965	2021	Yes	Substances that form ions in water; seawater influence
					Average	558	964			
Sulfate	ppm	500	NA	0.5	Range	61 - 72	217 - 221	2021	Yes	Runoff/leaching from natural deposits; industrial wastes
					Average	66	219			
Total Dissolved Solids, Filterable (TDS) (p)	ppm	1,000	NA	(2)	Range	298 - 302	599 - 609	2021	Yes	Runoff/leaching from natural deposits
					Average	300	604			
OTHER PARAMETERS										
GENERAL MINERALS										
Alkalinity, Total (as $CaCO_3$)	ppm	NA	NA	(1)	Range	86 - 97	123 - 128	2021	Yes	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
					Average	92	126			
Calcium	ppm	NA	NA	(0.1)	Range	27 - 32	64 - 70	2021	Yes	Runoff/leaching from natural deposits
					Average	30	67			
Hardness (as $CaCO_3$)	ppm	NA	NA	(1)	Range	110 - 133	270 - 273	2021	Yes	Runoff/leaching from natural deposits; sum of polyvalentcations, generally magnesium and calcium present in the water
					Average	122	272			
Magnesium	ppm	NA	NA	(0.01)	Range	12 - 13	25 - 26	2021	Yes	Runoff/leaching from natural deposits
					Average	12	26			
Potassium	ppm	NA	NA	(0.2)	Range	2.6 - 2.7	4.4 - 4.7	2021	Yes	Salt present in the water; naturally-occurring
					Average	2.7	4.6			
Sodium	ppm	NA	NA	(1)	Range	61 - 68	95 - 101	2021	Yes	Salt present in the water; naturally-occurring
					Average	64	98			
UNREGULATED CONTAMINANTS										
Boron	ppb	NL = 1,000	NA	100	Range	180	130	2021	Yes	Runoff/leaching from natural deposits; industrial wastes
					Average					
Chlorate	ppb	NL = 800	NA	20	Range	88	55	2021	Yes	Byproduct of drinking water chlorination; industrial processes
					Average					

For more details or questions, contact Jason W. Dyogi, Water Quality Specialist, at 310.285.2467

Imported Water From Metropolitan Water District (Cont.)

Parameter	Units	State (Federal) MCL	PHG	State DLR/CCRDL LCMRL (RL)	Range Average	Jensen Plant	Weymouth Plant	Most Recent Sampling Date	In Compliance	Major Sources in Drinking Water
NITROSAMINE COMPOUNDS										
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	(2)	Range	2.6	ND	2021	Yes	Byproduct of drinking water chlorination; industrial processes
MISCELLANEOUS (s)										
Calcium Carbonate Precipitation Potential (CCPP) (as $CaCO_3$) (t)	ppm	NA	NA	NA	Range	1.2 - 3.4	2.4 - 11	2021	Yes	A measure of the balance between pH and calcium carbonate saturation in the water
					Average	2.2	8.3			
Corrosivity (as Aggressiveness Index) (u)	AI	NA	NA	NA	Range	12.2	12.4 - 12.5	2021	Yes	
					Average		12.4			
Corrosivity (as Saturation Index) (v)	SI	NA	NA	NA	Range	0.35 - 0.40	0.52 - 0.61	2021	Yes	A measure of the balance between pH and calcium carbonate saturation in the water
					Average	0.38	0.56			
pH	pH Units	NA	NA	NA	Range	8.3 - 8.4	8.1	2021	Yes	NA
					Average	8.3				
Total Dissolved Solids Calculated (TDS) (w)	ppm	1,000	NA	NA	Range	276 - 340	400 - 604	2021	Yes	Runoff/leaching from natural deposits
					Average	304	567			
Sum of Five Haloacetic Acids (HAA5) (x)	ppb	60	NA	1.0	Range	2.3 - 3.6	1.4 - 5.8	2021	Yes	Byproduct of drinking water chlorination
					Average	3.0	3.7			
Total Trihalomethanes (TTHM) (x)	ppb	80	NA	1.0	Range	7.6 - 19	17 - 39	2021	Yes	Byproduct of drinking water chlorination
					Average	12	28			

Lead and Copper Results at Residential Tap

Parameter	Number of Samples Collected	Units	State and Federal Standards MCL	PHG	90th Percentile Value	Number of Sites Exceeding AL	AL Violations	Sample Date	Major Sources in Drinking Water
Lead	33	ppb	AL =15	0.2	1.2	0	NO	2020	Internal corrosion of household water plumbing systems; industrial manufacturers' discharge; runoff and leaching from natural deposits.
Copper	33	ppb	AL = 1300	300	130	0	NO	2020	Internal corrosion of household pipes; runoff and leaching from natural deposits; leaching from wood preservatives.

The State allows us 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. In 2016, the City of Beverly Hills Water Utilities Bureau and City of Beverly Hills Unified School District voluntarily sampled for lead at all 5 public schools. In 2017 and 2018, no K-12 public school submitted a request to sample for lead as part of Assembly Bill 746. In 2020, 33 residences were sampled for lead and copper at the tap.

Beverly Hills & a Portion of West Hollywood Distribution System

1 Parameter	Units	2 State (Federal) MCL	3 PHG	State DLR/CCRDL (RL)	4 Range / Average	5 Distribution System	Most Recent Sampling Date	In Compliance	6 Major Sources in Drinking Water
PRIMARY STANDARDS–Mandatory Health-Related Standards									
MICROBIOLOGICAL									
Total Coliform Bacteria (c)	% Positive Monthly Samples	5.0	MCLG = 0	NA	Range Average	Highest percent of monthly samples positive was 0.93%	2021	Yes	Naturally present in the environment
Escherichia coli (E. coli) (d)	Number	1	MCLG = 0	NA	Number of Positive Samples	0	2021	Yes	Human and animal fecal waste
INORGANIC CHEMICALS									
Nitrite (as Nitrogen)	ppm	1	1	0.4	Range Average	ND - 0.066 0.001	2021	Yes	Runoff and leaching from fertilizer use; septic tank and sewage; runoff and leaching from natural deposits
Fluoride (j)	ppm	2.0	1	0.1	Range Average	0.5 - 0.8 0.7	2021	Yes	Runoff and leaching from natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS									
Total Trihalomethanes (TTHM) (Distribution System)	ppb	80	NA	1.0	Range Highest LRAA	15 - 42 32.3	2021	Yes	Byproduct of drinking water chlorination
Sum of Five Haloacetic Acids (HAA5) (Distribution System)	ppb	60	NA	1.0	Range Highest LRAA	2.6 - 7.6 5.3	2021	Yes	Byproduct of drinking water chlorination
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	(0.05)	Range Average	0.8 - 2.9 1.9	2021	Yes	Drinking water disinfectant added for treatment
SECONDARY STANDARDS–Aesthetic Standards									
Color	Color Units	15	NA	NA	Range Average	ND - 5 ND	2021	Yes	Naturally-occurring organic materials
Odor Threshold	TON	3	NA	1	Range Average	ND - 2 ND	2021	Yes	Naturally-occurring organic materials
Turbidity	NTU	TT	NA	NA	Range Average	ND - 0.8 0.21	2021	Yes	Soil runoff
UNREGULATED DRINKING WATER CONSTITUENTS--Fourth Unregulated Contaminant Monitoring Rule (UCMR4) (2018 through 2019)									
HAA6Br [Total of 6 Brominated Haloacetic Acids]	ppb	NA	NA	NA	Range Average	5.8 - 22 9.7	2019	NA	Byproduct of drinking water chlorination
HAA9 [Total of 9 Haloacetic Acids]	ppb	NA	NA	NA	Range Average	7.6 - 31 14	2019	NA	Byproduct of drinking water chlorination
HAA5 [Total of 5 Haloacetic Acids]	ppb	TT	NA	NA	Range Average	4.1 - 11 6.5	2019	NA	Byproduct of drinking water chlorination
Manganese	ppb	TT	NA	0.4	Range Average	0.67 - 1.3 0.96	2019	NA	Leaching from natural deposits

The State allows us 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.

For more details or questions, contact Jason W. Dyogi, Water Quality Specialist, at 310.285.2467

Notes

*As a wholesale water system, Metropolitan provides its member agencies with relevant source water information and monitoring results that they may need for their annual water quality report. Metropolitan's compliance with state or federal regulations is determined at the treatment plant effluent locations and/or distribution system, or plant influent per frequency stipulated in Metropolitan's State-approved monitoring plan, and is based on TT, RAA, or LRAA, as appropriate. Data above Metropolitan's laboratory reporting limit (RL) but below the State DLR are reported as "ND" in this report; these data are available upon request. Metropolitan was in compliance with all primary and secondary drinking water regulations for the 2021 monitoring period.

Note: Metropolitan monitors the distribution system for constituents under the revised Total Coliform Rule (TCR), Water Fluoridation Standards, and Disinfectants/Disinfection Byproduct Rule (TTHM, HAA5, and total chlorine residual), including NDMA.

(a) Metropolitan monitors turbidity at the CFE locations using continuous and grab samples. Turbidity, a measure of cloudiness of the water, is an indicator of treatment performance. Turbidity was in compliance with the TT primary drinking water standard and the secondary drinking water standard of less than 5 NTU.

(b) Per the state's Surface Water Treatment Rule, treatment techniques that remove or inactivate *Giardia* cysts will also remove HPC bacteria, *Legionella,* and viruses. *Legionella* and virus monitoring is not required.

(c) Compliance is based on monthly samples from treatment plant effluents and the distribution system.

(d) The *E. coli* MCL is based on routine and repeat samples testing positive for coliforms and/or *E. coli,* or failure to analyze required repeat samples. No coliforms were found in the water treatment system and distribution system. No Level 1 assessment or MCL violations occurred.

(e) All distribution system samples had detectable total chlorine residuals, so no HPC bacteria analysis was required. Metropolitan monitors HPC bacteria to ensure treatment process efficacy.

(h) Compliance with the State MCL for aluminum is based on RAA. No secondary standard MCL exceedance occurred.

(k) Metropolitan was in compliance with all provisions of the State's fluoridation system requirements.

(m) Starting in 2021, samples are collected quarterly for gross beta particle activity and annually for tritium and strontium-90. Gross alpha particle activity, radium, and uranium data are from samples collected in 2020 for the required triennial monitoring (2020-2022). Radon is also monitored voluntarily with the triennial radionuclides.

(n) Compliance with the State and Federal MCLs is based on RAA or LRAA, as appropriate. Plant core locations for TTHM and HAA5 are service connections specific to each of the treatment plant effluents. One core location from the Jensen treatment plant effluent's service connections was excluded in the RAA and LRAA calculations due to operational changes in the Jensen distribution system.

(o) PHG assigned for each individual THM. Health risk varies with different combinations and ratios of the other THMs in a particular sample.

(p) Metropolitan's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October). The 12-month statistical summary of flow-weighted data is reported in the "Other Parameters" section.

(s) Data are from voluntary monitoring of constituents and are provided for informational purposes.

(t) Positive CCPP = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative CCPP = corrosive; tendency to dissolve calcium carbonate. Reference: Standard Method (SM2330.)

(u) AI ≥ 12.0 = Non-aggressive water; AI 10.0-11.9 = Moderately aggressive water; AI ≤ 10.0 = Highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98).

(v) Positive SI = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI = corrosive; tendency to dissolve calcium carbonate. Reference: Standard Method (SM2330).

(w) Statistical summary represents 12 months of flow-weighted data and values may be different than the TDS reported to meet compliance with secondary drinking water regulations. Metropolitan's calculated TDS goal is 500 mg/L.

(x) HAA5 and TTHM noncompliance samples were collected at the treatment plant effluents.

Q&A

Confidence in your Drinking Water

Answers to ten questions you have asked about the quality and safety of Beverly Hills water.

Each year, we ask Water Quality Specialist Jason W. Dyogi to furnish our Water Quality Report with objective information that answers the questions and concerns of Beverly Hills residents. Here again, he shares his expertise along with the latest research in this updated overview.

Jason Dyogi - Water Quality Specialist

1. I read somewhere that Beverly Hills water contained high levels of harmful, potentially cancer-causing, contaminants. Is this true and should I be concerned?

The City of Beverly Hills only delivers drinking water that is safe and continuously tested to ensure compliance with state and federal regulatory standards—standards that have been peer-reviewed.

Our water consistently meets all standards required by the U.S Environmental Protection Agency (EPA), California's State Water Resources Control Board, and set forth in the Safe Drinking Water Act. In addition, the City of Beverly Hills is subject to continuous oversight by the State Water Resources Board's Division of Drinking Water (SWRB-DDW) and its Office of Environmental Health Hazard Assessment (OEHHA).

What is concerning is one group's claims that state and federal water safety standards do not go far enough to protect public health.

With alarmist and misleading hyperbole, the group has taken available 2017-2019 data from the state database and then applied its own assumptions and mathematical formulas to arrive at a single number for each chemical that is allegedly "representative" of the entire system. Their findings are speculative and their publicized reporting is not subject to scientific peer review before publication.

Furthermore, the group presumes that all state and federal standards, such as Maximum Contaminant Levels (MCLs), are inadequate, and rely instead on its own non-enforceable guidelines or goals for the purposes of their analysis. The group's materials consistently misstate that their health guidelines represent the maximum concentration of a contaminant in water that scientists consider safe.

2. What is the City of Beverly Hills doing to ensure our drinking water is safe?

Every day, the City of Beverly Hills works to ensure the safety of our drinking water through careful monitoring and compliance testing. No expense is spared to ensure that we have the necessary infrastructure, innovative processes and resource management to treat your water. The recent reopening of our Foothill Water Treatment Plant equipped with a new, state of the art reverse osmosis system and other treatment processes [see page 24 - 25] is one example.

Our highly trained staff tests your water at each step, from source to water treatment plant to city connection points, reservoirs and, ultimately, the distribution system.

We also use only state-certified laboratories to test for emerging contaminants. In addition to daily water quality monitoring, the City submits weekly samples to state-accredited laboratories that I personally oversee.

These samples are taken from several regulatory-designated sampling stations that are representative of the entire city. In addition, I personally submit monthly compliance reports to our drinking water regulators that summarize both the State accredited laboratory sample results and daily collected field results.

Advances in science now allow water utilities like the City of Beverly Hills to detect extremely minute levels of minerals and compounds in water [equivalent to **1 drop** in **1 trillion** gallons of water that have no impact to human health.

We stay ahead of potential health risks by collecting data on unregulated contaminants and monitoring them as well. In contrast to the alarmist report, our annual Water Quality Reports provide transparency and detailed data based on rigorous, year-round testing of more than 185 regulated and unregulated contaminants taken throughout Beverly Hills and portions of the West Hollywood water distribution system.

Confidence in your Drinking Water

3. Are these state and federal water quality standards high enough to ensure my safety?

Yes. California's are some of the strictest water quality standards in the nation and the criteria established for both federal and state standards are based on cutting-edge scientific work that utilizes health-related data to protect public health. These standards are developed by a variety of governmental agencies that employ experienced public health medical doctors, toxicologists, epidemiologists, exposure scientists, environmental scientists, mathematical scientists, computer scientists, and biostatisticians, among others.

Toxicologists, for example, base their studies on doses that are hundreds to thousands of times above expected human exposures or environmental concentrations when evaluating potential health risks to humans.

4. How does Beverly Hills water measure up to bottled water?

Putting aside the subjective area of taste comparison, here are the three primary differences and why we believe Beverly Hills tap water is the best choice:

Safety. The Centers for Disease Control and Prevention" (CDC) states that "The United States has one of the safest water supplies in the world." The non-profit Food & Water Watch adds that "Consumer standards are actually more stringent for the quality and safety of tap water than for bottled water."

Bottled water is classified as a packaged product, regulated by the Food and Drug Administration (FDA), and is not necessarily any safer than tap water. In fact, much of bottled water comes from municipal water systems.

While the bottled water industry must adhere to quality standards, the water quality testing requirements the FDA imposes are far less stringent than those governing the water in municipal treatment systems and the monitoring of bottled water production is less frequent. Furthermore, water bottling companies are not required to share their test results with consumers, as we are.

Cost. As the Los Angeles Times reported in 2021, "the market leaders for bottled water — Coke and Pepsi — are just filtering and bottling tap water, and then selling it at a big markup." Meanwhile, global bottled water sales came close to $218 billion in 2020, driven largely by Covid fears. That is expected to continue rising.

Environmental Impact. Beyond the safety and cost comparisons, the environmental impact of bottled versus tap water is disproportionately different. Set aside the carbon footprint of manufacturing, filling, packaging and transporting those bottles, statistics show that "Americans alone send more than 38 billion water bottles to landfills every year, the equivalent of 912 million gallons of oil. That means that 1,500 plastic bottles are thrown away every second of the day." And, as all analysis makes clear, those numbers are continuing to rise.

5. Should I be stockpiling bottled water?

Natural disasters have the potential to interrupt a water supply system, and in Southern California we put earthquakes at the top of that threat list. It is critical that residents be prepared for such an event by having drinking water on hand and easily accessible. Recommendations by emergency preparedness advisories are to have a two-week supply of bottled water.

Even in the aftermath of a disaster, you can be assured the water we deliver will have undergone the same treatment processes before it reaches homes, including filtration, ultraviolet light, and chlorine disinfection. There is no threat to the quality of your tap water and no need to use up your bottled water supply.

It should be noted here that, as part of the City's ongoing effort to protect the water supply, we are taking steps to increase our emergency storage capacity as well as adding new wells in the Central Basin – a larger aquifer than the Hollywood Basin. These initiatives will greatly improve our sustainability through drought years or in the event of an acute emergency.

6. I smell chlorine in my water. Why are you putting it in our water?

To rid the water we deliver of any harmful germs, as required by federal law, utilities across the nation use chlorine. For well over a century this has effectively helped stop the spread of cholera and typhoid. A slight smell or taste of chlorine assures you that the water has been properly treated.

If you prefer, simply let the water sit in a glass or pitcher for a few minutes before putting in the refrigerator. Fresh cold water tends to taste better than room temperature water.

Confidence in your Drinking Water

7. After replacing my water heater, my tap water looked "milky" or discolored. Should I have my water tested?

After modifying or repairing a home's plumbing by replacing a water heater or faucet fixtures, air sometimes enters the pipes when they are repressurized. Air bubbles that may become trapped can give water a milky, white or cloudy appearance. Within minutes this will rise to the top of the glass and disappear.

It is recommended that residents open the cold water tap to vent the air first before opening the hot water tap to vent the water out of your plumbing system.

A brown or yellow tint to the water can occur following sudden changes in water pressure or in its directional flow. Also, modifying, moving or shaking any residential plumbing has the potential to stir up settled sediment that over time may have collected in the pipes or water heater. It might occur in pipes that have gone unused during a lengthy vacation, too. This is the result of dried sediment from the pipes when the water evaporated.

By running cold water run for a few minutes, the discolored water will be cleared from the pipes. But if it persists, open three or four cold water taps in the house and let them run at top pressure for about 20 minutes to flush the pipes.

So the water is not wasted, collect it in a bucket and use it for watering plants or other household needs.

8. Why does the water in my bathroom smell like a sewer or rotten eggs?

This is a condition created by organic material residents discarded into the drain of a kitchen or other sink. It can build up in the drain over time and decay, releasing a smell similar to that of rotten eggs.

It is not the odor of the water itself. In fact, one of the monitoring tests applied to Beverly Hills' water throughout our distribution system is to check for any odors. Each week we provide, as required by law, odor samples taken from various state-approved sampling stations and examined by a State-accredited laboratory.

To remedy this issue, pour half a cup of household bleach down the drain and wait at least one hour before flushing the drain with tap water. The chlorine bleach should eliminate that odor and also restore your U drain water plug that may have evaporated over time.

9. If I see white residue at the bottom of my teakettle or spotting on my glassware, is my water unsafe?

Certain minerals that occur naturally in water can build up to create a harmless residue. Calcium and magnesium are the most common of these. These minerals, that make water "hard," do not pose any health risks. On the contrary, according to the National Research Council

drinking water generally contributes a small amount toward total calcium and magnesium human dietary needs and is often preferred over distilled or "soft" water for its health benefits and flavor.

Water hardness is classified by the U.S. Department of Interior and the Water Quality Association. The average level of hardness in our tap water ranges between 108 and 262 mg/L or 6.3 grains/gallon and 15.3 grains/gallon. Monitoring for hardness is one of the many tests conducted by Metropolitan and the City of Beverly Hills.

To remove the deposits inside your teakettle, boil equal parts white vinegar and water. You can also remove any buildup in your coffee maker by filling the reservoir with equal parts of white vinegar and water and turning it on.

10. Are water filter systems useful, and if so, do you recommend a particular one?

The taste of drinking water is a different matter than its safety, and to alter the water aesthetics, some residents use a home carbon filter. The City of Beverly Hills does not endorse or recommend any specific systems. However, at the link below, the California Water Board website includes a list of several hundred registered Residential Water Treatment Devices from which to choose to meet your specific needs.

www.waterboards.ca.gov/drinking_water/certlic/device/watertreatmentdevices.html

[1] www.cdc.gov/healthywater/drinking/public/water_quality.html

[2] www.foodandwaterwatch.org/2016/02/16/guide-to-safe-tap-water-and-water-filters/

[3] www.latimes.com/business/story/2021-09-28/bottled-water-is-really-just-tap-water

[4] www.jerseyislandholidays.com/plastic-bottle-pollution-statistics/

EXTREME DROUGHT IN CALIFORNIA

California is experiencing another extreme drought.

With warmer and drier weather repeatedly affecting our state, our nation and the world, droughts in California are becoming more common and alarmingly more serious.

The 2020 and 2021 water years (which run October to September) had the least rainfall on record for two consecutive years. Snowpack, which typically supplies one-third of the state's water needs, is also alarming low. Due to these ultra-dry conditions, Governor Gavin Newsom declared a Drought Emergency throughout California on October 19, 2021.

Metropolitan, the main water supplier in Southern California, gets water from the State Water Project (SWP) and the Colorado River. They supply this water to their 26 member water agencies, who then deliver it to 19 million people, or 40% of the state's population.

On April 26, 2022, Metropolitan declared a first-of-its-kind water shortage emergency, requiring the cities and water agencies within SWP dependent areas to implement watering restrictions. While Beverly Hills has been receiving Colorado River water, a water shortage was also declared for Lake Mead on August 21, 2021. We all need to be mindful of the water needs and supply throughout the State. Due to ongoing modifications to regulations from the California Department of Water Resources, please be sure to stay abreast of the City's most recent watering guidelines.

State mandates and restrictions will continue to change as the climate continues to change. We all must adapt and do our best by making water efficiency a Beverly Hills way of life.

Most rain and snow falls in California from November through April. It then flows and melts to fill the reservoirs and aquifers with water we use for our homes, businesses and agriculture. It also supports fish and wildlife that depend on our rivers and wetlands.

Low water level strip on cliff at Lake Mead, where a water shortage was also declared.

BH2O Saving in Style
www.bhsaves.org

Water Efficiency

Keep An Eye Out For Water Leaks

Did you know that a running toilet can waste up to 4,800 gallons a day? An easy way to test if your toilet is running is to:

1. Put food coloring in the toilet tank.
2. Do not flush the toilet.
3. Wait 15 minutes and if food color leaks to toilet bowl, you have a leak.
4. To avoid staining the toilet, flush after test is completed.

Innovative Water Tracking Program Monitors What You Can't See

Track usage and discover leaks with the City's Water Tracking Program. Many water leaks are not visible and can go undetected for months. Not only is this wasteful, it adds unnecessary costs to your utility bill. Where most people only have the ability to physically check their water meters to detect less visible leaks in their home appliances, plumbing and irrigation systems, Beverly Hills residents can sign up for a free online program. Proven to save customers water, time and money, this City program displays daily water use and notifies the customer of abnormally high daily usage and/or continuous water flow issues. To sign up, visit water.beverlyhills.org.

Register For Automatic Alerts

One of the most valuable features of this program is the automated alerts of potential leaks and excessive water use. Sign up today at water.beverlyhills.org

Water Conservation Services Offered By The City

Water Saving Site Audits and Landscape Evaluations

Water Conservation Administrator Debby Dunn (Figoni) offers customers on-site and FaceTime water audits. With both on-site and virtual audits, Debby will walk in and around the property with the customer providing tips and ways to conserve water.

Since outdoor irrigation makes up two thirds of a typical, single-family home's water usage, the City wants to help our customers use water more efficiently and reduce their water bills through free landscape water evaluations. The evaluation focuses on the most efficient way to water your landscape, teaches the customer how to set their irrigation controller, and offers other helpful information, including the pros and cons of drip irrigation versus overhead sprinklers.

Debby can also provide information on beautiful, water-wise plants for those considering upgrading to a California Friendly landscape.

Photo Credit:
Western Municipal Water District

Debby Dunn (Figoni)
Water Conservation Administrator

If you would like to schedule an onsite or virtual water audit, please contact Debby Dunn (Figoni) at 310.285.2467 or via AskPW@beverlyhills.org.

Partner with Us to Promote Water Efficiency

The City's Water Conservation Administrator is eager to assist residents and businesses with ways to use water efficiently by offering a variety of services:

- **A free online Water Tracking Program at water.beverlyhills.org.** This program helps customers keep an eye on their water use, alerts them of abnormally high usage and of continuous water flow issues indicating leaks.
- **Free water audits and landscape evaluations.** Our Water Conservation Administrator will visit your home or office to present recommendations on how to use water more efficiently inside and outside as well as ways to make your landscape more water wise and naturally beautiful.
- **Fact sheets and flyers,** available in English and Spanish. Get tips on easy and convenient ways to conserve water, inside and outside your home.

Water Efficiency

Irrigate Efficiently

You can keep your landscape beautiful and healthy while making sure you do not over-water by following the City's watering guidelines and some of these water-saving tips:

Outdoor Water-Saving Tips

- Set your sprinkler timer to water 2 days a week (see our Outdoor Watering Guidelines). **NOTE:** Due to the Extreme Drought, watering days and rules may vary.
- Water each zone for about 8 minutes for pop up sprinklers and 15 minutes for drip.
- Water trees and shrubs infrequently but for longer durations to get the water deep to the root zone.
- Check your sprinkler system for broken or clogged sprinkler heads, and check for over spray.
- Consider drip irrigation for your trees, shrubs and flowers.
- Use a broom, not a hose, to clean driveways and sidewalks.
- Install a weather-based irrigation controller (WBIC), which will automatically adjust the watering schedule with the weather.
- Put a back-up battery in your sprinkler controller to save your settings during power outages.
- Use at least 3 inches of mulch around plants and trees to retain moisture and keep the soil cool.
- Consider replacing grass lawn areas with drought tolerant and native plants that require less water (rebates may be available).
- Use a pool cover to reduce evaporation.
- Keep an eye on pool and fountain auto fills so they only fill when needed.

Outdoor Watering Guidelines Adhere to "Stage C"

We encourage all residents to use water efficiently by following the Beverly Hills Municipal Code guidelines:

New City of Beverly Hills Drought Regulations:

- Two days per week watering: North of Santa Monica Blvd = Monday and Friday. South of Santa Monica Blvd = Tuesday and Saturday.
- No watering (sprinklers or hose) after 9 am or before 6 pm.
- Supplemental watering for trees allowed.
- Violations will be issued for non-compliance.
- 30% citywide water reduction goal.

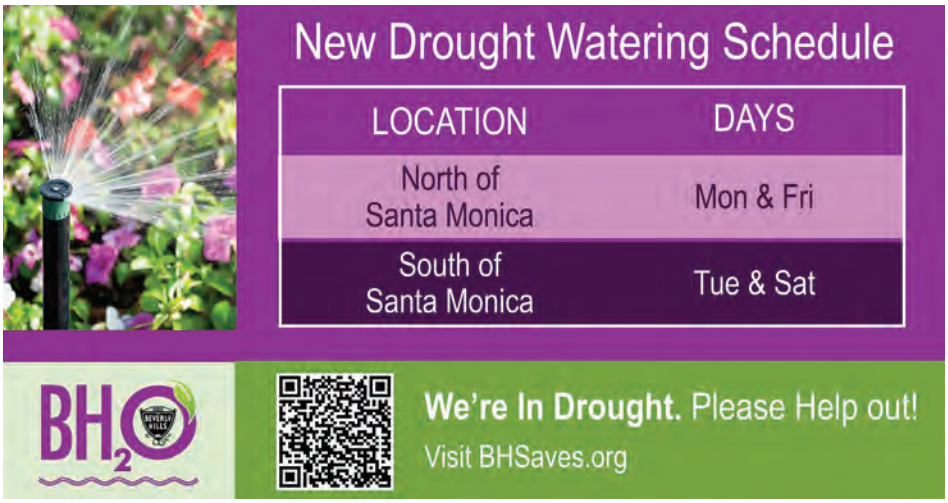
Monitor your water use by signing up for the City's Water Tracking program at Water.BeverlyHills.org. For more information, visit www.BHsaves.org, email askpw@beverlyhills.org or call 310.285.2467.

Ongoing Regulations

1. Water with sprinklers or a hose between the hours of 6 pm and 9 am.
2. Don't irrigate after a measurable rainfall.
3. Don't allow excessive water runoff due to sprinkler overspray or malfunction.
4. Repair leaks immediately.

Rebates, Tips, Questions

- Rebates are available for upgrading to high-efficiency appliances including toilets, clothes washers, weather based irrigation controllers and more. For a list of eligible appliances and rebate details, visit www.socalwatersmart.com.
- The City offers hose nozzles, soil moisture probes, low-flow showerheads and sink aerators at no cost. Contact Debby Dunn (Figoni) at 310.285.2467 or via email: AskPW@beverlyhills.org.
- For more water-saving tips and resources, visit www.BHSaves.org and www.epa.gov/watersense.



A Spotlight on Foothill

Water Treatment Plant's Return Adds to Self-Sufficiency

Beverly Hills took a big step towards water self-sufficiency this Spring with the reopening of the Foothill Water Treatment Plant, our 1990s-era facility that was taken offline in 2015 for renovation.

After a complete system overhaul in 2020 and 2021, involving new construction and technologies, the Foothill Water Treatment Plant and its reverse osmosis (RO) system are now capturing and treating water pulled from City wells. Volumes will soon be sufficient to provide up to 25 percent of the Beverly Hills' 8-million-gallon daily requirement. While the plant was offline, Beverly Hills relied entirely on Metropolitan for water.

At a March 28 ribbon cutting to herald the plant's return to operation, Mayor Bob Wunderlich commended the new, improved Foothill Plant as a major step "toward achieving a sustainable and healthy water solution" at a critical time when "the State of California is experiencing drought conditions that have never been seen before."

(Left to Right) Vice Mayor Julian A. Gold M.D., Councilmember John A. Mirisch, Mayor Lili Bosse, Councilmember Bob Wunderlich, and Councilmember Lester Friedman at the ribbon cutting ceremony.

Water Treatment Process

A Spotlight on Foothill

A Water Treatment Plant Turnaround

The $10 million required for the historic project was largely financed by City bonds and a community supported water reliability fee.

Irvine-based Shimmick Construction Company, whose portfolio includes milestone public works projects around the world, earned the contract. During renovation, portions of the existing Foothill Water Treatment Plant were removed and protection was installed for any remaining systems. All work was done within the existing Reverse Osmosis (RO) building and chemical storage footprint without modifying the building envelope.

Among the improvements are a new sand separator system which can capture the iron sulfide and sand, among other particles, that wells produce during operation. Also built, upstream of Foothill's RO system, was an oxidation media filtration system to remove any iron, manganese, hydrogen sulfide, iron sulfide, arsenic or other foulants. Its upstream location prevents major impact by these foulants on the system's reverse osmosis membranes.

Additional upgrades include new chemicals required for the media filtration process, improvement of existing chemical systems, and electrical and control systems for new pre-treatment processes.

Throughout, steps were taken to ensure the plant's eventual operation would be uninterrupted and that the highest standards of drinking water, as required by the nation's most stringent health and safety regulations, would be met.

In the final weeks before returning to full operation, the Plant underwent extensive water quality analysis and testing, a feasibility analysis to evaluate technology screening, studies and sampling, and a pilot test to check the technology. Results were submitted to the state's Division of Drinking Water and a ten-year water supply permit was awarded for the entire system.

Now we are continuing our efforts to locate and tap more City-owned wells to further shift to renewable sources of water and away from dependence on Metropolitan, and independence for Beverly Hills.

5 Once water has been filtered through these various processes, chlorination is used to ensure all microorganisms are destroyed. Our state certified technicians continuously and carefully monitor the chlorine levels in the **Finished Water**.

4 Water is further treated during the **Reverse Osmosis Process**, which forces water at high pressure through semi-permeable membranes that remove any contaminants including many inorganics, dissolved solids, radionuclides and synthetic organic chemicals.

6 The finished water is then stored in our reservoirs before it is pushed out through our distribution system and to Beverly Hills homes and businesses.

TO YOUR TAP!

Investing Wisely and Delivering on our Commitment

Capital Improvement Projects, or CIPs, are Public Works Department initiatives to secure a reliable, resilient supply of water that meets the most stringent regulatory requirements.

In 2021, through the completion of several major projects, and the launch of several others, we delivered on our promise to ensure drinking water that exceeds California's stringent water quality standards, the toughest in the nation.

Whether expanding and upgrading existing wells, pipelines and our treatment plant, or designing and constructing new infrastructure facilities, the Public Works Department annually invests in cost-effective projects that will continue to provide high-quality water for future generations.

The Cornerstone of a More Self-Reliant Water System

Among the most important accomplishments of 2021 was the completion of renovations to the Foothill Water Treatment Plant. Upon completing the re-design and construction of our 1990s-era facility, we conducted diligent regulatory pilot testing and lab analyses in early 2022. We demonstrated that the water treated at the plant meets all stringent California water quality standards and are proud to report that the Division of Drinking Water approved the results and issued all permits in time to reopen the treatment plant in April 2022. This now enables reconveyance of water from our existing groundwater wells including a future groundwater well currently under construction.

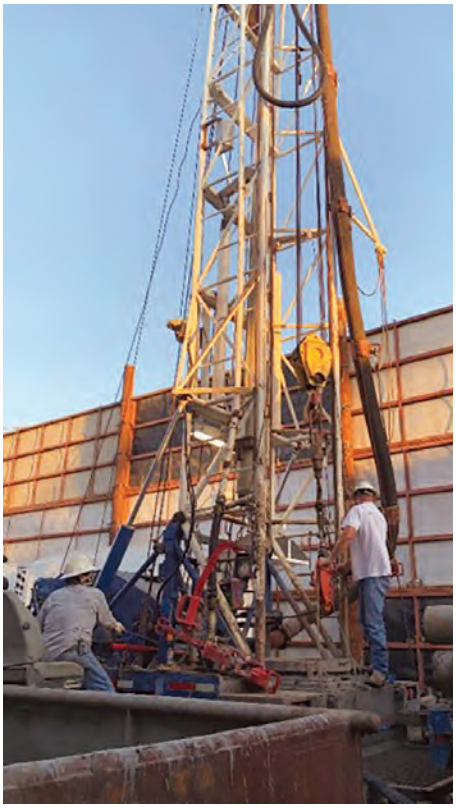
Critical to maintaining a safe system for the future is security, which increasingly means cyber security. As part of our treatment plant upgrade, we updated our Supervisory Control and Data Acquisitions (SCADA) system. Synonymous with telemetry, the SCADA system was reinforced with the latest cyber security technology to identify cyber threats to our distribution and treatment systems and reduce their vulnerability to attack.

For a complete review of our newly renovated plant and to learn more about the water treatment process, see the story on pages 24 - 25.

Setting Our Sights On New Sites

One encompassing goal of the CIP program is developing local sources of water that help wean the city of dependence on imported water from Metropolitan, which until recently provided Beverly Hills with 100% of its drinking water. One way to reduce Metropolitan dependency is by identifying and tapping renewable sources of groundwater. Aquifers, which are replenished by nature, can be tapped by wells that pump this groundwater to be treated by our treatment plant and distributed to storage reservoirs.

We are nearing the completion of La Cienega Well (LCW1) in the City of Los Angeles, which now consists of approximately three miles of new transmission main to convey raw groundwater through Beverly Hills and Los Angeles to our Foothill Water Treatment Plant. We are completing the well facility's enclosure, pump and motor, and other appurtenances. We expect LCW1 will begin its operation this fall once LADWP approvals are fully in place, joining our existing five functioning wells that will be conveying groundwater to our treatment plant.



LCW1 drilling

Once our sixth existing well (HW-6), which is currently offline for analysis, returns to operations in 2022, our seven wells will be producing 25% of Beverly Hills' water needs.

Another potential groundwater well site is the Sand Pit site, a city-owned property adjacent to Interstate 10. Careful monitoring and analytics through the end of summer 2022 will enable the city to determine the feasibility of converting the Sand Pit well site to a full production groundwater well. We believe it could produce a volume comparable to that produced by LCW1.

We are also actively searching for new wells in the unadjudicated portion of the Central Basin, which is a larger aquifer than the existing Hollywood Basin. This initiative will greatly improve reliability through drought years or in the event of an acute emergency. So far, we have identified and screened over 40 potential well sites in the Central Basin as part of this ongoing search for new well sites. Meanwhile, emergency storage facility upgrades advanced during 2021, with progress towards planning for automated reservoir management systems to operate our existing reservoirs at higher operating water levels, particularly at three of our largest: Coldwater, Sunset and Greystone.

Over the next year, we will perform a feasibility analysis to boost reservoir capacity and maximize operational storage with our Reservoir Management Systems (RMSs).

Other 2021 Accomplishments

Another accomplishment of major importance is the city's Water Main Replacement Project, which is an ongoing program critical to maintaining our city's water pipeline infrastructure. Some of these aging pipelines have reached the end of their lifelines and are in need of repair and/or replacement.

With care to minimize the neighborhood noise impacts and traffic levels, we initiated a multi-phase water main upgrade in 2021. Whenever possible, the work was performed in conjunction with concurrent utility upgrades to keep costs down. The first two phases of construction – on Loma Vista Drive between Evelyn Place and Doheny Road, and along San Ysidro Dr. between Tower Road and the city limits – are completed. Construction on the third phase, on Coldwater Canyon Dr. from Beverly Drive to Monte Cielo Drive, will begin after design is finalized later this year.

We also have replaced Pump Station No. 8's aging mechanical pumping equipment, electrical, instrumentation controls, piping and associated appurtenances.

A number of projects listed above were recommendations made in the Integrated Water Resources Master Plan (IWRMP), which was adopted in 2021 to offset future water demands and optimize the management and use of our precious water resources. Identifying additional well sites and increasing emergency storage are just a few examples.

To the future, the IWRMP will continue to help us identify stormwater capture projects, pursue additional groundwater wells, and find new ways to take advantage of recycled water when supplies become available.

If you have any questions regarding our CIP projects, please feel free to contact Vince Damasse at 310.285.2491 or AskPW@beverlyhills.org.

With care to minimize the neighborhood noise impacts and traffic levels, we initiated a multi-phase water main upgrade in 2021.

This report contains important information about your drinking water. Please contact the City of Beverly Hills Public Works Department at 310.285.2467 for assistance in Spanish or Farsi.

Este informe contiene información importante sobre su agua potable. Favor de comunicarse con el Departamento de Obras Públicas de la ciudad de Beverly Hills al 310.285.2467 para obtener asistencia en español.

این گزارش حاوی اطلاعات مهمی در مورد آب آشامیدنی مصرفی شماست.
خواهشمند است برای دریافت راهنمایی به زبان فارسی با اداره خدمات
همگانی شهر بورلی هیلز به شماره ۳۱۰۲۸۵۲۴۷۶ تماس حاصل فرمایید.

If you have questions regarding this report or the quality of your water, please contact Public Works Customer Service.

Public Works Customer Service

Call: 310.285.2467 | Email: AskPW@beverlyhills.org

Public Works Department

345 Foothill Road, Beverly Hills, CA 90210

EFFICIENCY

Get Involved

Public involvement is fundamental to ensuring that we are meeting water supply demand, water quality goals and the highest customer service level. We welcome your feedback; please see below for ways you can be involved with the City of Beverly Hills:

- Let us know how we are doing.
- Sign up for the Backbone newsletter and alerts.
- Participate in conservation events.
- Attend commission and council meetings.

The Public Works Commission is an advisory group to the City Council that generally meets at 8:00 a.m. on the second Thursday of every month. For exact meeting dates and time, please visit www.beverlyhills.org/departments/publicworks/publicworkscommission or contact the City Clerk at **310.285.2400.**

BEVERLY HILLS

For more information visit:
www.beverlyhills.org