2017 Annual Water Quality Report

Partners in Environmental Protection

The historic Cactus Garden in Beverly Gardens Park

A Message From Public Works

Beverly Hills' water quality in 2017 met or surpassed all public health standards set by state and federal regulations.

Read this report to learn more about the water provided by Beverly Hills and how the City delivers the highest quality of water year after year. You'll also learn ways you can conserve and protect this precious resource.

Dear Beverly Hills water customer,

English author and poet Samuel Johnson stated "Few things are impossible to diligence and skills."

In your Beverly Hills Public Works Department, the diligence and skill of City staff continues to ensure that the water coming out of your tap is of the highest quality. State-certified operators working in the City's water treatment and distribution systems, make certain that your tap water is pleasant tasting and safe to drink through constant monitoring, sampling, testing and maintenance.

The commitment of Beverly Hills water customers is also worth noting. Although the State of California no longer requires mandatory conservation measures, the community continues to conserve consistently about 15-20% less than in 2013. In Beverly Hills, water efficiency is a way of life, and we support the efforts of all residents and businesses.

Thanks to customers like you, together we can make sure our water supply remains sustainable to serve the needs of our City for generations to come. To learn more about ways to use water efficiently, go to www.bhsaves.org.

Speaking of sustainability, we're working on some very important and exciting projects, which will increase the resiliency and reliability of Beverly Hills' water supply. Currently, a project to restore the production from existing wells is nearing completion, and two additional wells have been constructed to augment the City's groundwater supply. In addition, improvements to the City's Water Treatment Plant will allow Beverly Hills to fully utilize its groundwater resource and reduce its dependence on imported water.

We're pleased to present to you this year's water quality report. Please review it and feel free to contact us with any questions. On behalf of the City of Beverly Hills Public Works Department and the men and women of the Utilities Division, thank you for allowing us to serve you.

Sincerely,

Gil Borboa
Assistant Director of Public Works
Utilities Division

مشتریان عزیز آب **Beverly Hills**

"تعداد کمی از چیزها وجود دارند که با پشتکار و مهارت امکان‌پذیر نباشند."

نویسنده و شاعر انگلیسی **Samuel Johnson**

پشتکار و مهارت کارکنان شهر در سازمان کارهای عمومی **Beverly Hills** برای شما همچنان ادامه دارد تا اطمینان حاصل کنیم آبی که از شیرهای شما بیرون می‌آید دارای بالاترین کیفیت می‌باشد. کارگران عملیاتی دارای تأییدیه از طرف ایالت در سیستم‌های فراوری و شبکه توزیع آب شهر میباشند و تلاش می‌کنند تا با نظارت مداوم بر کیفیت آب، نمونه‌گیری، آزمایش و نگهداری تجهیزات، اطمینان یابند که آب لوله‌کشی شما دارای مزهٔ خوشایندی برای نوشیدن باشد.

همچنین تعهد از طرف مشتریان آب **Beverly Hills** هم ارزش زیادی دارد. اگرچه دیگر الزامی برای اقدامات صرفه‌جویی از طرف ایالت کالیفرنیا وجود ندارد، اما جامعه همچنان به صرفه‌جویی در مصرف آب ادامه می‌دهد که مقدار مصرف در حدود ۱۵ تا ۲۰ درصد کمتر از سال ۲۰۱۳ می‌باشد. بازدهی بالاتر در مصرف آب **Beverly Hills** ، روشی است برای زندگی و ما در این زمینه از تلاشهای همهٔ مشتریان آب پشتیبانی می‌کنیم.

ما به کمک مشتریانی مانند شما، در کنار یکدیگر می‌توانیم اطمینان حاصل کنیم که منابع آب ما همچنان پایدار هستند تا نیازهای شهر خودمان را برای چندین نسل آینده نیز برآورده سازند. برای یادگیری بیشتر دربارهٔ روشهای استفاده از آب با بازدهی بالاتر به آدرس www.bhsaves.org مراجعه کنید.

ما در حالی که از پایداری منابع صحبت می‌کنیم، در حال حاضر مشغول کار بر روی بعضی پروژه‌های بسیار مهم و هیجان‌انگیز هستیم که میزان دوام و قابلیت اطمینان منابع آب **Beverly Hills** را افزایش می‌دهند. هم‌اکنون یک پروژه برای بازیابی محصولات از چاه‌های آب موجود در منطقه در دست اجرا است و دو چاه دیگر نیز ساخته شده‌اند تا به میزان آب‌های زیرزمینی شهر افزوده شود. اضافه بر این، بهبودهای انجام شده در «کارخانهٔ فراوری آب شهر» به **Beverly Hills** امکان می‌دهد تا منابع آب زمینی خود را به صورت کامل مورد استفاده قرار دهد و نیاز خود به واردات آب را کاهش دهد.

ما خوشحالیم که گزارش وضعیت کیفیت آب امسال را به شما تقدیم کنیم. لطفا آن را مرور کنید و اگر هر پرسشی داشتید آزادانه با ما تماس بگیرید. از طرف سازمان کارهای عمومی شهر **Beverly Hills** و مردان و زنانی که در بخش امکانات شهری کار می‌کنند، از شما به خاطر آن‌که اجازه دادید به شما خدمت‌رسانی کنیم سپاسگزاری می‌نماییم.

با احترام،

Gil Borboa

دستیار سرپرست بخش کارهای عمومی
بخش امکانات شهری

من رسالة العامة الأشغال

في المياه جودة حققت عام في ويلز بيفرلي جميع تجاوزت أو 2017 تيال العامة الصحة معايير الفيدرالية اللوائح حددتها. والولايات

لمعرفة التقرير هذا اقرأ تقدمها التي المياه عن المزيد توفر وكيف ويلز بيفرلي للمياه جودة أعلى المدينة على أيضًا سنويًا. عرف تتبعها التي الطرق المورد هذا على الحفاظ. وحمايته الثمين

Drinking Water and Your Health

Water agencies are required to provide an annual water quality report that informs you where your drinking water comes from and what is in it.

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. Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 800.426.4791 or visiting the website at www.epa.gov/safewater.

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 can also come from gas stations, urban stormwater runoffs, agricultural application and septic systems.
- Radioactive contaminants can be naturally-occurring or can be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board, Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The California Department of Public Health and U.S. Food and Drug Administration regulations 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 https://goo.gl/ZrJ3ab.

Protecting Water Quality at the Source

Source waters used by Metropolitan Water District of Southern California (Metropolitan)—the regional agency that provides water to Beverly Hills—are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed-related factors that could affect water quality. Treatment to remove specific contaminants can be more expensive than measures to protect water at the source, which is why Beverly Hills and other water agencies invest resources to support improved watershed protection programs.

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

Source water protection is an important issue for all of California. 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 – 2011 Update. You can request a copy of the most recent Watershed Sanitary Surveys by calling Metropolitan at 213.217.6000.

Protecting Our Local Watershed

Safeguarding our water is everyone's responsibility. As a water customer, you can do your part to protect our local watershed.

The Ballona Creek Watershed is an open 10-mile concrete channel from mid-Los Angeles to the Pacific Ocean at Playa del Rey. Feeding into the channel is a network of underground storm drain lines throughout the city as well as major tributaries including Centinela Creek, Sepulveda Channel and Benedict Canyon Channel. Since 49% of the watershed is covered by impervious surfaces, it is particularly vulnerable to pollutants such as trash, metal, bacteria and pesticides that runoff into storm drains.

To protect our watershed, here are some things you can do:

1. Limit your use of fertilizers and pesticides. The hazardous chemicals in both can reach our drinking water source.
2. Pick up after your pets.
3. Dispose of chemicals properly; take used motor oil and paint to a recycling center.
4. Get involved by volunteering with a local non-profit such as the ones listed below to clean up a nearby waterway or beach:
   - City of LA Office of Community Beautification
   - Friends of the Ballona Wetlands
   - Friends of the Los Angeles River
   - Heal the Bay
   - LA Conservation Corps
   - LA Waterkeeper
   - Surfrider Foundation
   - TreePeople

Courtesy of The California Department of Water Resources

Additional Information of Interest

Fluoridation.

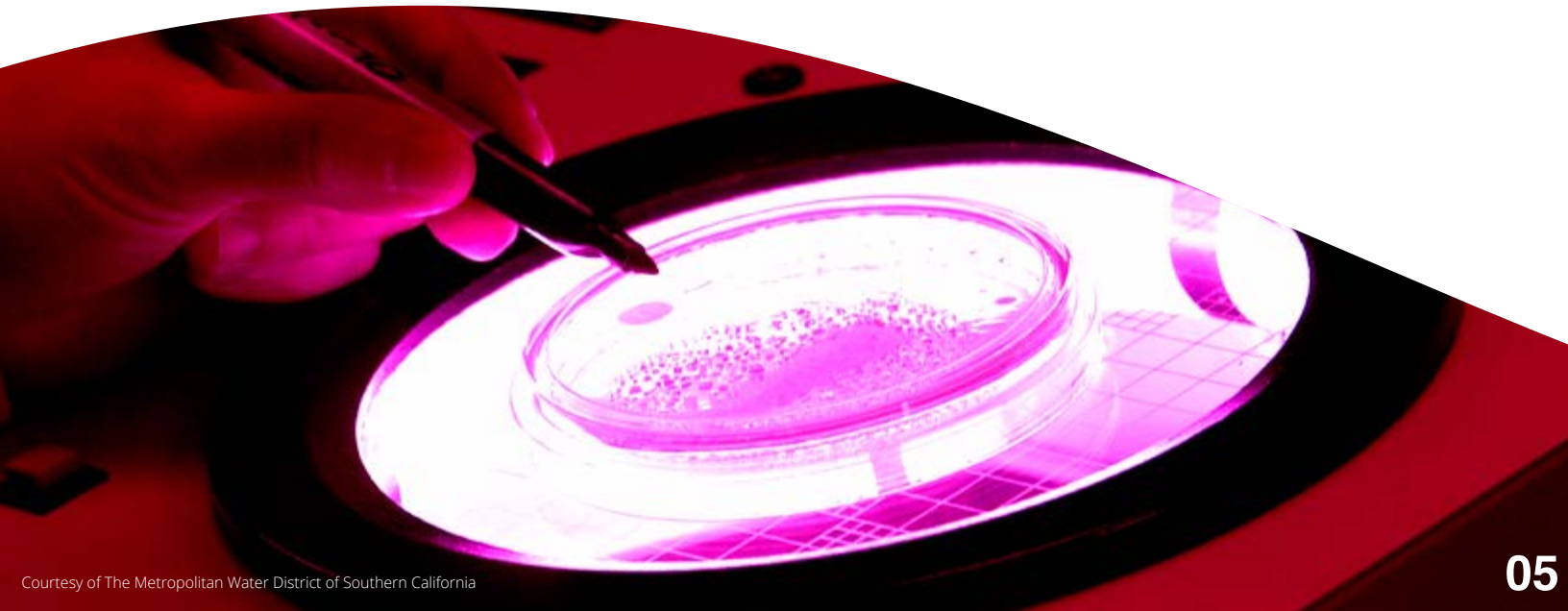
Fluoride occurs naturally in water and soil in varying amounts. The City of Beverly Hills and Metropolitan adjust the natural fluoride concentration in the water by adding a small concentration of fluoridation to promote dental health. Fluoride levels in your water are maintained within a range of 0.6 to 1.2 parts per million, as required by the Division of Drinking Water. Fluoridating the water especially helps to prevent tooth decay in children. Because of the health benefits of fluoridating in drinking water, a 1997 Assembly Bill of the State of California mandated all large system water suppliers begin fluoridating their water systems.

Lead.

If present, elevated levels (above 15 µg/L) 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. 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, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the USEPA Safe Drinking Water Hotline at 800.426.4791 or at www.epa.gov/lead.

Arsenic.

While your drinking water meets the U.S. Environmental Protection Agency (EPA) standard, it does contain low levels of arsenic, which occurs naturally in many water sources. The arsenic standard balances the current understanding of arsenic's possible health impacts against the cost of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations, and is linked to other health impacts such as skin damage and circulatory problems.



Courtesy of The Metropolitan Water District of Southern California

Additional Information of Interest

Chloramines.
Chloramines are compounds of chlorine and ammonia. 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.

Why Additional Chemicals Are Added To Your Water

To Disinfect.
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.

To Improve Dental Health.
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. Metropolitan adjusts the natural fluoride level in its water, which ranges from 0.1 to 0.4 parts per million, to the optimal level for dental health of 0.7 parts per million.

People with Weakened Immune Systems

Although Beverly Hills water meets all drinking water standards, 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. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800.426.4791.

Sources of Your Water Supply

The City's Treatment Plant has been offline since 2016 for operational improvements. As a result, 100 percent of your water supply is being provided by Metropolitan Water District. Metropolitan imports water supplies from two main sources: the Sacramento and San Joaquin Rivers through the State Water Project and 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. 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.

Colorado River

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.

Along with the State Water Project, the Colorado River Aqueduct is one of two imported drinking water sources for Southern California.

The water Metropolitan brings from both sources is first treated at the Weymouth Filtration Plant in LaVerne before it is delivered to Beverly Hills.

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Courtesy of The Metropolitan Water District of Southern California

Protecting Our Future Water Supply

As a Beverly Hills water customer, you may not realize that the majority of your drinking water comes from Northern California via the Sacramento-San Joaquin Delta. Measuring a total area of 1,100 square miles, the Delta is an expansive inland river delta and estuary that supports a complex ecosystem and supplies water to millions of Californians through the California State Water Project.

What is California WaterFix?

The future of a reliable water supply for Californians depends upon a healthy Delta ecosystem and upgrades to its water delivery infrastructure (State Water Project), which is badly outdated. Last April, the Metropolitan Board of Directors approved $10.8 billion in financing for the California WaterFix project to ensure our state has a reliable water supply for many years to come.

The California WaterFix is a $17 billion project that will protect our state's water supplies from climate change through upgrades to the decades-old delivery system and habitat restoration in the Delta. The project will ensure clean, reliable water while protecting our environment by:

- Creating twin tunnels to move water beneath the environmentally sensitive San Joaquin-Sacramento Delta rather than through it.
- Upgrading the 50-year old levees in the Delta that are vulnerable to earthquakes, floods, and rising sea levels, putting our fresh water supply at risk from saltwater contamination.
- Building three new intakes, each with 3,000 cubic-feet per second capacity.
- Restoring about 2,300 acres of habitat and up to 13,300 acres of habitat protection.

According to an extensive Metropolitan study, the California WaterFix is the single most cost-effective, large-scale project to ensure Southern California's long-term water supply. Metropolitan's $10.8 billion share to finance the project is projected to cost customers on average up to $4.80 a month.

As we look forward, the California WaterFix is essential to our future sustainability and will help California endure inevitable challenges in coming decades.

Courtesy of The California Department of Water Resources

Readers' Guide to the Water Quality Tables

The cornerstone of the water quality report is a series of data tables that list the results of year-round monitoring for nearly 400 constituents. Only the constituents that are found in Beverly Hills' water supply that are above the state detection limit for reporting are listed in the tables. Bottled water is not covered in this report. You will find four tables, one for each of the following water sources:

1. Metropolitan Treated Surface Water
2. Beverly Hills Distribution System
3. Beverly Hills Reverse Osmosis Treatment Plant
4. Lead and Copper Action Levels at Residential Taps

By reading the tables (beginning on Page 15) from left to right, you will learn the quantity of a constituent found in water and how that compares with the allowable state and federal limits. You will also see the measured range and average of the constituent and where it likely originated. The questions and answers on the following pages lettered **A** through **I** will explain the important elements of the tables.

Beverly Hills met all drinking water standards in 2017.

Readers' Guide to the Water Quality Tables

A Where does Beverly Hills get its water?

The City's Reverse Osmosis Treatment Plant has been offline since 2016 for operational improvements to ensure continued reliable drinking water for the future. As a result, 100 percent of your water supply is being provided by Metropolitan. Metropolitan imports water from Northern California via the State Water Project, and from the Colorado River via the Colorado River Aqueduct.

The table shows the percentage of the total water delivered by Metropolitan that is from the State Water Project. The remainder is from the Colorado River. Additional tables list the water quality standards for Beverly Hill's water distribution system, reverse osmosis treatment plant, as well as lead and copper samplings from residential taps.

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
www.mwdh2o.com

Courtesy of The Metropolitan Water District of Southern California

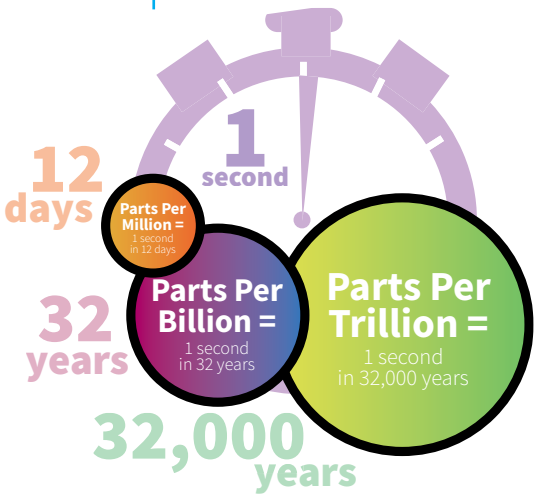
Readers' Guide to the Water Quality Tables

B What is in my drinking water?

Your tap water may contain different types of chemicals (organic and inorganic), microscopic organisms (e.g., bacteria, algae, protozoa, and viruses) and radioactive materials (radionuclides), many of which are naturally-occurring. Health agencies require monitoring for these constituents because at certain levels they could result in short- and long-term health risks. The column marked "Parameter" lists the constituents found in the water that Beverly Hills delivers.

C 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.



D 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 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.

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

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.

Readers' Guide to the Water Quality Tables

F 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 does not do 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).

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

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, as 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 "H" 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.

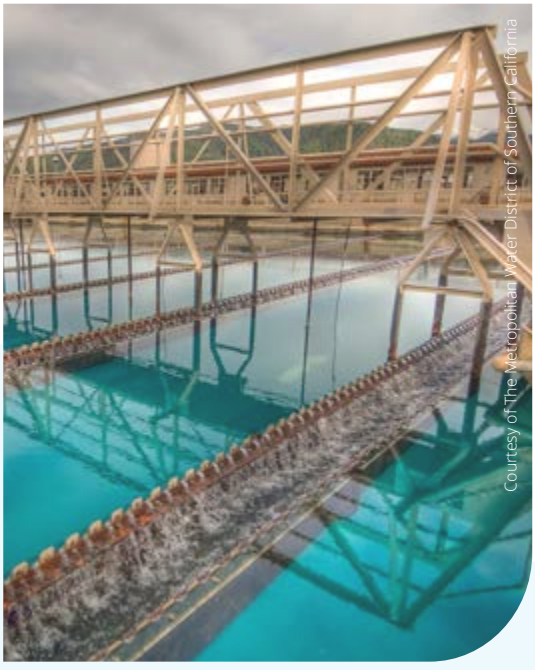
Water agencies have specific procedures to follow if a constituent is found at levels higher than the MCL and considered a potential threat to public health. Information is shared immediately with the regulatory agencies. The regulatory agencies will determine when and how this information is shared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

H What are the testing results for the water monitored?

The monitoring results for the two Metropolitan water treatment plants are listed as well as the monitoring results for the City's water distribution system, reverse osmosis treatment plant and lead and copper samplings from residential taps.

I How do constituents get into the water supply?

The most likely source for each constituent is listed in the last column of the 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.



Courtesy of The Metropolitan Water District of Southern California

Glossary

Use this glossary to understand the terms, abbreviations, quality standards and measurements used in the Water Quality Tables.

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 federal and state health agencies.

Terms & Abbreviations

Constituents
Components or elements found in drinking water.

Locational Running Annual Average (LRAA)
The highest LRAA is the highest of all Locational Running Annual Averages calculated as average of all samples collected within a 12-month period.

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.

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 (Cal/EPA).

Range
Results based on minimum and maximum values; range and average values are the same for samples collected once or twice annually.

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

Running Annual Average (RAA)
The highest RAA is the highest of all Running Annual Averages calculated as average of all samples collected within a 12-month period.

Treatment Technique (TT)
A required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

Glossary

Use this glossary to understand the terms, abbreviations, quality standards,and measurements used in the Water Quality Tables.

Additional Abbreviations

AI = Aggressiveness Index

CaCO3 = Calcium Carbonate

CFU = Colony-Forming Units

DLR = Detection Limits for Purposes of Reporting

NA = Not Applicable

ND = Not Detected

NL = Notification Level to SWRCB

SWRCB = State Water Resources Control Board

TON = Threshold Odor Number

SI = Saturation Index (Langelier)

Measurements

Beverly Hills conducts extensive sampling and testing to ensure your water meets all water quality standards. In 2017, over 20,406 samples were collected at various sampling points throughout the City's water system, all of which were below state and federal maximum allowable levels. Most contaminants are measured in:

- Million fibers per liter (MFL).
- Parts per million (ppm) or milligrams per liter (mg/L).
- Parts per billion (ppb) or micrograms per liter (µg/L).
- Parts per trillion (ppt) or nanograms per liter (ng/L).
- Parts per quadrillion (ppq) or picograms per liter.
- PicoCuries per liter (pCi/L)—A measurement of radioactivity in water.
- MicroSiemen per centimeter (µS/cm) or Micromho per centimeter (µmho/cm).
- Nephelometric Turbidity Units (NTU)—A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.

Courtesy of The Metropolitan Water District of Southern California

Imported Water From Metropolitan

	B	C	D	F		G	H		I
	Parameter	Units	State MCL	PHG	State DLR	Range / Average	Treatment Plant Effluent Weymouth Plant	Jensen Plant	Major Sources in Drinking Water
A	Percent State Project Water (a)	%	NA	NA	NA	Range	0-100	60-100	N/A
						Average	74	97	
E	PRIMARY STANDARDS—Mandatory Health-Related								
	CLARITY								
	Combined Filter Effluent Turbidity (b)	NTU	TT	NA	NA	Highest	0.04	0.06	Soil runoff
		%				% < 0.3	100	100	
	MICROBIOLOGICAL								
	Total Coliform Bacteria (d)	%	5.0	MCLG=0	NA	Range	0	0	Naturally present in the environment
						Average	0	0	
	E. coli (e)	NA	TT	MCLG=0	NA	Number of	0	0	Human and animal fecal waste
						Positive Samples	0	0	
	Heterotrophic Plate Count (HPC) Bacteria (f)	CFU/mL	TT	NA	NA	Range	ND-1	ND-1	Naturally present in the environment
						Median	ND	ND	
	Cryptosporidium	oocysts/200 L	TT	MCLG=0	NA	Range	ND	ND	Human and animal fecal waste
						Average	ND	ND	
	Giardia	cysts/200 L	TT	MCLG=0	NA	Range	ND	ND	Human and animal fecal waste
						Average	ND	ND	
	ORGANIC CHEMICALS **Synthetic Organic Compounds (g)**								
	2,4,5 - TP (Silvex)	ppb	50	3	1	Range	ND	ND	Residue of banned herbicide
						Average	ND	ND	
	2,4 - D	ppb	70	20	10	Range	ND	ND	Runoff from herbicide used on row crops; rangeland, lawns, and aquatic
						Average	ND	ND	
	Acrylamide (h)	ppm	TT	MCLG = 0	NA	Range	NA	NA	Water treatment chemical impurities
						Average	NA	NA	
	Alachlor	ppb	2	4	1	Range	ND	ND	Runoff from herbicide used on row crops
						Average	ND	ND	
	Atrazine	ppb	1	0.15	0.5	Range	ND	ND	Runoff from herbicides used on row crops and along railroad and highway right-of-ways
						Average	ND	ND	
	Bentazon	ppb	18	200	2	Range	ND	ND	Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses
						Average	ND	ND	
	Benzo(a)pyrene	ppt	200	7	100	Range	ND	ND	Leaching from linings and coatings of water storage tanks and distribution mains
						Average	ND	ND	
	Carbofuran	ppb	18	0.7	5	Range	ND	ND	Leaching of soil fumigant used on rice, alfalfa, and grape vineyards
						Average	ND	ND	
	Chlordane	ppt	100	30	100	Range	ND	ND	Residue of banned insecticide
						Average	ND	ND	
	Dalapon	ppb	200	790	10	Range	ND	ND	Runoff from herbicide used on right-of-ways, and crops and landscape maintenance
						Average	ND	ND	
	Di(2-ethylhexyl)adipate	ppb	400	200	5	Range	ND	ND	Discharge from chemical factories
						Average	ND	ND	
	Di(2-ethylhexyl)phthalate	ppb	4	12	3	Range	ND	ND	Discharge from rubber and chemical factories; ingredient in pesticides
						Average	ND	ND	
	Dibromochloropropane (DBCP)	ppt	200	1.7	10	Range	ND	ND	Banned nematocide that may still be present in soils due runoff/leaching
						Average	ND	ND	
	Dinoseb	ppb	7	14	2	Range	ND	ND	Runoff from herbicide used on soybeans, vegetables, and fruits
						Average	ND	ND	
	Dioxin (2,3,7,8-TCDD)	ppq	30	0.05	5	Range	ND	ND	Waste incineration emissions; chemical factory discharge
						Average	ND	ND	
	Diquat	ppb	20	6	4	Range	ND	ND	Runoff from herbicide used for terrestrial and aquatic weeds
						Average	ND	ND	
	Endothall	ppb	100	94	45	Range	ND	ND	Runoff from herbicide used for terrestrial and aquatic weeds; defoliant
						Average	ND	ND	
	Endrin	ppb	2	0.3	0.1	Range	ND	ND	Residue of banned insecticide and rodenticide
						Average	ND	ND	
	Epichlorohydrin (h)	ppm	TT	MCLG=0	NA	Range	NA	NA	Water treatment chemical impurities
						Average	NA	NA	
	Ethylene Dibromide (EDB)	ppt	50	10	20	Range	ND	ND	Petroleum refinery discharges; underground gas tank leaks; banned nematocide that maybe still present in soils due to runoff and leaching
						Average	ND	ND	
	Glyphosate	ppb	700	900	25	Range	ND	ND	Runoff from herbicide use
						Average	ND	ND	
	Heptachlor	ppt	10	8	10	Range	ND	ND	Residue of banned insecticide
						Average	ND	ND	
	Heptachlor Epoxide	ppt	10	6	10	Range	ND	ND	Breakdown product of heptachlor
						Average	ND	ND	
	Hexachlorobenzene	ppb	1	0.03	0.5	Range	ND	ND	Discharge from metal refineries and agrichemicals factories; wastewater chlorination reaction byproduct
						Average	ND	ND	
	Hexachlorocyclopentadiene	ppb	50	2	1	Range	ND	ND	Discharge from chemical factories
						Average	ND	ND	
	Lindane	ppt	200	32	200	Range	ND	ND	Runoff/leaching from insecticide used on cattle, lumber, and gardens
						Average	ND	ND	
	Methoxychlor	ppb	30	0.09	10	Range	ND	ND	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock
						Average	ND	ND	

Imported Water From Metropolitan *(cont.)*

B	C	D	F		G	H		I
Parameter	Units	State MCL	PHG	State DLR	Range / Average	Treatment Plant Effluent Weymouth Plant	Jensen Plant	Major Sources in Drinking Water
ORGANIC CHEMICALS **Synthetic Organic Compounds (g)**								
Molinate (Ordram)	ppb	20	1	2	Range	ND	ND	Runoff/leaching from herbicide used on rice
					Average	ND	ND	
Oxamyl (Vydate)	ppb	50	26	20	Range	ND	ND	Runoff/leaching from insecticide uses
					Average	ND	ND	
Pentachlorophenol	ppb	1	0.3	0.2	Range	ND	ND	Discharge from wood preserving factories; insecticidal and herbicidal uses
					Average	ND	ND	
Picloram	ppb	500	166	1	Range	ND	ND	Herbicide runoff
					Average	ND	ND	
Polychlorinated Biphenyls (PCBs)	ppt	500	90	500	Range	ND	ND	Runoff from landfills; discharge of waste chemicals
					Average	ND	ND	
Simazine	ppb	4	4	1	Range	ND	ND	Herbicide runoff
					Average	ND	ND	
Thiobencarb	ppb	70	42	1	Range	ND	ND	Runoff/leaching from herbicide used on rice
					Average	ND	ND	
Toxaphene	ppb	3	0.03	1	Range	ND	ND	Runoff/leaching from insecticide used on cotton and cattle
					Average	ND	ND	
Volatile Organic Compounds								
1, 1, 1 - Trichloroethane	ppb	200	1000	0.5	Range	ND	ND	Metal degreasing site discharge, manufacture of food wrappings
					Average	ND	ND	
1, 1, 2, 2 - Tetracchloroethane	ppb	1	0.1	0.5	Range	ND	ND	Discharge from industrial, agricultural use, and chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers
					Average	ND	ND	
1, 1, 2 - Trichloro - 1, 2, 2 - trifluoroethane (Freon - 113)	ppm	1.2	4	0.01	Range	ND	ND	Discharge from metal degreasing sites and other factories; dry cleaning solvent; refrigerant
					Average	ND	ND	
1, 1, 2 - Trichloroethane	ppb	5	0.3	0.5	Range	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	
1, 1 - Dichloroethane	ppb	5	3	0.5	Range	ND	ND	Extraction and degreasing solvent; fumigant
					Average	ND	ND	
1, 1 - Dichloroethylene	ppb	6	10	0.5	Range	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	
1, 2, 4 - Trichlorobenzene	ppb	5	5	0.5	Range	ND	ND	Discharge from textile-finishing factories
					Average	ND	ND	
1, 2 - Dichlorobenzene	ppb	600	600	0.5	Range	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	
1, 2 - Dichloroethane	ppt	500	400	500	Range	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	
1, 2 - Dichloropropane	ppb	5	0.5	0.5	Range	ND	ND	Industrial chemical factory discharge; primary component of some fumigants
					Average	ND	ND	
1, 3 - Dichloropropene	ppt	500	200	500	Range	ND	ND	Runoff/leaching from nematocide used on croplands
					Average	ND	ND	
1, 4 - Dichlorobenzene	ppb	5	6	0.5	Range	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	
Benzene	ppb	1	0.15	0.5	Range	ND	ND	Plastic factory discharge; gas tanks and landfill leaching
					Average	ND	ND	
Carbon Tetrachloride	ppt	500	100	500	Range	ND	ND	Discharge from chemical plants and other industrial waste
					Average	ND	ND	
cis - 1, 2 - Dichloroethylene	ppb	6	100	0.5	Range	ND	ND	Industrial chemical factory discharge; byproduct of TCE and PCE biodegradation
					Average	ND	ND	
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	ND	ND	Discharge from pharmaceutical and chemical factories; insecticide
					Average	ND	ND	
Ethylbenzene	ppb	300	300	0.5	Range	ND	ND	Petroleum refinery discharge; industrial chemical factories
					Average	ND	ND	
Methyl-*tert*-butyl ether (MTBE)	ppb	13	13	3	Range	ND	ND	Gasoline discharge from watercraft engines
					Average	ND	ND	
Monochlorobenzene	ppb	70	70	0.5	Range	ND	ND	Discharge from industrial and agricultural use, chemical factories, and dry cleaners
					Average	ND	ND	
Styrene	ppb	100	0.5	0.5	Range	ND	ND	Rubber and plastic factories discharge; landfill leaching
					Average	ND	ND	
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range	ND	ND	Discharge from factories, dry cleaners, and auto shops
					Average	ND	ND	
Toluene	ppb	150	150	0.5	Range	ND	ND	Discharge from petroleum and chemical refineries
					Average	ND	ND	
trans - 1, 2 - Dichloroethylene	ppb	10	60	0.5	Range	ND	ND	Industrial chemical factory discharge; byproduct of TCE and PCE biodegradation
					Average	ND	ND	
Trichloroethylene (TCE)	ppb	5	1.7	0.5	Range	ND	ND	Discharge from metal degreasing sites and other factories
					Average	ND	ND	
Trichlorofluoromethane (Freon-11)	ppb	150	1,300	5	Range	ND	ND	Industrial factory discharge; degreasing solvent; propellant and refrigerant
					Average	ND	ND	
Vinyl Chloride	ppt	500	50	500	Range	ND	ND	Leaching from PVC piping: plastic factory discharge; byproduct of TCE and PCE biodegradation
					Average	ND	ND	
Xylenes	ppm	1.750	1.8	0.0005	Range	ND	ND	Discharge from petroleum and chemical refineries; fuel solvent
					Average	ND	ND	

Imported Water From Metropolitan *(cont.)*

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Parameter	Units	State MCL	PHG	State DLR	Range / Average	Treatment Plant Effluent Weymouth Plant	Jensen Plant	Major Sources in Drinking Water
INORGANIC CHEMICALS								
Aluminum	ppb	1,000	600	50	Range	ND-210	ND–120	Residue from water treatment process; natural deposits erosion
					Highest RAA	170	89	
Antimony	ppb	6	1	6	Range	ND	ND	Petroleum refinery discharges; fire retardants; solder; electronics
					Average	ND	ND	
Arsenic	ppb	10	0.004	2	Range	ND	ND-2.4	Natural deposits erosion, glass and electronics production waste
					Average	ND	ND	
Asbestos (i)	MFL	7	7	0.2	Range	ND	ND	Asbestos cement pipes internal corrosion; natural deposits erosion
					Average	ND	ND	
Barium	ppb	1,000	2,000	100	Range	ND	ND	Oil and metal refineries discharge; natural deposits erosion
					Average	ND	ND	
Beryllium	ppb	4	1	1	Range	ND	ND	Discahrge from metal refineries, aerospace, and defense industries
					Average	ND	ND	
Cadmium	ppb	5	0.04	1	Range	ND	ND	Internal corrision of galvanized pipes; discharge from electroplating, industrial factories, and metal refineries; runoff from waste batteries and paints; natural deposits erosion
					Average	ND	ND	
Chromium	ppb	50	MCLG=100	10	Range	ND	ND	Discharge from steel and pulp mills; natural deposits erosion
					Average	ND	ND	
Copper (j)	ppm	AL = 1.3	0.3	0.05	Range	ND	ND	Internal corrosion of household pipes; natural deposits erosion; leaching from wood preservatives
					Average	ND	ND	
Cyanide	ppb	150	150	100	Range	ND	ND	Discharge from steel/metal, plastic, and fertilizer factories
					Average	ND	ND	
Fluoride ‘(k)	ppm	2.0	1	0.1	Range	0.5-0.9	0.6-0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	0.7	0.7	
Lead (j)	ppb	AL = 15	0.2	5	Range	ND	ND	Internal corrision of household water plumbing systems; industrial manufacturers’ discharge; erosion of natural deposits
					Average	ND	ND	
Mercury	ppb	2	1.2	1	Range	ND	ND	Erosion of natural deposits; factory discharge; landfill runoff
					Average	ND	ND	
Nickel	ppb	100	12	10	Range	ND	ND	Erosion of natural deposits; discharge from metal factories
					Average	ND	ND	
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range	ND	0.6	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
					Average	ND		
Nitrite (as Nitrogen)	ppm	1	1	0.4	Range	ND	ND	Runoff and leaching from fertilizer use; leaching from septic tank and sewage; natural deposits erosion
					Average	ND	ND	
Perchlorate (l)	ppb	6	1	4	Range	ND	ND	Industrial waste discharge
					Average	ND	ND	
Selenium	ppb	50	30	5	Range	ND	ND	Refineries, mines, and chemical waste discharge; runoff from livestock lots
					Average	ND	ND	
Thallium	ppb	2	0.1	1	Range	ND	ND	Leaching from ore processing; discharge from electronics, glass,and pharmaceutical factories
					Average	ND	ND	
RADIOLOGICALS								
Gross Alpha Particle Activity	pCi/L	15	MCLG=0	3	Range	ND	ND–3	Erosion of natural deposits
					Average	ND	ND	
Gross Beta Particle Activity	pCi/L	50	MCLG=0	4	Range	ND	ND	Decay of natural and man-made deposits
					Average	ND	ND	
Radium-226	pCi/L	NA	0.05	1	Range	ND	ND	Erosion of natural deposits
					Average	ND	ND	
Radium-228	pCi/L	NA	0.019	1	Range	ND	ND	Erosion of natural deposits
					Average	ND	ND	
Combined Radium-226 + 228	pCi/L	5	MCLG=0	NA	Range	ND	ND	Erosion of natural deposits
					Average	ND	ND	
Strontium-90	pCi/L	8	0.35	2	Range	ND	ND	Decay of natural and man-made deposits
					Average	ND	ND	
Tritium	pCi/L	20,000	400	1,000	Range	ND	ND	Decay of natural and man-made deposits
					Average	ND	ND	
Uranium	pCi/L	20	0.43	1	Range	ND	ND-1	Erosion of natural deposits
					Average	ND	ND	
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS								
Total Trihalomethanes (TTHM) - Plant Effluent	ppb	80	NA	1.0	Range	14-79	14-77	Byproduct of drinking water chlorination
					Average	35	22	
Haloacetic Acids (five) (HAA5) - Plant Effluent	ppb	60	NA	1.0	Range	6.4-22	4.7-6.4	Byproduct of drinking water chlorination
					Average	13	5.7	
Total Trihalomethanes(TTHM)-Plant Core Locations and Distribution System (m)	ppb	80	NA	1.0	Range	21-43	19-41	Byproduct of drinking water chlorination
					Highest LRAA	44	28	
Haloacetic Acids (five) (HAA5)- Plant Core Locations and Distribution System	ppb	60	NA	1.0	Range	6.4-26	5.6-7.9	Byproduct of drinking water chlorination
					Highest LRAA	17	6.8	
Total Chlorine Residual	ppm	MRDL=4.0	MRDLG=4.0	NA	Range			Drinking water disinfectant added for treatment
					Highest RAA			
Bromate (n)	ppb	10	0.1	1.0	Range	2.6-5.0	3.3-8.9	Byproduct of drinking water ozonation
					Highest RAA	NA	7.4	
Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range	2.0-2.9	2.3-3.1	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
					Highest RAA	2.5	2.5	

Imported Water From Metropolitan *(cont.)*

B	C	D	F		G	H		I
Parameter	Units	State MCL	PHG	State DLR	Range / Average	Treatment Plant Effluent Weymouth Plant	Jensen Plant	Major Sources in Drinking Water
E SECONDARY STANDARDS Aesthetic Standards	Units	State MCL	PHG	State DLR	Range / Average	Treatment Plant Effluent Weymouth Plant	Jensen Plant	Major Sources in Drinking Water
Aluminum (o)	ppb	200	600	50	Range	ND-210	ND-120	Residue from water treatment process; natural deposits erosion
					Highest RAA	170	89	
Chloride	ppm	500	NA	NA	Range	29-66	74-94	Runoff/leaching from natural deposits; seawater influence
					Average	48	84	
Color	Color Units	15	NA	NA	Range	2	1-2	Naturally-occurring organic materials
					Average		2	
Copper (j)	ppm	1.0	0.3	0.05	Range	ND	ND	Internal corrosion of household pipes; natural deposits erosion; wood preservatives leaching
					Average	ND	ND	
Foaming Agents- Methylene Blue Active Substance (MBAS)	ppb	500	NA	NA	Range	ND	ND	Municipal and industrial waste discharges
					Average	ND	ND	
Iron	ppb	300	NA	100	Range	ND	ND	Leaching from natural deposits; Industrial wastes
					Average	ND	ND	
Manganese	ppb	50	NL=500	20	Range	ND	ND	Leaching from natural deposits
					Average	ND	ND	
MTBE	ppb	5	13	3	Range	ND	ND	Gasoline discahrge from watercraft engines
					Average	ND	ND	
Odor Threshold (p)	TON	3	NA	1	Range	3	2	Naturally-occurring organic materials
					Average			
Silver	ppb	100	NA	10	Range	ND	ND	Industrial discharges
					Average	ND	ND	
Specific Conductance	µS/cm	1,600	NA	NA	Range	299-621	557-626	Substances that form ions in water; seawater influence
					Average	460	592	
Sulfate	ppm	500	NA	0.5	Range	46-123	61-78	Runoff/leaching from natural deposits; industrial wastes
					Average	84	70	
Thiobencarb	ppb	1	42	1	Range	ND	ND	Runoff/leaching from rice herbicide
					Average	ND	ND	
Total Dissolved Solids (TDS)	ppm	1,000	NA	NA	Range	179-364	316-373	Runoff/leaching from natural deposits
					Average	272	344	
Turbidity (b)	NTU	5	NA	0.1	Range	ND	ND	Soil runoff
					Average	ND	ND	
Zinc	ppm	5.0	NA	0.05	Range	ND	ND	Runoff/leaching from natural deposits; Industrial wastes
					Average	ND	ND	
OTHER PARAMETERS								
General Minerals								
Alkalinity (as $CaCO_3$)	ppm	NA	NA	NA	Range	43-71	85-86	Runoff/leaching from natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
					Average	57	86	
Calcium	ppm	NA	NA	NA	Range	14-35	27	Runoff/leaching from natural deposits
					Average	24		
Hardness (as CaCO3)	ppm	NA	NA	NA	Range	58-152	118-120	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
					Average	105	119	
Magnesium	ppm	NA	NA	NA	Range	6.2-16	12-14	Runoff/leaching from natural deposits
					Average	11	13	
Potassium	ppm	NA	NA	NA	Range	2.2-3.2	3.1-3.2	Salt present in the water; natrurally-occurring
					Average	2.7	3.2	
Sodium	ppm	NA	NA	NA	Range	35-64	58-80	Salt present in the water; natrurally-occurring
					Average	50	69	
Unregulated Contaminants								
Boron	ppb	NL = 1,000	NA	100	Range	110	190	Runoff/leaching from natural deposits; industrial waste
					Average			
Chromium VI (q)	ppb	NA	0.02	1	Range	ND	ND	Runoff/leaching from natural deposits; discharge from industrial waste
					Average	ND	ND	
Dichlorodifluoromethane (Freon-12)	ppb	NL = 1,000	NA	0.5	Range	ND	ND	Industrial waste discharge
					Average	ND	ND	
Ethyl-*tert*-butyl ether (ETBE)	ppb	NA	NA	3	Range	ND	ND	Used as gasoline additive
					Average	ND	ND	
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	2	Range	ND	ND-3.2	Byproduct of drinking water chloramination; industrial waste
tert-Amyl-methyl ether (TAME)	ppb	NA	NA	3	Range	ND	ND	Used as gasoline additive
					Average	ND	ND	
tert-Butyl alcohol (TBA)	ppb	NL =12	NA	2	Range	ND	ND	MTBE breakdown product; used as gasoline additive
					Average	ND	ND	
Vanadium	ppb	NL = 50	NA	3	Range	ND	4.0	Naturally-occurring; industrial waste discharge
					Average	ND		
Miscellaneous								
Chlorate	ppb	NL = 800	NA	20	Range	34	28	Byproduct of drinking water chlorination; industrial processes
					Average			
Corrosivity (r) (as Aggressiveness Index)	AI	NA	NA	NA	Range	11.9-12.1	12.0-12.1	Elemental balance in water; affected by temperature, other factors
					Average	12.0	12.0	
Corrosivity (s) (as Saturation Index)	SI	NA	NA	NA	Range	0.18-0.35	0.15-0.26	Elemental balance in water; affected by temperature, other factors
					Average	0.26	0.20	
pH	pH Units	NA	NA	NA	Range	8.4-8.7	8.2-8.3	NA
					Average	8.5	8.3	
Radon	pCi/L	NA	NA	NA	Range	ND	ND	Gas produced by the decay of natural-occurring uranium in soil and water
					Average	ND	ND	

Beverly Hills Distribution System

	B			C	D	F	G	H	I
	Parameters	**Sample Date**	**No. of Months in Violation**	**Units**	**State MCL (MRDL)**	**PHG (MCLG) (MRDL)**	**Range / Average**	**Level Detected**	**Typical Source of Contaminant**
	Total Coliform Bacteria (ad)	2017	0	%	5.0 (ad,b)	NA	Range Average	0 0	Naturally present in the environment
	Turbidity (Weekly) (System) (a)	2017	0	NTU	5	NA	Range Average	0-1.19 0.01	Soil runoff
	Color	2017	0	Units	15	NA	Range Average	0 - 9 0.72	Naturally occurring organic material
	Chlorine Residual (Weekly) (System) RAA	2017	0	ppm	4	4	Range Highest RAA	1.33-1.92 1.78	Disinfectant added for treatment
	Fluoride (Weekly) (System)	2017	0	ppm	2	1	Control Range Optimal Level Range Average	0.6 -1.2 0.7 0.60-0.83 0.72	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
	Total Trihalomethanes (TTHM) (ab,l)	2017	0	ppb	80	NA	Range Highest RAA	18.4-49.6 30.23	Byproducts of drinking water disinfection
	Haloacetic Acids (five) (HAA5) (ab,m)	2017	0	ppb	60	NA	Range Highest RAA	6.44-30.70 13.17	Byproducts of drinking water disinfection
	Nitrite as N	2017	0	ppm	1	1	Range Average	0-0.095 0.0094	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposit
	Odor	2017	0	TON	3	NA	Range Average	ND 0	Naturally ocurring organic material

Reverse Osmosis Treatment Plant

	B			C	D	F		G	H	I
	Parameter	**Sample Date**	**No. of Months in Violation**	**Units**	**State or Federal MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**State DLR**	**Range / Average**	**Level Detected****	**Typical Source of Contaminant**
E	**PRIMARY STANDARDS--Mandatory Health-Related Standards**									
	MICROBIOLOGICAL									
	Total Coliform Bacteria (ad)	2017	0	%	5.0 (ad,b)	(0)	NA	Range Average	0% 0%	Naturally present in the environment
	E. coli (ad)	2017	0			(0)	NA	Range Average	0% 0%	Human and animal fecal waste
	Heterotrophic Plate Count (HPC) (ae)	2017	0	CFU/mL	TT	NA	NA	Range Average	TT TT	Naturally present in the environment
	INORGANIC CHEMICALS									
	Fluoride Treated-Related	2017	0	ppm	2	1	0.1	Range Average	0 0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
	Arsenic*	2017	0	ppb	10	0.004	2	Range Average	0 0	Erosion of natural deposits; runoff from orchards; glass and electronics production waste
E	**SECONDARY STANDARDS--Aesthetic Standards**									
	Chloride	2017	0	ppm	500	NA	NA	Range Average	0 0	Runoff/leaching from natural deposits; seawater influence
	Manganese	2017	0	ppb	50	NL = 500	20	Range Average	0 0	Leaching from natural deposits
	Sulfate	2017	0	ppm	500	NA	0.5	Range Average	0 0	Runoff/leaching from natural deposits; industrial waste
	Total Dissolved Solids (TDS)	2017	0	ppm	1000	NA	NA	Range Average	0 0	Runoff/leaching from natural deposits

*Arsenic compliance is measured in the water treatment plant effluent. Results show that arsenic is reduced to meet safe and compliance standards.
**WTP was offline for Capital Improvement Project (CIP) for the entire year of 2017.

Lead and Copper Action Levels at Residential Taps

	B			C		F		H		I
A	**Parameter**	**Number of Samples collected**	**Sample Date**	**Units**	**Action Level (AL)**	**Health Goal**	**90th Percentile Value**	**Sites Exceeding AL No. of Sites**	**AL Violations?**	**Typical Source of Contaminant**
	Copper (af)	32	2017	ppb	1300	300	156	0	NO	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	Lead (af)	32	2017	ppb	15	0.2	4.54	0	NO	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; errosion of natural deposits

In 2017, 32 residences were tested for lead and copper at-the-tap. Lead and copper were not detected in any of the samples. A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. In 2017, no school submitted request to be sampled for lead.

Notes

(a) The Jensen Treatment Plant treated Los Angeles Aqueduct water during the months of March and June 2017.

(b) As a Primary Standard, the turbidity levels of the filtered water were less than or equal to 0.3 NTU in 95% of the online measurements taken each month and did not exceed 1 NTU for more than one hour. Turbidity, a measure of the cloudiness of the water, is an indicator of treatment performance. The turbidity levels for grab samples at these locations were below the state DLR and were in compliance with the Secondary Standard.

(c) Legionella and virus monitoring is not required. However, under the State Surface Water Treatment Rule, if Giardia cysts are removed/inactivated by treatment techniques, Legionella and viruses will be controlled. No Giardia cysts were detected during the monthly pathogen monitoring in the plant effluent.

(d) State Total coliform Rule (TCR)- No more than 5.0% total coliform-positive samples in a month: Compliance is based on the monthly combined distribution system sampling from all of the treatment plants. Six total coliform-positive samples were found out of the 8,971 samples analyzed in 2017. The MCL was not violated. Federal Revised Total Coliform Rule (rTCR) - More than 5.0% total coliform-positive samples in a month triggers Level 1 assessments. No Level 1 assessments, or violations occured.

(e) State Acute TCR (E. coli) MCL - No samples were E. coli-positive and the MCL was not violated. Federal rTCR E. coli MCL and Level 2 TT assessments - No samples were E. coli - positive. No MCL violations and no Level 2 assessments occurred.

(f) All distribution system samples had detectable total chlorine residuals and no HPC was required. However, plant effluents HPC were analyzed to ensure chlorine disinfection. HPC reporting level is 1 CFU/mL. Values are based on monthly median per State guidelines and recommendations.

(g) Data are from samples collected in 2015. Metropolitans required triennial monitoring (2017 - 2019) will be performed in 2018.

(h) Metropolitan was in compliance with the States Treatment Technique Requirements regarding the use of acrylamide for water treatment process. Metropolitan does not use water treatment compounds containing epichlorohydrin.

(i) Data are from 2011 and reported once every nine-year compliance cycle until the next samples are collected.

(j) As a wholesaler, Metropolitan has no retail customers and is not required to collect samples at the consumers' tap under the Lead and Copper Rule. Results are based from annual compliance monitoring.

(k) Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.

(l) Metropolitan's perchlorate reporting level is 0.1 ppb, which is below the state DLR of 4 ppb. Data above Metropolitan's reporting level but below the DLR are reported as ND in this report. These data are available upon request.

(m) No MCL exceedance occurred in the Distribution System. Compliance with State and Federal TTHM MCL is based on LRAA.

(n) No MCL exceedance occurred in the Skinner Treatment Plant Effluent. Compliance with State and Federal Bromate MCL is based on RAA. Weymouth Treatment Plant's RAA will be calculated once four quarterly data are available.

(o) No MCL exceedance occurred in the Weymouth Treatment Plant Effluent. Compliance with State Aluminum MCL is based on RAA.

(p) No Odor Threshold MCL exceedance occurred in Mills, Skinner, and Weymouth Treatment Plant Effluents because no values were higher than the MCL of 3. The MCL was not violated.

(q) Previous MCL of 10 ppb was withdrawn on 9/11/2017. Metropolitan's chromium vl reporting level is 0.03 ppb, which is below the state DLR of 1 ppb. Data above Metropolitan's reporting level but below the DLR are reported as ND in this report. These data are available upon request.

(r) AI (greater than or equal to) 12.0 = Non-aggressive water.

AI (10.0 - 11.9) = Moderately aggressive water.

AI (less than or equal to)10.0 = Highly aggressive water.

Reference: ANSI/AWWA Standard C400-93 (R98).

(s) Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes.

Negative SI index = corrosive; tendency to dissolve calcium carbonate.

Water is Life: Do Your Part To Conserve It

In his "State of the State" address earlier this year, Governor Jerry Brown noted that water conditions in California are fundamentally good, but not something we can take for granted. Water is our most precious resource and protecting our water supply for generations to come is everyone's responsibility. Wise water use will become even more important as climate change brings hotter temperatures, less snowpack and likely droughts in the future.

Water Efficiency, A Beverly Hills Way of Life

As a community, we can all come together and work towards reducing our water demand. The City is doing its part to conserve water by restricting outdoor watering of street medians, utilizing recirculated water for public fountains and practicing efficient water use throughout the City's offices and public venues.

On the next page are easy ways you can save water inside your home and outdoors to help us reach our citywide goal.

Landscape Water Evaluations

A typical single family home uses two-thirds of their total water consumption outdoors to water the landscape. In an effort to help our customers use water more efficiently, the City offers free landscape water evaluations. The evaluation focuses on the most efficient way to water your landscape. In addition, the pros and cons of drip irrigation versus overhead sprinklers will be discussed. Information on beautiful water wise plants will be available for those considering upgrading to a California Friendly landscape. To sign up, please call 310.285.2467 or email: AskPW@beverlyhills.org.

Courtesy of The California Department of Water Resources

While the Emergency Drought is over, we encourage all residents to continue using water efficiently, which is why "Stage C" is still in place:

1. From October to May, outdoor watering is restricted to two days per week and only between the hours of 5 pm and 9 am.
   - North of Santa Monica – Monday & Friday.
   - South of Santa Monica – Tuesday & Saturday.
2. From June to September, outdoor watering is restricted to three days per week and only between the hours of 5 pm and 9 am.
   - North of Santa Monica – Monday, Wednesday & Friday
   - South of Santa Monica – Tuesday, Thursday & Saturday
3. No outdoor watering after measurable rainfall.
4. No excessive water runoff due to sprinkler overspray or malfunction.
5. Repair leaks immediately.

STAGE C
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Water is Life:
Do Your Part To Conserve It

Indoors:

- Take a five minute (or less) shower.
- Do not run water when brushing your teeth, shaving and washing dishes by hand.
- Wash only full loads of laundry and dishes.
- Install high-efficiency toilets, clothes washers, and dishwashers. Be sure to check out rebates for eligible appliances by visiting www.socalwatersmart.com.
- Install faucet aerators on sink faucets.

Outdoors:

- Use a broom, not a hose, to clean driveways and sidewalks.
- Give your sprinkler system a check-up by inspecting sprinkler heads for clogs or damage. Also check your sprinklers for overspray to minimize water waste.
- Choose a water-efficient irrigation system such as drip irrigation for your trees, shrubs and flowers.
- Install a weather-based irrigation controller (WBIC), which will automatically adjust the watering schedule with the weather.
- Use at least a 3-4" layer of mulch around trees and plants to retain moisture and keep the soil cool.
- Consider replacing grass lawns with water-wise landscape areas using drought tolerant and native plants that require less water.
- Use a pool cover to reduce evaporation. You'll save money on heating bills and the cost of chemicals too.
- Plug the overflow line when the pool is in use and always when adding water.

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 details on the rebates, visit www.socalwatersmart.com.

For more water-saving tips and resources, visit www.epa.gov/watersense/watering-tips and www.BHSaves.org. You can also contact Public Works Customer Service at 310.285.2467 or via email at AskPW@beverlyhills.org.

Courtesy of The California Department of Water Resources

Water is Life: Do Your Part To Conserve It

Tracking Usage. Discovering Leaks.

Did you know that one leaky toilet can waste up to 200 gallons of water an hour? And, a broken sprinkler pipe can waste even more. 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.

The City of Beverly Hills has taken a proactive step to help our customers detect continuous water flow issues soon after they start with an online program called Water Tracker. Proven to save our customers water, time and money, this free City program displays daily water use and will notify you of abnormally high daily usage and/or continuous water flow issues.

Signing up for the Water Tracker program is easy:

1. Visit https://water.beverlyhills.org and click on "Sign Up Here." Enter your email address and hit "submit." You will receive a confirmation email with a link to activate your account.
2. Sign into Water Tracker using your login email address and newly created password. Enter your 6-digit customer number on your water bill to link up your account. Note: If your customer number is less than 6 digits, add "0" to the beginning of your customer number.
3. Re-enter your login and password to finish setting up your account. Then, click "My Water Use" to start exploring water usage statics by year, month, week, day or hour (on left side of screen). You can also view your water usage summary per billing cycle on the tab labeled "Consumption Summary."

One of the most valuable features of this program are the automated alerts of potential leaks and excessive water use. You can set up your notifications under "Account Settings," where you will select your preferred options (frequency, email vs. text notifications, etc.) Under "Water Settings," you can set your "usage budget" and other parameters such as "Continuous Flow Threshold," which should be set at "0" to be notified of potential leaks.

In addition to this valuable tool, a simple visual inspection around your home is an easy way to spot leaks. Taking 10 minutes to check your home for leaks today could save hundreds to thousands of gallons of water.

Faucets, showerheads and bathtubs.

Look for dripping faucets and showerheads. Leaky faucets and showerheads are often caused by worn-out washers. Fixing worn washers in a faucet with a slow steady drip saves 350 gallons per month, and 2,000 gallons a month if the leak is a small stream.

Check for moisture around sinks.

Check under and around sinks for wet spots, a musty smell or bowed cabinetry.

Toilets.

An easy way to test for leaks is to put food coloring in the tank. Don't flush. If the colored water appears in the bowl within 15 minutes, there is a leak. If you have a leak, check

- Overflow Tube: Water should be a half-inch below the top of the tube.
- Lift Chain: It should not catch on anything.
- Flapper: Ensure it is seating properly.
- Flush Handle: Make sure it functions properly.

Water Supply Lines, Valves and Corrosion.

Water-using devices can leak and cause damage to walls and floors, potentially creating an environment for mold or mildew. Look for continuous leaks in supply lines, fittings and valves. Check your clothes washer hoses regularly for cracks that could result in leaks. Also, look for leaks caused by corrosion, such as a rusty water heater bottom. Leaks may be intermittent, meaning they only occur when a water-using device is in operation.

Sprinkler System.

Make sure sprinkler heads and irrigation pipes are securely connected. If you notice pooling of water in your landscaping, it may be a break or leak in your system.

Your Dollars At Work

We are proud of our community and we put your dollars to work in the most efficient way to maintain our great city.

Learn more about what the City is doing to maintain and enhance your community infrastructure by reading our bi-monthly newsletter *The Backbone.* You can sign up to receive an email notification of the latest newsletter by visiting www.beverlyhills.org/enotice.

One of our top priorities as your Public Works Department is to ensure high quality water, a more resilient water system, and long-term sustainability for all Beverly Hills residents and businesses.

Securing new water sources, improving our infrastructure and implementing new services comes at a cost. However, we continually work to better leverage City resources, improve efficiencies, and reduce overall construction costs and time to maximize your dollars.

Our capital improvement projects exemplify our stewardship of Beverly Hills' infrastructure. Through these projects, we are modernizing and improving the reliability of our water system while pursuing new local groundwater sources. Leading these projects is a proposal to develop 1,700 acre-feet per year (AFY) of new potable water supply in the La Brea Subarea of the Central Groundwater Basin, located 1-2 miles south of the City near I-10 and La Cienega Boulevard. The major project components include:

- Construct 3 new groundwater wells.
- Treat raw groundwater by expanding the existing Foothill Water Treat Plant.
- Transport groundwater to the treatment plant through a conveyance system which includes the rehabilitation of an existing pipeline and the construction of a new pipeline from the intersection of La Cienega Blvd. and Olympic Blvd. to the Foothill Water Treatment Plant.

Other projects, and their status include:

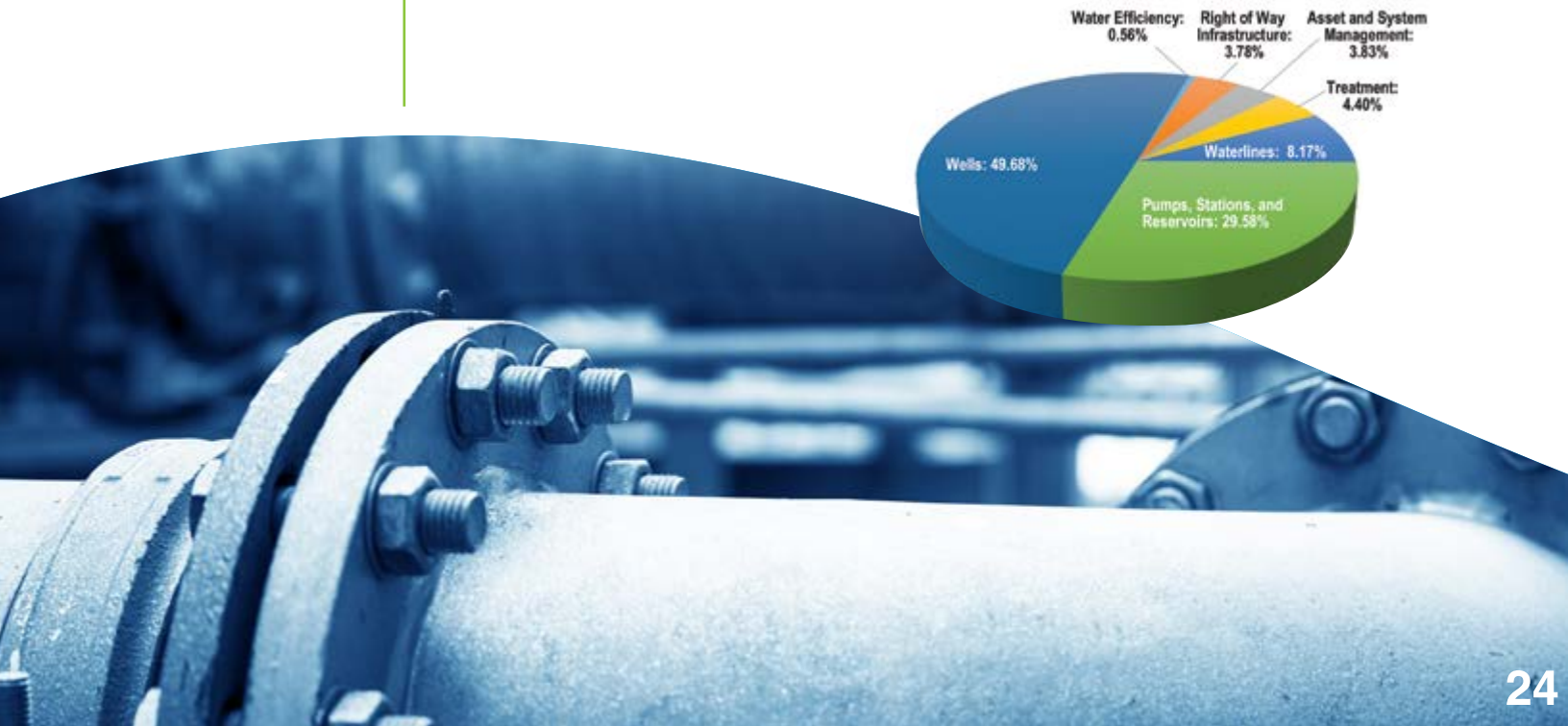
Pump Station No. 8 Rehabilitation Project to replace aging mechanical equipment and the associated piping at the existing pump station adjacent to Reservoir No. 7 (in progress).

Hollywood Wells Rehabilitation Project to rehabilitate the City's existing four wells. This will extend the life wells and provide reliable water supply to the city (two wells complete, two in progress).

Maple Wells Project to construct two municipal supply wells at the Maple Yard (342 Foothill Road) and a pipeline to convey well water to our water treatment plant and distribution system (complete).

"Water quality and availability is perhaps one of the most important resources that directly impacts quality of life for our community," explains Assistant Director Borboa, "which is why these projects are so important. Dollars spent today will ensure we are able to meet our water needs far into the future."

Our goal is to be innovative, proactive, and efficient. But Public Works can't do it alone. We encourage you to participate by letting us know what we can do better. Together we can ensure a sustainable future for all Beverly Hills water customers.



This report contains important information about your drinking water. Please share this information or ask someone to translate it.

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را به زبان انگلیسی بخوانید لطفاً از کسی که میتواند یاری بگیرید تا مطالب را برای شما به فارسی ترجمه کند.

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

Get Involved

You may also address your concerns at scheduled Public Works Commission 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 contact the City Clerk at 310.285.2400.