## WATER QUALITY EXCELLENCE

COVERING THE REPORTING PERIOD JANUARY - DECEMBER 2024



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Metropolitan's water quality is equal to or better than what is required to safeguard public health.

# 2025 Annual Drinking Water Quality Report



Metropolitan is a regional wholesaler that provides water for 26 member public agencies to deliver—either directly or through their member agencies—to nearly 19 million people living in Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties. Metropolitan imports water from the Colorado River and Northern California to supplement local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other resource-management programs. Protecting our source waters is the first line of defense in safeguarding drinking water quality for the public.

Colorado River water is conveyed via Metropolitan's 242-mile Colorado River Aqueduct from Lake Havasu on the California-Arizona border, to Lake Mathews near Riverside. Water supplies from Northern California are released from Lake Oroville and drawn from the confluence of the Sacramento and San Joaquin rivers in the California Delta. These supplies are transported in the State Water Project's 444-mile California Aqueduct.



# A Letter from the Water Quality Section Manager

The Metropolitan Water District of Southern California was formed by the state legislature 97 years ago to build and operate the Colorado River Aqueduct – declared one of seven modern civil engineering wonders in the United States in 1995. Constructing a 242-mile aqueduct across a desert landscape to a growing Southern California, with five pumping plants, tunnels, siphons, and canals was just the first step in what would become the mission of Metropolitan – to deliver adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. Once the water arrives in the Southland, it is the responsibility of treatment plant operators, engineers, technicians, and water quality professionals to treat and monitor the water supply for nearly 19 million residents.

To do this, we employ a multi-barrier approach to safeguard the public's drinking water, as prescribed in the federal Safe Drinking Water Act. We rely on many different types of analytical equipment and use about 150 analytical methods to test water supplies. Samples are collected from throughout our water system, with the nearest location about one quarter of a mile from the main Water Quality Laboratory in La Verne and the farthest location 250 miles away. There are 120 regulated contaminants that require monitoring and about 280 non-regulated constituents we also measure. Over 250,000 water quality test results are produced every year by Metropolitan's chemists, biologists, microbiologists, technologists, engineers, and water sampling technicians.

You can read our testing results in the detailed tables that begin on page 18. Additionally, a Reader's Guide helps explain the data. Many of the topics covered in the report are updated regularly on Metropolitan's website at mwdh20.com.

On behalf of the many dedicated employees who protect, treat, deliver, and test water throughout our 5,200-square-mile service area, I am proud to present this Annual Drinking Water Quality Report, which summarizes water quality monitoring data for calendar year 2024.

Paul Rochelle Water Quality Section Manager

Oversight of water quality at the source is the first step in multi-barrier protection. Photo courtesy CA Department of Water Resources.

# A multi-barrier approach to protect water quality & public health

Metropolitan has monitored water quality since first imports from the Colorado River Aqueduct reached Southern California in 1941. Since 1974, the year that the Safe Drinking Water Act was passed and the Water Quality Branch at Metropolitan was formed, compliance monitoring has become formalized with enforceable regulations.

Today, Metropolitan's highly skilled staff, many of whom are leaders in their fields, goes beyond the minimum requirements and conduct investigations to develop and optimize advanced detection methods and further our understanding of potential contaminants. Metropolitan has a long history of applied research and engagement in preparing for emerging water quality challenges and new regulations.

The multi-barrier approach to safe drinking water involves protecting water quality and implementing control measures throughout the water supply journey of several hundred miles to minimize the risk of contamination. Step one in the multi-barrier approach is source water protection, which involves monitoring source water quality, and understanding watersheds and sources of contamination. Metropolitan advocates at local, state, and national levels to remove or limit potential sources of contamination and implement protective measures. The next step is treating water to remove or inactivate potential contaminants. Metropolitan operates five water treatment plants, which together can disinfect more than 2 billion gallons of water daily using a five-step treatment process that includes a combination of ozone disinfection, coagulation, sedimentation, flocculation, and filtration. The treatment plants also add chlorine to provide disinfection redundancy when needed. The third step in the multibarrier approach to protecting public health is implementing measures to prevent water quality deterioration in the distribution system after water leaves the treatment plants. Metropolitan ensures distribution system integrity through a regular program of maintenance and inspection and uses chloramine to maintain a stable disinfectant residual in delivered water.

The final step is routine testing of treated water to monitor the effectiveness of treatment and distribution processes. Samples are collected throughout Metropolitan's vast distribution system and transported to the water quality laboratory for analysis. The results of this monitoring and analysis are provided on pages 18-21 of this report.

#### water·shed

Refers to land that channels water such as rainfall and snowfall into a body of water like a lake, stream or bay and can be impacted by the environment that contains wildlife, businesses, farming and other land uses.



## Multi-barrier approach

# source water protection

Step one in the multi-barrier approach is source water protection, which involves monitoring source water quality, and understanding watersheds and sources of contamination.

### treating water

The next step is treating water by disinfection, coagulation, sedimentation, flocculation, and filtration to remove potential contaminants.

### distribution system

The third step is implementing measures to prevent water quality deterioration in the distribution system after water leaves the treatment plant.

### routine testing

The final step is routine testing of treated water to monitor the effectiveness of treatment and distribution processes.

# Protecting water quality at the source

Source water protection is an important issue for all of California. Protecting water quality at the source means protecting the area where water originates from contaminants – this is often hundreds of miles away from where the water is used. Metropolitan's source waters – the Colorado River and State Water Project – each have different water quality challenges. Both are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fire impacts, and other factors that can affect water quality.

Treatment to remove contaminants can be more expensive and more challenging than measures to protect source waters, which is why Metropolitan and other water agencies invest resources to support improved watershed protection programs.

Source waters are vulnerable to weather extremes caused by climate change. Heavy rainfall after prolonged dry years can introduce contaminants from burn areas, wildlife, and human activities within the watershed. Metropolitan's water treatment operations are modified and adapted to ensure continued compliance with drinking water regulations and water quality goals under changing source water conditions.

Public water systems are required to submit a comprehensive sanitary survey of their watersheds to the State Water Resources Control Board's Division of Drinking Water every five years. These sanitary surveys examine possible sources of contamination and recommend actions to protect source waters. The most recent surveys for Metropolitan's source waters are the Colorado River Watershed Sanitary Survey 2022 Update and the California State Water Project Watershed Sanitary Survey 2021 Update. The next updates for the Colorado River and State Water Project watershed sanitary surveys are due in 2026 and 2027, respectively. To increase public awareness on the importance of protecting water quality in lakes and rivers, National Source Water Protection Week is recognized every year-September 28 to October 4 in 2025. For more information visit



www.awwa.org/ communications-andoutreach/sourcewater-protection-week/



## Drinking water and your <mark>health</mark>



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.

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 Safe Drinking Water Hotline 800-426-4791 or by visiting the USEPA's website at epa.gov/ground-waterand-drinking-water.

Being proactive and preparing for future challenges is part of a multi-barrier approach. Certain contaminants emerge as areas of concern as science and technology advance. For example, since 2013, Metropolitan has been voluntarily monitoring for a family of chemicals known as per- and polyfluoroalkyl substances (PFAS), including the two most common PFAS - perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). For calendar year 2024, no PFAS were found in Metropolitan's source or treated water above the state detection limit for the purpose of reporting. Metropolitan also is concerned about microplastics in the environment and is tracking research to better understand potential health risks and whether existing water treatment processes are effective in removing microplastics from drinking water supplies. Metropolitan is developing in-house capabilities to analyze water samples for microplastics and will begin voluntary monitoring once standard protocols for sample collection, sample preparation, and analysis methods are finalized and validated

#### **PFAS**

A family of chemicals known as perand polyfluoroalkyl substances, including the two most common PFAS – perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).



U.S. Environmental Protection Agency's Safe Drinking Water Hotline 800-426-4791

# Health advisory for people with weakened immune systems

Although Metropolitan treats water to meet and surpass drinking water standards, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, including 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 individuals should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants can be found by calling the USEPA Safe Drinking Water Hotline, 800-426-4791 or online at:



epa.gov/ground-water-and-drinking-water



cdc.gov/healthywater/drinking/ public/water\_diseases.html



# Contaminants that may be present in <mark>drinking water</mark>

Water agencies are required to use the following language to discuss the source of contaminants that may reasonably be expected to be found in drinking water, including tap water and bottled water.

To ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board, Division of Drinking Water, prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. California law 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's website at



cdph.ca.gov/Programs/CEHDFDCS/Pages/ FDBProgramsFoodSafetyProgram/Water.aspx

## Contaminants that may be present in sources of drinking water include:

**Microbial contaminants**, such as viruses and bacteria, which may come from wastewater 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 runoff, agricultural applications and septic systems

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





## Metropolitan plans for future needs

Metropolitan partnered with the Los Angeles County Sanitation Districts to test removal of chemical contaminants and pathogens at the Pure Water Southern California demonstration facility at the Grace F. Napolitano Innovation Center. We test and evaluate the treatment process to turn wastewater into highly purified water to ultimately replenish the region's local water supply. The multi-barrier approach to ensuring high quality water is also applied to water reuse. Redundant treatment processes remove pathogens and chemical contaminants to ensure the quality of the highly purified water. And we use the same kinds of methods and equipment to test the reuse treatment processes as we use do test the water produced by our drinking water treatment plants.

#### Learn more about **Pure Water Southern California**



At full scale, Pure Water **Southern California** will have the potential to produce up to 150 million gallons of purified water daily.

**Grace F. Napolitano** Southern California **Innovation Center** 



## Metropolitan's water quality lab celebrates 40 years

# Named in honor of Dr. Michael J. McGuire

Dr. Michael J. McGuire began his career at Metropolitan as a water quality engineer in 1979 and retired in 1992 as an assistant general manager after serving as Director of Water Quality for four years. He was in many ways the heart and mind of water quality and he helped to establish Metropolitan as a world leader in ensuring water quality and the protection of public health. He elevated the importance of water quality and brought commitments to regulatory compliance and research, as well as recruitment of a diverse community of top engineers, scientists, and technicians for the water quality branch. During his tenure, Metropolitan pioneered a method to assess the taste and odor of drinking water, he supported research that improved

the quality of treated water and informed national drinking water regulations, and he initiated the move to ozone as Metropolitan's primary disinfectant.

Dr. McGuire advocated for constructing a dedicated water quality laboratory, a building that celebrates its 40-year anniversary in 2025. On February 20, 2025 the laboratory was dedicated in Dr. McGuire's honor in recognition of his influence in establishing Metropolitan as a global leader in water quality. His focus on research and collaboration inspired discussion and creation of new regulations and improved drinking water treatment methods across the industry.



Dr. McGuire's colleagues, friends and family joined to recognize his enduring contribution to the field of water quality.





Metropolitan's service area and distribution system is expansive. Our monitoring is guided by science as well as human senses. More than 40 years ago, Metropolitan introduced the idea of Flavor Profile Analysis for water, under Dr. McGuire's leadership. The FPA method evaluates the odor and flavor of our water and the practice has been adopted by drinking water agencies across the world as a Standard Method. Metropolitan's FPA panel meets several times a week to evaluate the taste and odor of water samples from throughout our system. As a result, Metropolitan has won awards in international and regional water tasting competitions for more than two decades.

## **Reader's Guide**

The cornerstone of this water quality report is a table that lists the results of yearround monitoring for hundreds of regulated and non-regulated constituents. Only those constituents found in water monitored by Metropolitan that are above the state detection limit for the purposes of reporting are listed in the table.

By reading the table on pages 18 through 19 from left to right, you will learn the level of a constituent found in Metropolitan's water and how that number compares with the allowable state and federal limits. You also will see the measured range and average of the constituent and where it likely originated. The questions and answers, lettered A through I, explain the important elements of the table. These letters correspond to row and column headings on the water quality table.

#### **MCL**

**Maximum Contaminant** Levels (MCL) are the highest concentrations of constituents that are allowed in drinking water.

#### What are the sources of water Metropolitan delivers?

Metropolitan imports water from Northern California through the Sacramento-San Joaquin Delta via the State Water Project, and from the Colorado River through our Colorado River Aqueduct. The table shows the percentage of the total water delivered by Metropolitan that is from the State Water Project. The remainder comes from the Colorado River.

#### What is in my drinking water?

Your 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 from Metropolitan's treatment plants.

#### How are constituents reported?

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

#### D

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

Regulatory agencies have maximum contaminant levels for constituents so that drinking water is safe. 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 a 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 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.

> Metropolitan met or surpassed all primary drinking water standards in 2024.

B

С

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

E

Primary standards are developed for the purpose of protecting the public from possible health risks associated with exposure to health-compromising constituents. 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 aesthetics (e.g., appearance, taste and smell) of water. These substances are not reasonably expected to have any potential health-related impacts unless they also have a primary standard. Some constituents (e.g., aluminum) have two different MCLs, one to protect against health-related impacts, and another to protect against non-healthrelated impacts.

## What are Public Health Goals and Maximum Contaminant Level Goals?

Public Health Goals and Maximum Contaminant Level Goals are targets set by regulatory agencies for the water industry. They define a constituent level in the water that does 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.

## 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, described in the footnotes to the water quality table.

These constituents do not have a numerical MCL, but instead have a required treatment technique that when satisfied is listed in the column for the treatment plant effluent and distribution system (Column "H" of the table). The highest and 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 areas served by each of Metropolitan's treatment plants and its distribution system?

Metropolitan operates five water treatment plants, and the monitoring results for the supplies delivered by each of the plants are listed. Typically, the F.E. Weymouth Water Treatment Plant serves parts of Los Angeles County, the San Gabriel Valley and areas of Orange County. The Robert B. Diemer Water Treatment Plant also provides treated water to areas of Orange County and coastal Los Angeles. The Joseph Jensen Water Treatment Plant supplements local water supplies in the San Fernando Valley, Ventura County and central Los Angeles. The Robert A. Skinner Water Treatment Plant serves western Riverside County, Moreno Valley and San Diego County. Finally, the Henry J. Mills Water Treatment Plant also serves western Riverside County and Moreno Valley.

#### 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. Certain fertilizers and pesticides have too. Many of these chemicals have now been banned from use.

## 2024 Water Quality Table

	В	С	D	F	G	Н				I.		
						Treatment Pla	reatment Plant Effluents and Distribution System					
	Parameter	Units	State MCL	PHG	Range Average	Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Major Sources in Drinking Water	
A	Percent State Water Project	%	NA	NA	Range	0 - 98	100	100	0 - 64	0 - 100	Not Applicable	
E	PRIMARY STANDARDS - Mandatory Health-Related Standards											
	Combined Filter Effluent	NTU	ТТ	NA	Highest	0.06	0.04	0.08	0.07	0.06	Soil runoff	
	(CFE) Turbidity <sup>(a)</sup>	%			% ≤ 0.3 NTU	100	100	100	100	100		
MICROBIOLOGICAL (b)						1						
	Total Coliform	% Positive		Molo	Range	Dis	tribution Sys	stemwide: 0 -	0.3		Naturally present in	
	Bacteria <sup>(c)</sup>	Monthly Samples		MCLG = 0	Average	Dis	stribution Sys	stemwide: 0.	1		the environment	
	INORGANIC CHEMICALS	;		1	1		1	1		1	1	
	Aluminum <sup>(d)</sup>	ppb	1,000	600	Range	ND - 110	52 - 91	ND - 110	ND - 160	ND - 150	Residue from water treatment process; runoff and leaching	
					Highest RAA	ND	62	ND	74	93	from natural deposits	
	Barium	ppb	1,000	2,000	Range	124	ND	ND	ND	124	Oil and metal refineries discharge; natural deposits erosion	
	Fluoride <sup>(e)</sup>			1	Average	06.08	06.00	06.00	06.09	02.08	Runoff and leaching	
		ppm	2.0		Range	0.0 - 0.8	0.0 - 0.0	0.0-0.9	0.3 - 0.8	from natural deposits;		
					Average	0.7					promotes strong teeth; discharge from fertilizer	
						Die	tribution Sve	temwide: 0 7	0.7	and aluminum factories		
					Distributi				Runoff and leaching			
	Nitrate (as Nitrogen)	ppm	10	10	Range	ND	D 0.5	0.6	ND	ND	from fertilizer use; septic tank and sewage:	
					Average						natural deposits erosion	
RADIONUCLIDES <sup>(f)</sup>												
	Gross Alpha Particle	nCi/l	15	MCLG = 0	Range	ND - 5		ND	ND - 4	ND	Runoff/leaching from natural deposits	
	Activity	poi/L			Average	ND	ND	ND	ND			
	Gross Beta Particle	nCi/l	50	MCLG = 0	Range	ND - 5	ND	ND	ND - 5	ND - 5	Decay of natural and	
	Activity	poi/L			Average	4		4	ND	man-made deposits		
	Radium-228	nCi/l	NA	0.019	Range	ND	ND ND	ND - 1	ND	ND	Erosion of natural	
					Average			ND			deposits	
	Combined Radium- 226 + 228	pCi/L	5	MCLG = 0	Range	ND	ND	ND - 1	ND	ND	Erosion of natural deposits	
		F - '' -			Average			ND				
	Uranium	pCi/L	'L 20	0.43	Range	ND - 3	2 - 3	ND	ND - 3	ND - 3	Erosion of natural	
					Average	1	2		2	ND	deposits	

## 2024 Water Quality Table

					Treatment Plant Effluents and Distribution System							
Parameter	Units	State MCL	PHG	Range Average	Diemer Je Plant F	ensen P Plant F	Vills S Plant	kinner V Plant	Veymouth Plant	Major Sources in Drinking Water		
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS @												
Total Trihalomethanes				Denne	24 - 30	13 - 27 14 - 29 15 - 48 28 - 37						
(TTHM) (Plant Core Locations and Distribution System)	nnh	80	NΔ	Range	Dist	Distribution Systemwide: 12 - 48				Byproduct of drinking		
	ppp	00		Highest	44	21	44	34	32	water chlorination		
				LRAA	Dist	ribution Syst	emwide: 45					
Sum of Five Haloacetic				Range	ND - 9.5	1.3 - 5.0	ND - 5.7	ND - 4.2	<u>}</u>			
Acids (HAA5) (Plant	ppb	60	NA		Dist	ribution Syst	emwide: ND	) - 23		Byproduct of drinkin		
Distribution System)				Highest	19	5.6	13	12	6.2			
				LNAA	Dist	ribution Syst	emwide: 19					
_			0.1	Range	ND - 1.6	ND - 5.4	ND - 19	ND - 6.0	ND - 9.2	Byproduct of drinkir		
Bromate	ppb	10		Highest RAA	ND	3.1	7.9	1.5	2.0	water ozonation		
Chloramines (as total chlorine residual)	ppm	MRDL = 4.0	MRDLG = 4.0	Range	Distribution Systemwide: 1.6 - 3.0					Drinking water disinfectant added for treatment		
				Highest RAA	Distribution Systemwide: 2.5							
Total Organic Carbon	maa	тт	NA	Range	2.0 - 2.5	2.0 - 2.5	1.5 - 2.5	2.3 - 3.0	2.1 - 2.6	Various natural and man-made sources; TOC is a precursor		
(TOC)	r r			Highest RAA	2.4	2.4	2.2	2.6	2.4	for the formation of disinfection byprodu		
SECONDARY STANDARDS - Aesthetic Standards												
Aluminum <sup>(d)</sup>	daa	200	600	Range	ND - 110	52 - 91	ND - 110	ND - 160	ND - 150	Residue from water treatment process;		
				Highest RAA	ND	62	ND	74	93	runoff and leaching from natural deposi		
Chlorido	nnm	Soo NA Range 93 - 116 39 - 41   Average 104 40	NA	Range	93 - 116	39 - 41	41 - 67	92 - 100	96 - 116	Runoff/leaching fro		
Shionde	ppm		54	96	106	seawater influence						
	Color Units	15	NA	Range	1 - 2		1 - 2	1 - 2		Naturally-occurring		
Color				Average	2		2	2		organic materials		
			NA	Range						Naturally-occurring		
Odor Threshold	TON	3		Average	1 1	1	1	ND	organic materials			
				Range	888 - 1,070	498 - 522	317 - 466	903 - 917	7 912 - 1,08	30 Substances that		
Specific Conductance	µS/cm	1,600	NA	Average	979	510	392	910	996	form ions in water; seawater influence		
Sulfate			NA	Range	196 - 253	89 - 92	21 - 47	195 - 203	3 200 - 25	0 Runoff/leaching		
	ppm	500		Average	224	90	34	199	225	from natural deposit industrial wastes		
Total Dissolved Solids	nnm	1 000	NA	Range	556 - 686	291 - 322	178 - 263	560 - 572	2 573 - 69	0 Runoff/leaching		
(TDS) <sup>(h)</sup>	Phili	1,000		Average	erage 621	306	220	566	632	from natural deposi		

#### ABBREVIATIONS AND DEFINITIONS

Average	Arithmetic mean
CFE	Combined Filter Effluent
DLR	Detection Limit for Purposes of Reporting
LRAA	<b>Locational Running Annual Average</b> ; highest LRAA is the highest of all LRAAs calculated as an average of all samples collected within a 12-month period.
MCL	Maximum Contaminant Level - 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.
MCLG	Maximum Contaminant Level Goal - 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.
MRDL	Maximum Residual Disinfectant Level - 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.
MRDLG	Maximum Residual Disinfectant Level Goal - 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.
NA	Not Applicable
ND	Not Detected at or above DLR or RL

NTU Nephelometric Turbidity Units

pCi/L picoCuries per liter

- PHG Public Health Goal 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.
- ppb parts per billion or micrograms per liter (µg/L)
- ppm parts per million or milligrams per liter (mg/L)
- RAA Running Annual Average; highest RAA is the highest of all RAAs calculated as an average of all samples collected within a 12-month period.
- Range 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
- TON Threshold Odor Number
- TT Treatment Technique A required process intended to reduce the level of a contaminant in drinking water.
- µS/cm microSiemens per centimeter
- Primary Standards MCLs, MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.
- Secondary Standards Requirements that ensure the appearance, taste, and smell of drinking water are acceptable.

#### FOOTNOTES

- (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 Heterotrophic Plate Count (HPC) bacteria, *Legionella*, and viruses. *Legionella* and virus monitoring is not required.
- (c) Compliance is based on monthly samples from the distribution system.
- (d) Compliance with the state MCL for aluminum is based on RAA.
- (e) Metropolitan was in compliance with all provisions of the state's fluoridation requirements. When fluoride feed systems were temporarily out of service during treatment plant shutdowns and/or maintenance work, an occasional fluoride level was measured below 0.7 mg/L.

- (f) 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 quarterly in 2023 for the required triennial monitoring (2023-2025). Radon is also monitored voluntarily with the triennial radionuclides.
- (g) 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.
- (h) 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 Detected Constituents That May be of Interest to Consumers."

#### Fluoridation fact sheet and FAQs

AI	Aggressiveness Index	ppt	parts per trillion or nanograms
CaCO <sub>3</sub>	Calcium Carbonate		per liter (ng/L)
CCPP	Calcium Carbonate Precipitation Potential	SI	Saturation Index
NL	Notification Level - The level at which notification by the public water system to State Water Resources Control Board is required.		

Othe	er De	etec	ted	Cons	titu	ents	that
May	Be	of Ir	ntere	est to	Co	nsun	ners

(please refer to the main table for other abbreviations and definitions)

### Other Detected Constituents That May Be of Interest to Consumers

	Tre	atment Plant	Effluents and	Major Sources in Drinking Water						
Parameter	Units	NL	Range Average	Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant		
Alkalinity (as 0-00)	n=	NIA	Range	105 - 123	94 - 101	68 - 71	103 - 107	109 - 127	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide,	
Airaillilly (as CaCO <sub>3</sub> )	hbw	NA	Average	114	98	70	105	118	and occasionally borate, silicate, and phosphate	
Boron	ppb	1,000	Range <b>Average</b>	140	170	130	130	140	Runoff/leaching from natural deposits; industrial wastes	
Coloium			Range	58 - 78	38 - 39	15 - 22	61 - 62	59 - 76	Punoff/loophing from a strend la tr	
Galcium	ppm	INA	Average	68	38	18	62	68	Runon/leaching from natural deposits	
Calcium Carbonate	<b>n</b>	NI A	Range	5.4 - 10	2.0 - 4.4	1.2 - 4.4	5.0 - 10	5.5 - 11	A measure of the balance between	
(CCPP) (as CaCO <sub>3</sub> ) <sup>(a)</sup>	ppm	NA	Average	7.7	3.4	2.9	7.6	8.4	pri and calcium carbonate saturation in the water	
Chlorate	ppb	800	Range Average	77	71	78	80	80	Byproduct of drinking water chlorination; industrial processes	
Corrosivity (b)			Range	12.4 - 12.6		12.2 - 12.3	12.3 - 12.4	12.4 - 12.6	A measure of the balance between	
as Aggressiveness Index (AI)	AI	NA	Average	12.5	12.2	12.2	12.4	12.5	pH and calciumarbonate saturation in the water	
Corrosivity <sup>(c)</sup> as	SI	NA	Range	0.58 - 0.65	0.36 - 0.39	0.40 - 0.41	0.46 - 0.57	0.60 - 0.65	A measure of the balance between	
Saturation Index (SI)			Average	0.62	0.38	0.40	0.52	0.62	ph and calcium carbonate saturation in the water	
Hardness (as CoCC )	ppm	NIA	Range	235 - 305	143 - 153	68 - 99	242 - 243	241 - 303	Runoff/leaching from natural deposits; sum of polyvalent cations,	
naiuness (as CaCU <sub>3</sub> )	hhiii	INA	Average	270	148	84	242	272	generally magnesium and calcium present in the water	
Lithium	ابير	AL A	Range	32 - 47	ND		24 - 32	32 - 47 electrochemica	Naturally-occurring; used in electrochemical cells, batteries.	
Lithium	ррр	NA	Average	40	NU	ND	28	40	and organic syntheses and pharmaceuticals	
Magnosium	ppm	NA	Range	22 - 29	13 - 14	8.4 - 11	22 - 23	23 - 29	Runoff/loophing from natural days it	
พลฐกษรเนทา			Average	26	14	9.7	22	26	Runon/reaching from natural deposits	
	nnt		Range	ND	ND	ND	2.5 ND			
N-Nitrosodimethyl-		10	Kange	D	istribution Sy	rstemwide: ND		Byproduct of drinking water		
amine (NDMA)	441	PHG = 3	Average	ND	ND	ND	2.5	ND	chloramination; industrial processes	
				Ľ	Distribution Sy	rstemwide: NC	)			
pН	pH	NA	Range	8.2	8.2 - 8.3	8.7 - 8.8	8.1	8.2	Not Applicable	
	UTIILS		Average	8.3	8.3	8.7				
Potassium	ppm	NA	Range	4.4 - 5.4	2.6	1.9 - 3.1	4.6 - 4.9	4.6 - 5.4	Salt present in the water;	
			Average	4.9		2.5	4.8	5.0	naturany-occurring	
Sodium	ppm	NA	Range	90 - 116	46	35 - 54	91 - 95	93 - 117	Salt present in the water;	
	ЧЧ		Average	103	UT	44	93	105	naturally-occurring	
Total Dissolved Solids	ppm	m MCL = 1,000	MCL = 1,000	Range	492 - 682	295 - 313	169 - 262	493 - 597	506 - 680	Runoff/leaching from natural deposi
(IDS) (0)			Average	590	304	222	559	587		

#### FOOTNOTES

- (a) Positive CCPP indicates non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative CCPP indicates corrosive; tendency to dissolve calcium carbonate. Reference: *Standard Methods (SM2330)*
- (b) AI ≥ 12.0 indicates non-aggressive water; AI 10.0 11.9 indicates moderately aggressive water; AI ≤ 10.0 indicates highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98)
- (c) Positive SI indicates non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI indicates corrosive; tendency to dissolve calcium carbonate. Reference: *Standard Methods (SM2330)*
- (d) 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 standards.

# Learn More

Additional information about drinking water safety and standards can be found at:

## STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

1001 | Street Sacramento, CA 95814 916-449-5577



waterboards.ca.gov/drinking\_ water/programs

#### U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF GROUND WATER AND DRINKING WATER

1200 Pennsylvania Avenue, NW Mail Code 4606M Washington, DC 20460-0003



epa.gov/ground-water-anddrinking-water

#### **CONSUMER INFORMATION**



epa.gov/CCR

INFORMATION ABOUT DRINKING WATER STANDARD SETTING



epa.gov/dwstandardsregulations







## 2025 Annual Drinking Water Quality Report

Covering the reporting period January – December 2024

This report is very important to read or have translated. The sentences to the right reflect the diversity of Metropolitan's service area and read, "This report contains important information about your drinking water. Translate it, or speak with someone who understands it."



Metropolitan's Board of Directors typically meets on the second Tuesday of each month at the downtown Los Angeles headquarters building at 700 N. Alameda St., Los Angeles, adjacent to historic Union Station. More information is available at **mwdh2o.com**. You can call Metropolitan's staffed information line at 213-217-6000.

#### يحتوي هذا التقرير على معلومات هامة عن نوعية مياه الشرب. يرجى ترجمته أو مناقشته مع شخص يفهمه جيداً.

#### Chinese

这份报告中含有关于饮用水的重要信息。请您找人翻译,或者请能看得懂这份 报告的朋友给您解释一下。

#### French

Cé rapport contient des information importantes concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu' un qui peut le comprendre.

#### German

Dieser Bericht enthält wichtige Informationen über die Wasserqualität in Ihrer Umgebung. Der Bericht sollte entweder offiziell übersetzt werden, oder sprechen Sie mit Freunden oder Bekannten, die gute Englishchkenntnisse besitzen.

#### Greek

Αυτή η αναφορά περιέχει σημαντικές πληροφορίες σχετικά με το πόσιμο νερό. Μεταφράστε την ή ζητήστε να σάς την εξηγήσει κάποιος που την κατανοεί.

#### Hindi

इस रिपोर्ट में पीने के पानी के बारे में महत्वपूर्ण जानकारी दी गई है। इसका अनुवाद करें, या किसी ऐसे व्यक्ति से बात करें, जो इसे समझता हो।

#### Japanese

この資料には、あなたの飲料水についての大切な情報が書かれています。内容 をよく理解するために、日本語に翻訳して読むか説明を受けてください。

#### Khmer

របាយការណ៍នេះមានព័ត៌មានសំខាន់អំពីទឹកសម្រាប់ពិសា។ ស្ងមបកប្រៃ ឬពិគ្រោះជាម្លយអ្នកដែល មើលយល់របាយការណ៍នេះ។

#### Korean

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다.이 보고서를 번역하시거나, 내용을 이해하는 분과 상의하십시오.

#### Polish

Sprawozdanie zawiera ważne informacje na temat jakości wody w Twojej miejscowści. Poproś kogoś o przellurnaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

#### Russian

Отчет содержит важную информацию о питьевой воде. Переведите его или попросите кого-нибудь, кто хорошо понимает текст, объяснить вам его содержание.

#### Spanish

Este informe contiene información importante acerca de su agua potable. Tradúzcalo o hable con alguien que lo entienda.

#### Tagalog

Ang ulat na ito ay naglalaman ng mahahalagang impormasyon tungkol sa pag-inom ng tubig. Mangyaring ipasalin ito, o kumausap sa isang taong nakakaintindi nito.

#### Vietnamese

Bản báo cáo này có chứa các thông tin quan trọng về nước uống. Hãy dịch, hoặc nói chuyện với ai đó hiểu bản báo cáo này.