

WATER QUALITY EXCELLENCE 2024 ANNUAL DRINKING WATER QUALITY REPORT

Covering the reporting period January - December 2023

METROPOLITAN'S WATER QUALITY IS EQUAL TO OR BETTER THAN WHAT IS REQUIRED TO SAFEGUARD PUBLIC HEALTH.

A Letter from the Water Quality Section Manager

For half a century, Metropolitan's Water Quality Section has helped safeguard Southern California's drinking water and developed innovations in research and technology that have been used around the world. The Water Quality and Research Branch, as it was first named when formed in 1974, was created in response to the proposed Safe Drinking Water Act, which was signed into law by President Gerald Ford on December 16, 1974. The SDWA addressed the lack of decisive and federally enforceable regulation of contaminants in water supplies.

But the passage of the SDWA was not the start of oversight for Metropolitan, an agency formed nearly 100 years ago. Oversight of water quality began as early as the first delivery of water from the Colorado River Aqueduct, coupled with an on-going commitment to reliable, high-quality drinking water for Southern California.

Since passage of the SDWA 50 years ago, the Water Quality Section has supported the expansion of regulations that have improved the quality of drinking water, developed and patented detection methods for chemicals and microbes, improved testing procedures, and made significant contributions to the industry's knowledge on monitoring contaminants and improving drinking water treatment. Because our past informs the present and future, our operations have evolved in response to new regulations, improved treatment methods and contaminants of emerging concern (CECs).

Metropolitan invests in the latest and most-advanced technology at our main Water Quality Laboratory in La Verne and ensures that the five satellite laboratories at each of our water treatment plants are equipped for all routine monitoring requirements. We rely on the expertise of our highly skilled staff with disciplines across the sciences, many of whom are leaders in their fields of research and regulatory compliance.

Our legacy of oversight continues. Metropolitan's Water Quality Section tests our water for more than 120 regulated and about 280 unregulated constituents. Nearly 250,000 water guality tests are conducted every year on samples gathered from throughout our vast distribution system.

Metropolitan's water meets or surpasses all state and federal regulatory requirements.

The original Water Quality and Research Branch had a staff of just 10 in 1974. Now, 50 years later, there is a dedicated staff of about 110 people - chemists, engineers, microbiologists, lab technicians, biologists, limnologists, administrative support staff and other specialists.

Applied research remains critical to our mission. For more than 40 years, Metropolitan has conducted or participated in about 85 projects with roughly \$25 million in external grant funding to conduct applied research on improved water treatment and disinfection, pathogen detection, disinfection byproducts, source water protection and CECs.

With the expertise of Metropolitan scientists and engineers, we also are at the forefront of creating a potential third source of water to complement existing imported supplies from the Colorado River and State Water Project. This includes an innovative way to increase resiliency in our water supply by purifying wastewater to remove pathogens and chemical contaminants such as per- and polyfluoroalkyl substances, or PFAS. Metropolitan's Water Quality Section staff are onsite and in laboratories working to ensure that the purified water produced by the Pure Water Southern California demonstration plant at the Grace F. Napolitano Innovation Center in Carson meets the highest water quality standards, is safe and ready to replenish the region's local groundwater basins and supplement existing drinking water supplies should the project move to full-scale in the future. Pure Water Southern California has the potential to produce 150 million gallons of water daily or 50 billion gallons per year, enough water to serve 1.5 million people.



"It is almost beyond the vision of the fanciful mind of the biologist to forecast the many changes which may be expected in the aquatic and microscopic world."

> - Consultant (and later Metropolitan board member) Arthur Taylor in a 1934 progress report on water treatment.

For half a century, Metropolitan's Water Quality team has helped safeguard drinking water for Southern California and developed innovations in research and technology used globally. This timeline highlights the defining moments and discoveries that shaped the past and present, and pave the road for what lies ahead.

WATER OUALITY AND RESEARCH-BRANCH ESTABLISHED, 1974

Coinciding with the passage of the federal Safe Drinking Water Act, Metropolitan forms the Water Quality and Research Branch with a staff of 10. The team operates from the F.E. Weymouth head house until a move into the Materials and Testing Lab (as it was referred to at the time) in 1976.



On behalf of the many dedicated employees who protect, treat and deliver water throughout the Southern California region, I am proud to present this Annual Drinking Water Quality Report, which summarizes water quality monitoring data for calendar year 2023. We have prepared a commemorative supplement to herald 50 years of Metropolitan's Water Quality Section, a history worth celebrating, and our continued commitment to high quality water which was demonstrated long before enactment of the Safe Drinking Water Act. You will also find key milestones in the historical timeline that runs along the bottom third of this report.

The core feature of our annual report is a detailed table of testing results that begins on page 16. 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 mwdh2o.com You may also contact me at 909.392.5155 or prochelle@mwdh2o.com.

Sincerely,

Dr. Paul Rochelle Water Quality Section Manager

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NATION WIDE THM-PROBLEM IDENTIFIED

974

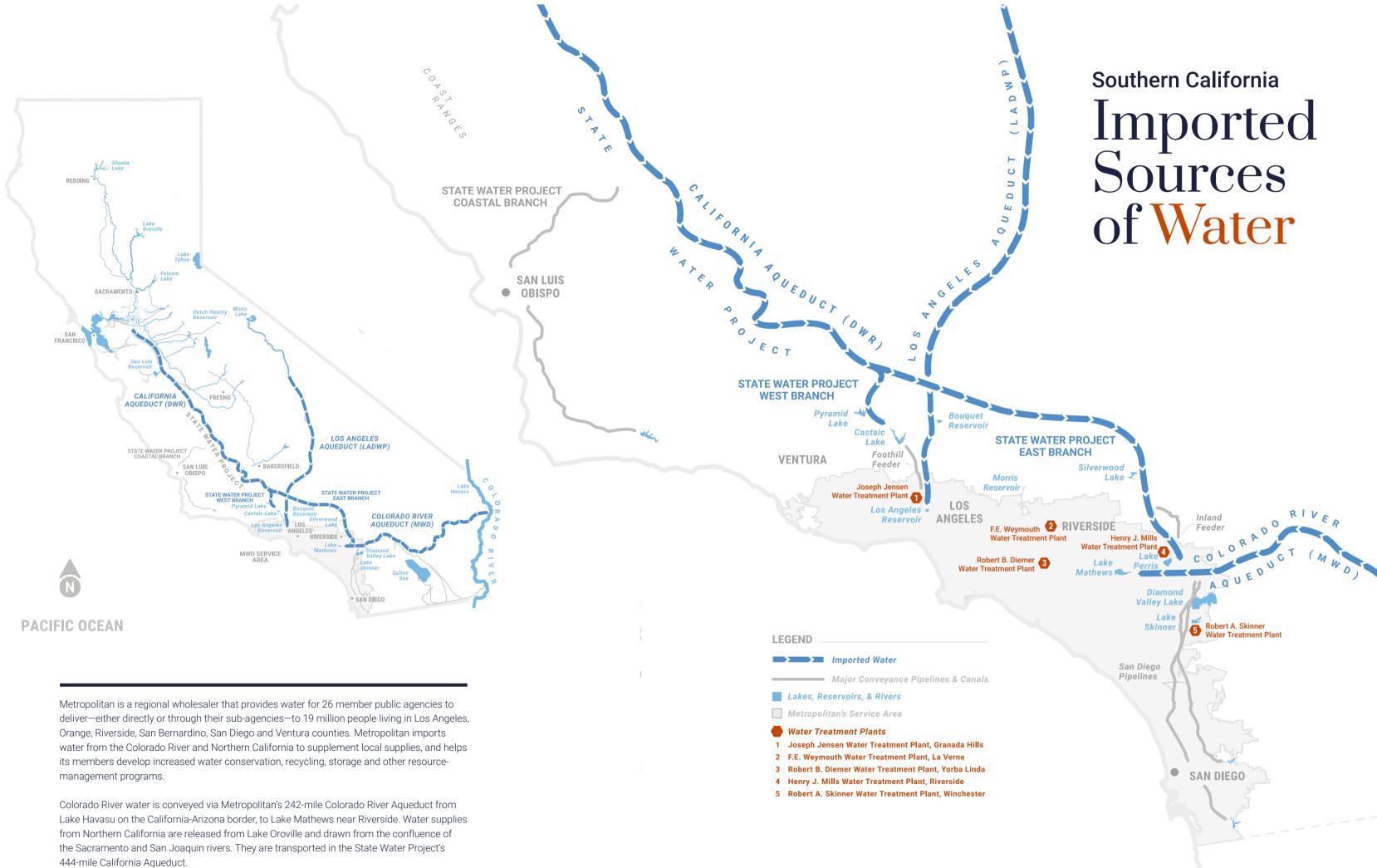
U.S. EPA completes a 1975 study that measures the occurrence of trihalomethanes, byproducts that result from the disinfection of drinking water with chlorine.

FIRST ENFORCEABLE REGULATIONS

The adoption of the federal Safe Drinking Water Act on December 16, 1974 enacts the first enforceable national drinking water regulations.

UNMASKING TASTE & ODOR CULPRITS

Closed Loop Stripping Analysis, a tool for identifying taste-and-odor issues caused by cyanobacteria and algae, is developed with the ability to detect compounds in the ng/L- nanograms per liter- parts per trillion range.



Drinking Water & Your Health

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-water-and-drinking-water**.



THE PARTS-PER-BILLION RANGE

Gas Chromatography and Mass Spectrometry

play a crucial role in discovering disinfection

byproducts and other organic chemicals

at the parts per billion (µg/L) level,

which is equivalent to one second

in 32 years.

Sierra Nevada snowmelt. Photo courtesy CA Dept. of Water Resources.

HEALTH ADVISORY FOR PEOPLE WITH WEAKENED IMMUNE SYSTEMS

Although Metropolitan treats water to meet drinking water standards, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 EPA 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/index.html

Contaminants That May Be Present In Drinking Water

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's 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 California Department of Public Health's website, cdph.ca.gov/Programs /CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/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 sewage treatment plants, septic systems, agricultural livestock operations and wildlife

Inorganic contaminants, such as salts and metals that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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

CO-OPTING FUTURE SCIENTISTS

The Cooperative (Co-op) Education Program launches and brings local college students to laboratory facilities for practical experience, creating a pool of potential new water industry employees including permanent Metropolitan staff.

REFINING THE WATER-FLAVOR PALATE

Flavor Profile Analysis, which relies on a trained human palate and nose, crosses over from the food industry to the water community to serve as an early warning system for taste and odor issues.

THE CHLORAMINE REVOLUTION

Concerns about the safety of disinfection byproducts and new regulations prompt Metropolitan to evaluate a switch from free chlorine to chloramines for maintaining disinfection throughout the distribution system.

1980s

6



Laboratory technologist, one of about 100 water quality employees charged with drinking water quality oversight.

GOING TO THE SOURCE

Concerns grow about the interaction of organic materials and disinfection chemicals, prompting research focused on new ways to protect source water quality and reduce disinfection byproducts. Metropolitan becomes the first water agency in the nation to use scuba divers for monitoring.

A NEW HOME

A new 27,000-square-foot Water Quality Laboratory in La Verne is dedicated at Metropolitan with a staff of 57, making it one of the largest,most advanced water quality laboratories in the country.

1985

Emerging Contaminants & New Regulations

Metropolitan's first treated water sample was collected on June 10, 1941. Since that very first sample, Metropolitan's applied research and engagement has ensured that we are prepared for emerging water quality challenges and new regulations.

Today, Metropolitan's highly skilled staff, many of whom are leaders in their fields, go beyond the minimum requirements and conduct investigations to develop and optimize advanced detection methods that further our understanding of potential contaminants. The team prepares for emerging contaminants and new regulations and is already monitoring the latest constituents of concern.

Since 2013. Metropolitan has been voluntarily monitoring for perand polyfluoroalkyl substances - a family of chemicals known as PFAS, including the two most common PFAS – perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). New federal drinking water standards for six PFAS - PFOA, PFOS, PFNA, PFHxS, HFPO-DA (commonly known as GenX Chemicals), and PFBS were issued in April 2024.

Metropolitan has detected PFAS at low concentrations in some source waters, including very low levels of PFOS at a source water lake. PFOA and PFOS have more consistently been detected in groundwater wells in the region. Three compounds - PFHxA, PFBA and PFPeA - have been detected at trace levels in Metropolitan's treated water. While these three compounds are not at levels requiring notification or response. Metropolitan is working alongside our member agencies to understand how PFAS affect the region's water supplies and ensure Southern California continues to have high quality, reliable water.

DISINFECTION BYPRODUCTS

IN THE CROSSHAIRS

While widely used in the industry

to control disinfection byproduct

formation, Metropolitan research

finds alternative treatment methods

to granular activated carbon.

There are also concerns of microplastics in the environment. and Metropolitan is preparing to monitor our water and tracking research to better understand potential health risks and the effectiveness of water treatment processes in removing microplastics from drinking water supplies. We continue to engage with the SWRCB's Division of Drinking Water and the water community to increase understanding on the extent and impact of microplastics in the region's water supplies. Staff participated in regional, national, and international discussions on the state-of-the-science on microplastics in the environment and potential impacts to public health. Outreach included a Metropolitan member agency workshop in 2023 focused on preparing for the state's upcoming required microplastics monitoring.

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. We also will continue to support our member agencies as the drinking water community responds to this emerging issue as part of our proactive stance toward protecting water quality and public health.

Metropolitan Plans With The Future In Mind: Pure Water Southern California

With the future in mind, Metropolitan has Grace F. Napolitano Innovation Center. partnered with the Los Angeles County There, we test and evaluate the treatment Sanitation Districts to test removal of process to turn treated wastewater into pathogens and chemical contaminants highly purified water to replenish the such as PFAS, at the Pure Water Southern region's local water supply. California demonstration facility at the

PURE**WOTER**

Metropolitan has a history of adapting to new and alternative sources of water dating back to the State Water Project coming online in the early 1970s. With a makeup different than the primary source of drinking water the Colorado River - Metropolitan was there from the beginning, testing this new supply. The same approach of evaluation was applied to desalination technologies. This primarily focused on Colorado River water through the Desalination Research and Innovation Partnership, a Metropolitan sponsored program that spanned 12 years until it ended in 2009. More than 75 individual projects were funded by this program, including conceptual studies and demonstration-scale tests.

1990s

OZONE SHOWS **PROMISING RESULTS**

Ozone treatment is studied as a way to improve drinking water treatment and reduce disinfection byproduct formation, as well as taste-and-odor compounds. Eventually, ozone treatment is added to all five Metropolitan water treatment plants.

AMMONIA TO NITRITES TO NITRATES

Pioneering research improves the understanding of nitrification in distribution systems. If not controlled and managed, nitrification can deteriorate water quality by reducing the amount of protective disinfectant in drinking water.

MOLECULAR TESTING TECHNOLOGY

Metropolitan staff develops and adopts advanced molecular techniques that help identify pathogens in drinking water, a category of contaminants that includes bacteria protozoa, and viruses with the potential to cause illness.

At full-scale, this program has the potential to produce up to 150 million gallons of treated water daily when completed and provide purified water for up to 1.5 million people, making it one of the largest water reuse programs in the world.





Window reflection of on-site water quality testing at the Pure Water Southern California Grace F. Napolitano Innovation Center.



LOWER COLORADO RIVER **BASIN CLEANUP**

Perchlorate, an industrial chemical. is detected in water in the Lower **Colorado River Basin and eventually** traced to manufacturing sites upstream and out-of-state, initiating cleanup efforts that significantly reduce contaminant levels.

LIMNOLOGY BECOMES A WATER QUALITY TOOL

The science of limnology (the study of lakes and other freshwater sources) is applied to manage Metropolitan's reservoirs.







Metropolitan's service area is expansive. It spans parts of six counties and 5,200 square miles. Our closest routine sample location is less than a mile from the La Verne Water Quality Laboratory, with the furthest 250 miles away. Sample collectors travel more than 150,000 miles each year by car and plane to bring samples in for analysis. Staff rely on nearly 500 different types of analytical equipment and use about 150 methods to evaluate samples. In a given year, about 250,000 water quality test results are generated.







PACIFIC OCEAN

STATE WATER PROJECT WEST BRANCH

Castaic Lake

Pyramid Lake

Foothill Feeder

VENTURA COUNTY

COUNTY

AVOIDING A QUAGGA-MIRE

Metropolitan establishes a comprehensive program to manage invasive quagga mussels in the Colorado River Aqueduct and associated facilities.

A D D R E S S I N G BROMATES

A bromate control strategy is developed, potentially saving Metropolitan millions in chemical costs for disinfection.

TESTING . . . TESTING . 1, 2, 300 THOUSAND

As technology and science advance, compliance with drinking water regulations and support for water system operations requires Metropolitan to conduct more than 250,000 analytical tests per year to safeguard public health. This number continues to grow.

CREATING A CONTAMINANT WATCHLIST Metropolitan plays a significant role in

U.S. EPA's Contaminant Candidate List process to identify contaminants for potential future regulation.

MOAB CLEANUP

Colorado River source water protection efforts resulted in a multi-agency effort to remove and safely dispose of 14 million tons of contaminated mill tailings (to date) because of concerns about health and environmental impacts.

2000s

REGIONAL WATER QUALITY MONITORING LOCATIONS



methods.

Extensive research on NDMA formation and control prepares Metropolitan for future regulation of this disinfection byproduct with health concerns.



Source water samples gathered at Lake Mathews.

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 it from contaminants in the area it originates – this is often hundreds of miles away from where the water is used. Public water systems are required to submit a comprehensive sanitary survey of their watersheds to the SWRCB'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.

Metropolitan's source waters — the Colorado River and State Water Project — each present different water quality challenges. Both are

2010s

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.

2020s



CYANOBACTERIA TOXINS

U.S. EPA issues Health Advisories for toxins released by cyanobacteria; Metropolitan establishes new technology and a program to track and characterize cyanotoxins in water sources.

MICROPLASTICS IN WATER

Metropolitan responds to California's legislative mandate to better define, analyze, and monitor microplastics in drinking water supplies.

PER- & POLYFLUOROALKYL-SUBSTANCES (PFAS)

"Forever chemicals" used in industrial, food, personal care, and household products are detected in water supplies across the country. National concern prompts new health guidelines, with new regulatory standards issued April 2024.

PURE WATER Southern California

Metropolitan's Board of Directors approves a potable reuse demonstration project (named after Congresswoman Grace F. Napolitano in 2023) in partnership with the Los Angeles County Sanitation Districts. If built to full-scale, Pure Water Southern California will be one of the largest potable reuse programs in the world, treating up to 150 million gallons of purified water daily.





Flavor Profile/ Best Tasting Water

More than 40 years ago, Metropolitan pioneered a method to evaluate the odor and flavor of our water to help ensure it smells and tastes good. Since then, the practice has been adopted by drinking water agencies across the world as a Standard Method and is regarded as one of the most reliable measures of drinking water aesthetics. The rigorous water treatment process at Metropolitan's five plants uses ozone as the primary disinfectant, which destroys a wide variety of microorganisms and effectively removes unpleasant tastes and odors.

Metropolitan's Flavor Profile Analysis panel meets several times a week to evaluate the taste of water samples from throughout the system. As a result of this focus on great tasting and smelling water, Metropolitan has won awards in international and regional water tasting competitions for over two decades. We now have our own certified FPA trainers.



COVID-19 PANDEMIC RESPONSE

While the pandemic does not impact the quality of drinking water, COVID-19 affects supply chains for chemicals used for water treatment and requires extensive safety protocols for staff required to report to work every day to ensure our water quality is safeguarded.

CLIMATE CHANGE TAKES SHAPE

Years of drought, followed by a historic season of atmospheric storms of snow and rain, bring the impacts of climate change into stark perspective. The new era of weather whiplash impacts water quality as well as quantity and requires reimagining the region's water delivery system and supportive infrastructure.

LOOKING FORWARD

To keep pace with emerging issues, increasingly stringent laboratory testing requirements, and future regulation, Metropolitan assesses the need to upgrade and expand the Water Quality Laboratory.

Readers' Guide to the Water Quality Table

The cornerstone of the water quality report is a table that lists the results of year-round monitoring. By reading the table on pages 16 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.

A 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 total water Metropolitan delivers that comes from the SWP, with the remainder imported from the Colorado River.

B 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 (MRDL) 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.

E WHY ARE SOME OF THE CONSTITUENTS LISTED IN THE SECTION LABELED "PRIMARY STANDARDS" AND OTHERS IN THE "SECONDARY STANDARDS" SECTION?

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 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-health-related impacts.

F 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.

Metropolitan met all primary drinking water standards in 2023.

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.

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, as has the use of certain fertilizers and pesticides. Many of these chemicals have since been banned from use.



Senior microbiologist is part of the oversight team for the Water Quality Section

2023 Water Quality Table

В	С	D	F	G			н			I.	
					Treatment	t Plant Effluer					
Parameter	Units	State MCL	PHG	Range Average	Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Major Sources in Drinking Water	
Percent State Water Project	%	NA	NA	Range	0 - 100	100	100	0 - 67	0 - 100	Not Applicable	
PRIMARY STANDARDS - M	landatory H	lealth-Related S	tandards					1	1		
CLARITY											
Combined Filter Effluent	NTU			Highest	0.08	0.07	0.07	0.07	0.06		
(CFE) Turbidity ^(a)	%	TT	NA	% ≤ 0.3	100	100	100	100	100	Soil runoff	
MICROBIOLOGICAL (b)											
	% Positive	ve		Range		Distribution \$	Systemwide:	0 - 0.3		Naturally present in the	
Total Coliform Bacteria ^(c)	Monthly Samples	TT	MCLG = 0	Average		Distribution \$	Systemwide:	0.07		environment	
INORGANIC CHEMICALS											
Aluminum ^(d)			600	Range	ND - 70	ND - 83	ND - 68	ND - 110	ND - 71	Residue from water treatment process; runoff	
Aluminum	ppb	1,000	600	Highest RAA	105	ND	60	113	115	and leaching from natural deposits	
Barium	ppb	1,000	2,000	Range	ND	ND	ND	116	ND	Oil and metal refineries discharge; natural deposits	
Danum				Average	ND	ND				erosion	
	ppm 2.0	opm 2.0		Range Average	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	Runoff and leaching from natural deposits; water additive that promotes	
Fluoride ^(e)			1			Distribution S	strong teeth; discharge from fertilizer and				
					0.7	0.7	0.7	0.7	0.7	aluminum factories	
						Distribution S					
Nitrate (as Nitrogen)	gen) ppm -	ppm 10	10	Range	0.7	1.0	0.8	ND	0.8	Runoff and leaching from fertilizer use; septic tank and sewage; natural	
Millate (as Millogen)		10	IU	Average	0.7	1.0	0.0		0.0	deposits erosion	
RADIONUCLIDES (f)											
Gross Alpha Particle	pCi/L 15	pCi/l 15	MCLG = 0	Range	ND - 5	ND	ND	ND - 4 ND	Runoff/leaching from		
Activity				Average	ND					natural deposits	
Gross Beta Particle Activity	pCi/L	50	MCLG = 0	Range	ND - 6	ND	ND - 4	ND - 8	ND - 6	Decay of natural and man-made deposits	
				Average	ND		ND	ND	ND		
Radium-228	pCi/L	NA	0.019	Range Average	ND	ND	ND - 1 ND	ND	ND	Erosion of natural deposits	
Combined Radium-				Range			ND - 1				
226 + 228	pCi/L	5	MCLG = 0	Average	ND	ND	ND	ND	ND	ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	Range	ND - 3	2 - 3	ND	ND - 3	ND - 3	Erosion of natural deposits	
	F 0.7 E			Average	1	2		2	ND		

В	С	D	F	G	н				l i se		
	Treatment 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	
DISINFECTION BYPRODUC	TS, DISINF	ECTANT RESIDU	ALS, AND DISINF	ECTION BY	PRODUCT PI	RECURSORS	(g)				
					29 - 68	16 - 56	18 - 67	21 - 37	18 - 34		
Total Trihalomethanes (TTHM)				Range	D	istribution Sy	/stemwide: 1	6 - 74	1	Byproduct of drinking	
(Plant Core Locations and Distribution	ppb	80	NA	Highest	45	32	50	31	26	water chlorination	
System) ^(h)				LRAA	D	istribution Sy	/stemwide: 5	0	1		
Sum of Five Haloacetic				Range	5.0 - 32	2.8 - 7.1	ND - 32	1.7 - 26	ND - 8.9	_	
Acids (HAA5) Plant Core Locations	ppb	60	NA	Kange	D	istribution Sy	/stemwide: N	ND - 33	1	Byproduct of drinking	
and Distribution System) ^(h)	ppp			Highest	19	6.3	14	15	6.2	water chlorination	
system) 🐃				LRAA	D	istribution Sy	/stemwide: 1	9			
		10	0.1	Range	ND - 6.3	ND - 14	ND - 20	ND - 2.6	ND - 12	Byproduct of drinking	
Bromate	ppb	10	0.1	Highest RAA	ND	7.6	6.7	ND	2.4	water ozonation	
				Range	Distribution Systemwide: 1.2 - 3.0					Drinking water disinfectan	
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	Highest RAA	D	istribution Sy	added for treatment				
Total Organic Carbon (TOC)	ppm	TT	NA	Range	2.1 - 3.0	1.4 - 2.6	1.8 - 2.7	2.3 - 3.0	1.8 - 3.0	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts	
				Highest RAA	2.4	2.1	2.2	2.6	2.4		
SECONDARY STANDARDS	6 - Aesthetic	Standards									
				Range	ND - 70	ND - 83	ND - 68	ND - 110	ND - 71	Residue from water	
Aluminum ^(d)	ppb	200	600	Highest RAA	105	ND	60	113	115	 treatment process; runoff and leaching from natural deposits 	
				Range	42 - 91	48 - 58	38 - 44	72 - 110	34 - 55	Runoff/leaching from	
Chloride	ppm	500	NA	Average	66	53	41	91	44	natural deposits; seawater influence	
					1-2						
Color	Color Units	15	NA	Range		1	1	1	1	Naturally-occurring organic materials	
	onito			Average	2						
<u> </u>		_		Range	_	_	_	2		Naturally-occurring	
Odor Threshold	TON 3	3	NA	Average	2	2	2 2	2	2	organic materials	
				Range	424 - 859	578 - 604	357 - 359	664 - 1,040	357 - 507	Substances that	
Specific Conductance	µS/cm	1,600	NA							form ions in water;	
				Average	642	591	358	852	432	seawater influence	
Sulfate	nnm	500	NA	Range	70 - 175	95 - 112	32 - 50	113 - 236	51 - 72	Runoff/leaching from natural deposits:	
Sandto	ppm	500		Average	122	104	41	174	62	from natural deposits; industrial wastes	
				Range	253 - 534	357 - 367	200 - 207	401 - 670	209 - 296	D ((1)))	
Total Dissolved Solids (TDS) ⁽ⁱ⁾	ppm	1,000	NA	Average	394	362	204	536	252	Runoff/leaching from natural deposits	

В	С	D	F	G	н					I.	
	Treatment 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	
DISINFECTION BYPRODUC	TS, DISINFE	ECTANT RESIDU	ALS, AND DISINF	ECTION BY	PRODUCT PI	RECURSORS	(g)				
Total Trihalomethanes	methanes 29 - 68 16 - 56 18 - 67 21 - 37 18 - 34										
(TTHM) (Plant Core Locations	ppb	80	NA	Range	D	istribution Sy	vstemwide: 1	6 - 74	1	Byproduct of drinking water chlorination	
and Distribution System) ^(h)	ppp			Highest	45	32	50	31	26		
				LRAA			vstemwide: 5				
Sum of Five Haloacetic Acids (HAA5)				Range	5.0 - 32	2.8 - 7.1	ND - 32	1.7 - 26	ND - 8.9		
(Plant Core Locations and Distribution	ppb	60	NA		19	6.3	vstemwide: N 14	15	6.2	Byproduct of drinking water chlorination	
System) ^(h)				Highest LRAA			vstemwide: 1		0.2	-	
				Range	ND - 6.3	ND - 14	ND - 20	ND - 2.6	ND - 12	Byproduct of drinking	
Bromate	ppb	10	0.1	Highest RAA	ND	7.6	6.7	ND	2.4	water ozonation	
Total Oblasian Desidual				Range	D		Drinking water disinfectant				
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	Highest RAA	D	istribution Sy		added for treatment			
Total Organic Carbon				Range	2.1 - 3.0	1.4 - 2.6	1.8 - 2.7	2.3 - 3.0	1.8 - 3.0	Various natural and man-made sources; TOC	
(TOC)	ppm	TT	NA	Highest RAA	2.4	2.1	2.2	2.6	2.4	is a precursor for the formation of disinfection byproducts	
SECONDARY STANDARDS	6 - Aesthetic	Standards									
				Range	ND - 70	ND - 83	ND - 68	ND - 110	ND - 71	Residue from water	
Aluminum ^(d)	ppb	200	600	Highest RAA	105	ND	60	113	115	treatment process; runoff and leaching from natural deposits	
Chloride		500	NA	Range	42 - 91	48 - 58	38 - 44	72 - 110	34 - 55	Runoff/leaching from natural deposits;	
Chioride	ppm	500	NA	Average	66	53	41	91	44	seawater influence	
	Color Units			Range	1 - 2					Naturally-occurring	
Color		15	NA	Average	2	1	1 1	1	1	organic materials	
				Range							
Odor Threshold	TON	3	NA	Average	2	2	2	2	2	Naturally-occurring organic materials	
		1.000		Range	424 - 859	578 - 604	357 - 359	664 - 1,040	357 - 507	Substances that	
Specific Conductance	µS/cm	1,600	NA	Average	642	591	358	852	432	form ions in water; seawater influence	
				Range	70 - 175	95 - 112	32 - 50	113 - 236	51 - 72	Runoff/leaching	
Sulfate	ppm	500	NA	Average	122	104	41	174	62	from natural deposits; industrial wastes	
Total Dissolved Solids	ssolved Solids ppm 1,000 NA	Range	253 - 534	357 - 367	200 - 207	401 - 670	209 - 296	Runoff/leaching			
(TDS) ⁽ⁱ⁾	ppm	1,000		Average	394	362	204	536 252 from natural	from natural deposits		

ABBREVIATIONS AND DEFINITIONS

Average Arithmetic mean

- CFE Combined Filter Effluent
- LRAA Locational Running Annual Average; 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 (USEPA).
- 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
- Not Detected at or above DLR or RL ND

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 HPCs, 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 system requirements. Fluoride feed systems were temporarily out of service during treatment plant shutdowns and/or maintenance work in 2023, resulting in occasional fluoride levels below 0.7 mg/L.

- **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.
- parts per billion or micrograms per liter (µg/L) daa
- ppm parts per million or milligrams per liter (mg/L)
- Running Annual Average; highest RAA is the highest RAA 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.
- 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 (Primary Drinking Water Standards) -MCLs, MRDLs and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements.
- Secondary Standards Requirements that ensure the appearance, taste, and smell of drinking water are acceptable.
- (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 MCLs is based on RAA or LRAA, as appropriate. Plant core locations for TTHM and HAA5 are service connection specific to each of the treatment plant effluents.
- (h) PHG assigned for each analyte: THMs (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) as 0.06 ppb, 0.5 ppb, 0.4 ppb, and 0.1 ppb, respectively; and for each HAA5 (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid and dibromoacetic acid) as 53 ppb, 0.2 ppb, 0.1 ppb, 25 ppb, and 0.03 ppb, respectively. Health risk varies with different combinations and ratios of the other THMs and HAA5 in a particular sample.
- (i) Metropolitan's TDS compliance data are based on flowweighted 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."

Other Detected Constituents that May Be of Interest to Consumers

Fifty years of service by the Water Quality Section is the story of people - their dedication, skill and accomplishments. The make up of our workforce, with their fields of expertise and specialty, keep pace with a growing population, environmental challenges, science and technology and additional regulations - all in service of protecting public health.

This legacy of oversight started long before the section was officially formed to coincide with the adoption of the Safe Drinking Water Act in 1974. It dates to the earliest days of Metropolitan.



Today, Metropolitan employs more than 100 chemists, engineers, microbiologists, lab technicians, limnologists, biologists, and other

specialists from different fields of expertise to actively monitor and protect the region's drinking water supply from known and emerging contaminant threats.



				Treatment Plant E			
Parameter	Units	NL	Range Average	Diemer Plant	Jensen Plant		
			Range	66 - 102	85 - 102		
Alkalinity (as CaCO ₃)	ppm NA Average		Average	84	94		
_		1 000	Range	100	190		
Boron	ppb	1,000	Average	Plant 66 - 102 84 130 25 - 52 38 1.4 - 9.7 5.7 19 12.1 - 12.6 12.4 0.25 - 0.83 0.54 99 - 220 160 15 90 - 21 15 9.6 - 21 15 ND			
			Range	25 - 52	39 - 40		
Calcium	ppm	NA	Average	38	40		
Calcium Carbonate			Range	1.4 - 9.7	1.2 - 7.9		
Precipitation Potential (CCPP) (as $CaCO_3$) ^(a)	ppm	NA	Average	5.7	4.1		
			Range		ND		
Chlorate	ppb	800	Average	Plant 66 - 102 84 130 25 - 52 38 1.4 - 9.7 5.7 19 12.1 - 12.6 12.4 0.25 - 0.83 0.54 99 - 220 160 ND - 30 15 9.6 - 21 15 ND 15 ND 15 15 15 15 15 15 15 15 15 15			
Corrosivity ^(b)			Range	12.1 - 12.6	12.2 - 12.6		
as Aggressiveness Index	AI NA		Average	12.4	12.4		
Corrosivity ^(c)			Range	0.25 - 0.83	0.19 - 0.79		
as Saturation Index	SI	NA	Average	Plant 66 - 102 84 130 25 - 52 38 1.4 - 9.7 5.7 19 12.1 - 12.6 12.4 0.25 - 0.83 0.54 99 - 220 160 15 9.6 - 21 15 9.6 - 21 15 15 15 15 15 15 15 16 15 15 16 15 15 16 15 16 15 16 15 16 15 16 15 16 15 16 16 16 16 16 16 16 16 16 16	0.49		
			Range	99 - 220	138 - 153		
Hardness (as CaCO ₃)	ppm	NA	Average	66 - 102 84 130 25 - 52 38 1.4 - 9.7 5.7 19 12.1 - 12.6 12.4 0.25 - 0.83 0.54 99 - 220 160 ND - 30 15 9.6 - 21 15 9.6 - 21 15 15 15 15 15 15 15 15 15 15 15 15 15	146		
			Range	ND - 30	ND - 10		
Lithium	ppb	NA	Average	15	ND		
			Range	9.6 - 21	10 - 12		
Magnesium	ppm	NA	Average	15	11		
			Range	ND	3.5		
N-Nitrosodimethyl-	ppt	10		E	Distribution S	y:	
amine (NDMA)		PHG = 3	Average	ND	3.5		
				C	istribution S	y	
Perfluorobutanoic acid	ppt	NA	Range	ND	ND		
(PFBA) ^(d)	۲۳.		Average				

Major Sources in nent Plant Effluents and Distribution System **Drinking Water** Mills Skinner Weymouth Plant Plant Plant Runoff/leaching of natural 57 - 64 92 - 125 65 - 78 deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, 60 108 72 silicate, and phosphate Runoff/leaching from natural 130 130 140 deposits; industrial wastes 17 - 20 39 - 72 20 - 28 Runoff/leaching from natural deposits 18 56 24 A measure of the balance 1.3 - 9.4 0.6 - 4.1 4.2 - 10 between pH and calcium carbonate saturation in 2.3 7.1 4.2 the water Byproduct of drinking ND 17 19 water chlorination; industrial processes 12.1 - 12.4 A measure of the balance 11.9 - 12.1 between pH and calcium 12.5 carbonate saturation in 12.0 12.2 the water A measure of the balance 0.13 - 0.42 0.62 - 0.75 0.21 - 0.58 between pH and calcium carbonate saturation in 0.28 0.68 0.39 the water Runoff/leaching from natural 79 - 80 165 - 291 81 - 122 deposits; sum of polyvalent cations, generally magnesium 80 228 102 and calcium present in the water Naturally-occurring; used in ND - 13 18 - 43 electrochemical cells, batteries, ND and organic syntheses and 30 ND pharmaceuticals 7.8 - 8.9 15 - 27 7.8 - 13 Runoff/leaching from natural deposits 8.4 21 10 ND 3.2 ND Systemwide: ND - 5.3 Byproduct of drinking water chloramination; industrial ND ND 3.2 processes Systemwide: 2.2 Industrial chemical factory discharges; runoff/leaching ND 2.0 ND from landfills; used in fireretarding foams and various industrial processes

		Treatment Plant Effluents and Distribution System														
Parameter	Units	NL	Range Average	Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant								
	pН		Range		8.2 - 8.6	8.5 - 8.7	8.2 - 8.5									
рН	Units	NA	Average	8.5	8.4	8.6	8.4	8.6	Not Applicable							
			Range	2.6 - 4.3	2.4 - 2.6		3.6 - 4.8	2.6 - 3.0	Salt present in the wa							
Potassium	ppm	NA	Average	3.4	2.5	2.5	4.2	2.8	naturally-occurring							
					Range	47 - 91	60 - 68	39 - 40	69 - 103	39 - 55	Salt present in the wa					
Sodium	ppm	NA	Average	69	64	40	86	47	naturally-occurring							
Sum of Five			Range	5.8 - 21	3.9 - 5.1	4.6 - 25	8.2 - 21	ND - 5.9	Byproduct of drinking chlorination							
Haloacetic Acids (HAA5) ^(e)	ppb	MCL = 60	Average	14	4.4	11	13	4.1								
Total Dissolved Solids			Range	230 - 642	305 - 366	153 - 300	378 - 642	210 - 641	Runoff/leaching from							
(TDS) ^(f)	ppm	MCL = 1,000	Average	433	347	228	501	357	natural deposits							
Total Trihalomethanes	omethanes		_		_	_		_		Range	23 - 57	11 - 78	16 - 76	13 - 76	13 - 68	Byproduct of drinking
(TTHM) ^(e)	ppb	MCL = 80	Average	38	23	49	30		water chlorination							
Vanadium			Range						Naturally-occurring; in							
	ppb	NL = 50	Average	3.1	3.9	3.3	ND	3.4	Naturally-occurring; in waste discharge							

ABBREVIATIONS AND DEFINITIONS

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

NL

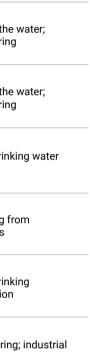
- AI Aggresiveness Index
- **CaCO**, Calcium Carbonate
- **CCPP** Calcium Carbonate Precipitation Potential
- **CCRDL** Consumer Confidence Report Detection Level
- MRL Minimum Reporting Level
 - Notification Level The level at which notification by the public water system to SWRCB is required.
- parts per trillion or nanograms ppt per liter (ng/L)

Saturation Index

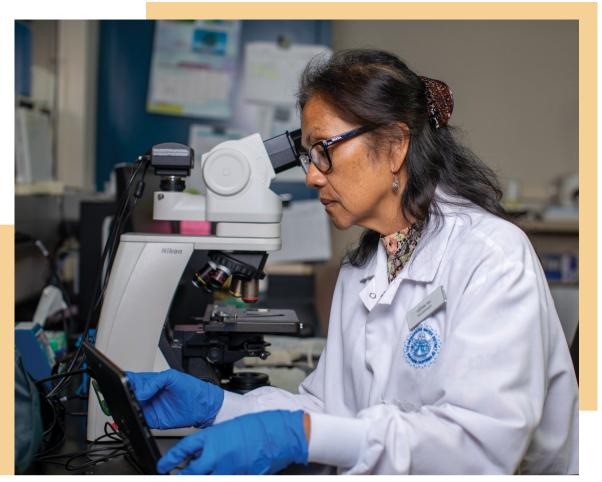
SI

SWRCB State Water Resources Control Board UCMR5 Fifth Unregulated Contaminant Monitoring Rule

- 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) Al \geq 12.0 indicates non-aggressive water; Al 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 a non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI indicates a corrosive; tendency to dissolve calcium carbonate. Reference: Standard Methods (SM2330)
- (d) CCRDL is based on the EPA UCMR5 MRLs for the 29 constituents detected by EPA Methods 533 and 537.1. Results below CCRDLs are considered "ND". PFAS results below the CCRDLs but above the laboratory reporting levels are included in this report.
- (e) HAA5 and TTHM noncompliance samples collected at treatment plant effluents.
- (f) 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.







Our water quality team consists of scientists and lab assistants who assure quality in daily operations.

Learn More

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

STATE WATER RESOURCES CONTROL **BOARD'S 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-and-drinking-water CONSUMER INFORMATION epa.gov/CCR

INFORMATION ABOUT DRINKING WATER STANDARD SETTING epa.gov/dwstandardsregulations

To keep pace with new regulations

improved technology, and research

to accommodate more functions

for workflow improvements, more

testing and research, better storage

call for a reimagining of the space,

expected by the end of this decade.

and rooms for specialized instruments

needs, the original lab was expanded

within its physical structure. The need

and water quality challenges,

WE MONITOR THE DRINKING WATER THAT SERVES 19 MILLION **PEOPLE IN SOUTHERN** CALIFORNIA.

IN A TYPICAL YEAR WE GENERATE ABOUT 250,000 WATER **OUALITY TEST RESULTS.**

> OUR SCUBA DIVERS HAVE LOGGED NEARLY 4,400 DIVES IN OUR **RESERVOIRS.**

"NEXT CHAPTER"

What lies ahead for the next 50 years? If history is any indicator, expect change and challenges. We can also expect Metropolitan to meet the moment and develop innovative solutions and strategies. Two exciting initiatives on the horizon include an upgraded laboratory facility and a growing role in the monitoring and treatment for a large-scale water sustainability solution in the Pure Water Southern California program.



Early conceptual drawing for laboratory entrance.

OUR NEAREST ROUTINE SAMPLE LOCATION IS ABOUT A QUARTER MILE FROM THE WATER QUALITY LAB; THE FURTHEST LOCATION IS 250 MILES AWAY.

TRAVEL MORE THAN 150,000 MILES EACH YEAR.

SAMPLE COLLECTORS

WE MONITOR FOR **120 REGULATED** CONSTITUENTS AND ABOUT **280 NON-REGULATED** CONSTITUENTS.

WE RELY ON NEARLY **500 DIFFERENT** TYPES OF ANALYTICAL EQUIPMENT AND USE ABOUT **150 ANALYTICAL** METHODS.

WE ANALYZE ABOUT **16.000** MICROBIOLOGY SAMPLES FOR COLIFORMS EACH YEAR - INDICATORS FOR POSSIBLE CONTAMINATION.

ABOUT 476,000 GALLONS **OF WATER** FROM THE DEMONSTRATION PLANT AT THE **GRACE F. NAPOLITANO PURE** WATER SOUTHERN CALIFORNIA **INNOVATION CENTER** HAVE BEEN ANALYZED FOR PATHOGENS PROVIDING IMPORTANT TREATMENT DATA.

IN ITS **50** YEAR HISTORY. MORE THAN **750** STAFF MEMBERS HAVE WORKED IN WATER QUALITY.

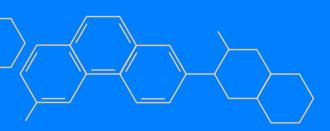
SINCE 1986, WE HAVE CONDUCTED OR PARTICIPATED IN ABOUT **85 PROJECTS** WITH MORE THAN \$25 MILLION IN EXTERNAL GRANT FUNDING TO CONDUCT APPLIED RESEARCH ON IMPROVED WATER TREATMENT AND DISINFECTION, PATHOGEN DETECTION, DISINFECTION BYPRODUCTS, AND SOURCE WATER PROTECTION.



2024 ANNUAL DRINKING WATER QUALITY REPORT

Covering the reporting period January – December 2023

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 district's downtown Los Angeles headquarters building at 700 N. Alameda St., Los Angeles, adjacent to historic Union Station. More information is available at mwdh20.com.

Printed by MWD Imaging Services July 2024 1,000

Arabic

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 ឬពិគ្រោះជាមួយអ្នកដែល 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.