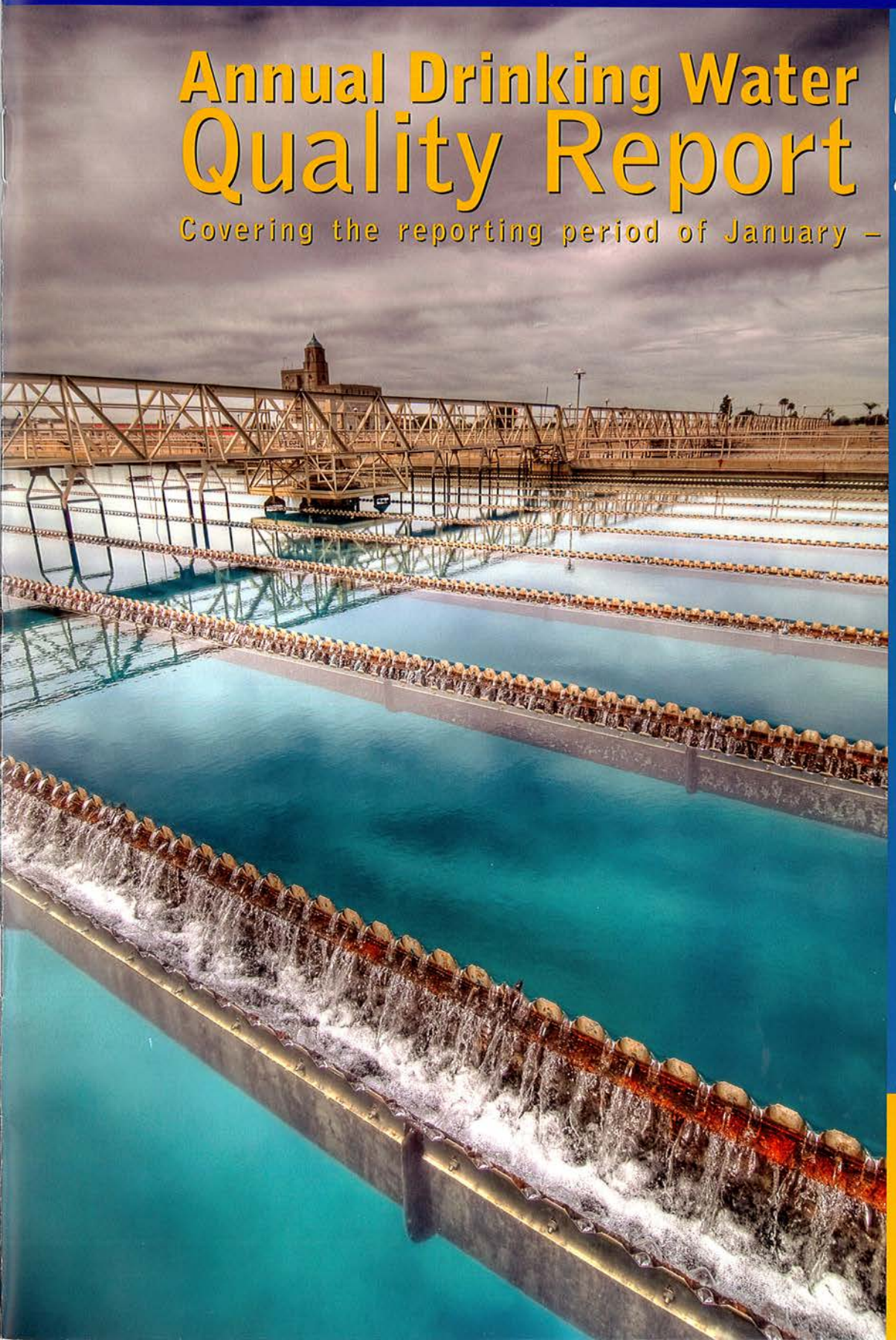
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

WATER QUALITY EXCELLENCE

Annual Drinking Water Quality Report 2012

Covering the reporting period of January – December 2011



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

READ THIS REPORT TO LEARN MORE about water provided by Metropolitan, how it compares favorably to all drinking water standards, and what is being done to further protect **19 million Southland consumers.**

About The Metropolitan Water District of Southern California

Metropolitan is a regional wholesaler that provides water for 26 member public agencies to deliver to 19 million people living in Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members develop increased water conservation, recycling, storage and other resource-management programs.

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

Cover: F.E. Weymouth Water Treatment Plant in LaVerne, California

A Letter from the Board Chairman

The Metropolitan Water District of Southern California is a regional wholesaler that delivers water to 26 member public agencies serving 19 million people living throughout a 5,200 square-mile service area in Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties.

Metropolitan was established in 1928 under an act of the state Legislature to construct and operate the 242-mile Colorado River Aqueduct which runs from Lake Havasu on the California-Arizona border to Metropolitan's Lake Mathews reservoir in Riverside County.

Today, Metropolitan owns and operates an extensive range of facilities including the Colorado River Aqueduct, 16 hydroelectric facilities, nine reservoirs, nearly a thousand miles of large-scale pipes and five water treatment plants. Four of these treatment plants are among the 10 largest plants in the world. And, Metropolitan is the largest distributor of treated drinking water in the United States.

To help ensure the delivery of a safe and reliable water supply, each year Metropolitan tests its water for almost 400 constituents and performs nearly 250,000 water quality tests on samples gathered from throughout our vast distribution system. Analysis of these samples is undertaken at Metropolitan's state-of-the art water quality laboratory.

We are pleased to present this Annual Drinking Water Quality Report which provides a summary of our water quality and monitoring data for our member agencies and the communities we serve. A core feature of the report is a detailed table that illustrates year-round monitoring results. A Readers Guide is also included which helps further explain the data reported. To learn about additional water quality and supply issues, visit Metropolitan's Web site at mwdh2o.com and click on to the "Spotlight on Water" section. You may also contact Dr. Mic Stewart, Metropolitan's Manager of Water Quality, at (213) 217-5696 or mstewart@mwdh2o.com.

Metropolitan's Board of Directors typically meets on the second Tuesday of each month. Board committee meetings usually occur on the Monday preceding the Tuesday board meeting. These meetings are convened at Metropolitan's headquarters in downtown Los Angeles, 700 N. Alameda Street, adjacent to Union Station and are open to the public. To receive a board meeting agenda or to check on the date and start time for meetings, click on the Board of Directors link at the top of the right hand column of Metropolitan's Web site, mwdh2o.com.

On behalf of the board and staff at Metropolitan, I hope you find this report to be comprehensive and informative.

Sincerely,

John V. Foley

John V. Foley

Chairman, Metropolitan Board of Directors

Drinking Water and Your Health

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

DRINKING WATER, INCLUDING BOTTLED WATER, MAY REASONABLY BE expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at (800) 426-4791 or visiting their Web site at epa.gov/safewater/.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activities.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses, bacteria and protozoa that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife

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

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

Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoffs, agricultural application, and septic systems

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

In order to ensure that tap water is safe to drink, the USEPA and the State Department of Public Health (Department) prescribe regulations that limit the amounts of certain contaminants in water provided by public water systems. Department and U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that provide the same protection for public health.

Protecting Water Quality at the Source

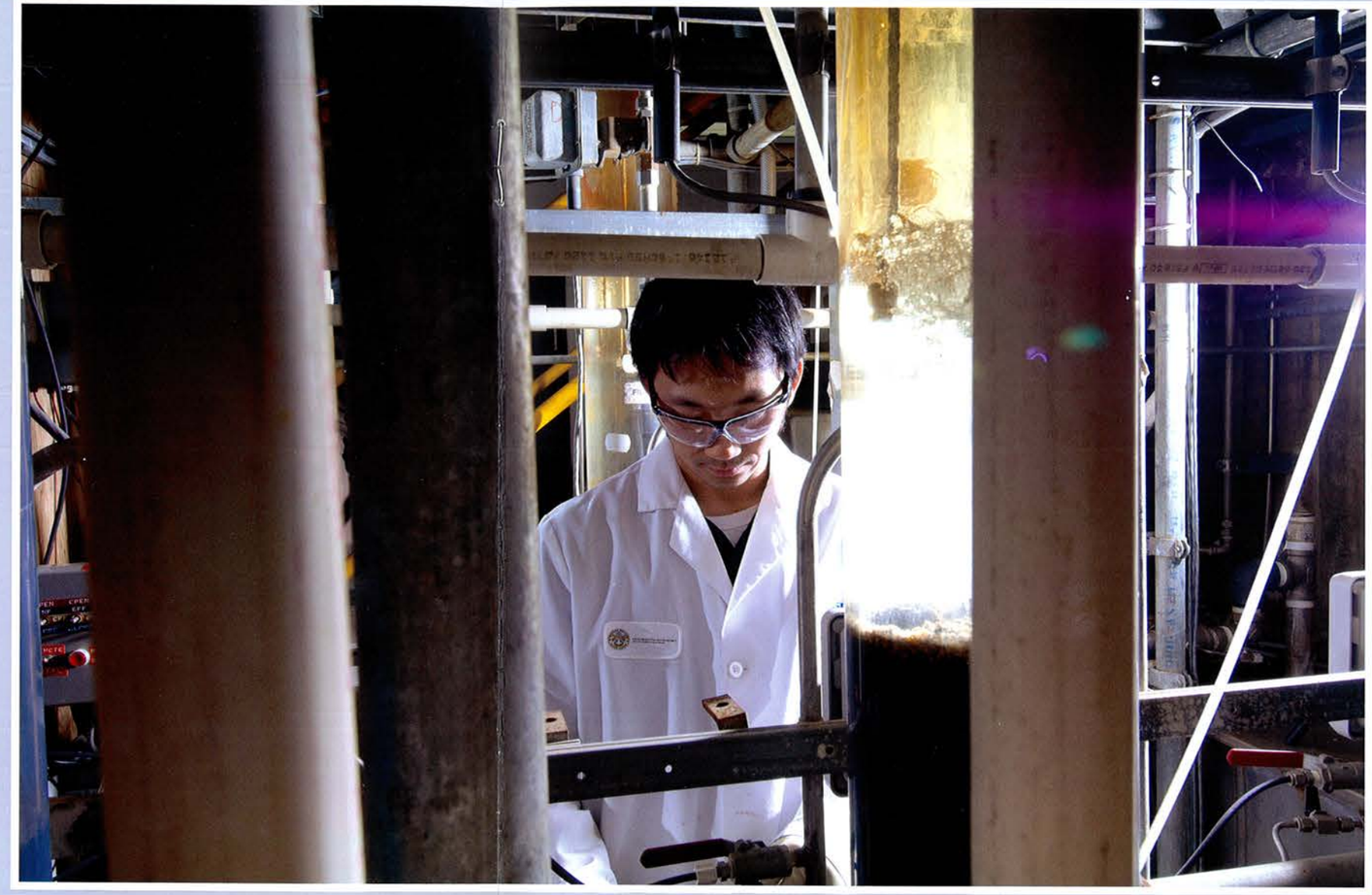
SOURCE WATER PROTECTION IS AN IMPORTANT ISSUE FOR ALL OF CALIFORNIA. Large water utilities are required by the Department to conduct a Watershed Sanitary Survey every five years to examine possible sources of drinking water contamination. Metropolitan's updated Colorado River and State Water Project surveys were submitted to the Department in early 2012, and include suggestions for how to better protect these source waters.

Source waters used by Metropolitan — the Colorado River and State Water Project — each have different water quality challenges. Both are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed factors that could affect water quality. Treatment to remove specific contaminants can be quite costly and more expensive than protecting water at the source, which is why Metropolitan invests in watershed protection programs.

USEPA also requires utilities to complete one Source Water Assessment (SWA) based on the watershed sanitary surveys. Metropolitan completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

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

For a summary of either the Watershed Sanitary Survey or the Source Water Assessment, please call (213) 217-6850.



Health Advisory for People with Weakened Immune Systems

Some possible constituents, such as *Cryptosporidium,* are known to especially affect people with weakened immune systems. These people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants or have HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline, (800) 426-4791.

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

California Department of Public Health
Office of Drinking Water, 1616 Capitol Avenue
PO Box 997377, MS 7400
Sacramento, CA 95899-7377
http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
Headquarters Office (916) 449-5600

U.S. Environmental Protection Agency
Office of Ground and Drinking Water (4601)
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0003

Safe Drinking Water Hotline
(800) 426-4791
http://www.epa.gov/safewater/
(General drinking water information)

http://www.epa.gov/safewater/standard/index.html
(Information on how drinking water standards are established)

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 for nearly 400 constituents. Only the constituents that are found are listed in the table. ***Metropolitan met all primary drinking water standards in 2011.***

By reading the table from left to right, you will learn the quantity of a constituent found in Metropolitan's water and how that compares with the allowable state and federal limits. You will also see the measured range and average of the constituent and where it likely originated.

The questions and answers on this page (lettered A through I) will explain the important elements of the 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 via the Colorado River Aqueduct. The table shows the percentage of the total water delivered by Metropolitan that is from the State Water Project. The remainder is from the Colorado River.

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.

C How are constituents reported?

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

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

Health agencies have maximum contaminant levels (MCLs) for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters "TT" in the MCL column because they do not have a numerical MCL. Instead, they have certain treatment requirements that have to be met to reduce their levels in drinking water. One of the constituents, total chlorine residual, has an MRDL (maximum residual disinfection level) instead of an MCL. The MRDL is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. While disinfectants are necessary to kill harmful microbes, drinking water regulations protect against too much disinfectant being added. Another constituent, turbidity, has a requirement that 95 percent of the measurements taken must be below a certain number. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

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

Constituents that are grouped in the primary standards section may cause health problems at certain levels. In general, if the average amount of a constituent is greater than the MCL, the water may not be safe to drink.

Constituents grouped in the secondary standards section can affect the appearance, taste and smell of water. These substances do not affect the safety of the water unless they also have a primary standard. Some constituents (e.g., aluminum) have two different MCLs, one for health-related impacts, and another for non-health-related impacts.

F What are Public Health Goals (PHG) and Maximum Contaminant Level Goals (MCLG)?

PHGs and MCLGs are targets or goals set by regulatory agencies for the water industry. They define a constituent level in the water that does not pose any significant threat to health. It is oftentimes 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. Further, sometimes the MCLGs or PHGs are so low they cannot even be measured by today's technology. That is why PHGs and MCLGs are considered goals to work toward, and not realistic standards that can be enforced.

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 **, if the AVERAGE amount of a constituent found in tap water over the course of a year is no greater than the MCL, then the regulatory requirements are considered to be satisfied. The highest and very lowest levels measured over a year are shown in the RANGE. Requirements for safety, appearance, taste and smell are based on the AVERAGE levels recorded and not the RANGE.

Water agencies have specific procedures to follow if a constituent is found at levels higher than the MCL and considered a potential threat to public health. News is shared immediately with the regulatory agencies and broadcast to the public, usually via the news media. If there is no health threat but standards are exceeded, the situation is reported to the regulatory agencies and noted in this annual water quality report.

**Some constituents have special rules described in the footnotes to the water quality table. Constituents that have the letters "TT" instead of a numerical MCL meet the drinking water standard if there is also a "TT" in the columns designated as "H."

H What are the testing results for each of Metropolitan's treatment plants?

Metropolitan operates five water treatment plants and the monitoring results for the water 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.

I How do constituents get into the water supply?

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

2011 Water Quality Table

	B	C	D	F	G	H					I
						Treatment Plant Effluent					
	Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Weymouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources in Drinking Water
A	Percent State Project Water	%	NA	NA	Range **Average**	24 - 100 55	0 - 100 42	100 100	30 - 83 56	100 100	NA
E	**PRIMARY STANDARDS - Mandatory Health-Related Standards**										
	CLARITY										
	Combined Filter Effluent Turbidity	NTU %	0.3 95 (a)	NA	Highest **% < 0.3**	0.07 100	0.08 100	0.05 100	0.09 100	0.13 100	Soil runoff
	MICROBIOLOGICAL										
	Total Coliform Bacteria (b)	%	5.0	(0)	Range **Average**	**Distribution System-Wide:** ND - 0.1 **Distribution System-Wide:** ND					Naturally present in the environment
	Heterotrophic Plate Count (HPC) (c)	CFU/mL	TT	NA	Range **Median**	**Distribution System-Wide:** TT **Distribution System-Wide:** TT					Naturally present in the environment
	ORGANIC CHEMICALS										
	Acrylamide	NA	TT	(0)	Range **Average**	TT TT	TT TT	TT TT	TT TT	TT TT	Water treatment chemical impurities
	Epichlorohydrin	NA	TT	(0)	Range **Average**	TT TT	TT TT	TT TT	TT TT	TT TT	Water treatment chemical impurities
	INORGANIC CHEMICALS										
	Aluminum (d)	ppb	1,000	600	Range **Highest RAA**	ND - 220 110	ND - 240 140	61-99 86	ND ND	ND - 100 84	Residue from water treatment process; natural deposits erosion
	Arsenic	ppb	10	0.004	Range **Average**	ND ND	ND ND	2.3 2.3	ND ND	ND ND	Natural deposits erosion; glass and electronics production wastes
	Fluoride (e) (treatment-related)	ppm	2.0	1	Control Range **Optimal Fluoride Level**	0.7 - 1.3 0.8	0.7 - 1.3 0.8	0.7 - 1.3 0.8	0.7 - 1.3 0.8	0.6 - 1.2 0.7	Water additive for dental health
					Range **Average**	0.7 - 1.0 0.8	0.5 - 1.0 0.8	0.7 - 0.9 0.8	0.7 - 0.9 0.8	0.2 - 0.8 0.7	
					Range	**Distribution System-Wide:** 0.2 - 1.0					
	Nitrate (as N) (f)	ppm	10	10	Range **Average**	ND - 0.4 ND	ND - 0.4 ND	0.4 - 0.5 0.4	ND ND	ND - 0.7 0.5	Runoff and leaching from fertilizer use; sewage; natural deposits erosion
	RADIONUCLIDES (g)										
	Gross Alpha Particle Activity	pCi/L	15	(0)	Range **Average**	ND - 3 ND	ND - 3 3	ND ND	ND - 3 ND	ND ND	Erosion of natural deposits
	Gross Beta Particle Activity (h)	pCi/L	50	(0)	Range **Average**	ND - 6 4	ND - 4 ND	ND - 4 ND	ND - 5 ND	ND ND	Decay of natural and man-made deposits
	Uranium	pCi/L	20	0.43	Range **Average**	1 - 2 2	2 2	ND - 2 1	ND - 2 1	ND - 1 1	Erosion of natural deposits
	DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (i)										
	Total Trihalomethanes (TTHM) (j)	ppb	80	NA	Range **Average**	48 - 68 57	37 - 58 48	20 - 47 28	11 - 36 22	9.3 - 30 19	By-product of drinking water chlorination
	Total Trihalomethanes (TTHM) (j)	ppb	80	NA	Range **Highest RAA**	**Distribution System-Wide:** 8.5 - 77 **Distribution System-Wide:** 43					By-product of drinking water chlorination
	Haloacetic Acids (five) (HAA5) (k)	ppb	60	NA	Range **Average**	17 - 33 26	15 - 25 20	1.8 - 3.4 2.4	1.0 - 11 5.9	1.4 - 6.2 4.5	By-product of drinking water chlorination
	Haloacetic Acids (five) (HAA5) (k)	ppb	60	NA	Range **Highest RAA**	**Distribution System-Wide:** ND - 54 **Distribution System-Wide:** 18					By-product of drinking water chlorination
	Total Chlorine Residual	ppm	[4.0]	[4.0]	Range **Highest RAA**	**Distribution System-Wide:** 1.3 - 2.8 **Distribution System-Wide:** 2.3					Drinking water disinfectant added for treatment
	Bromate (l)	ppb	10	0.1	Range **Highest RAA**	NA NA	NA NA	ND - 8.8 5.9	ND - 12 5.2	ND - 7.6 4.5	By-product of drinking water ozonation
	DBP Precursor Control (TOC)	ppm	TT	NA	Range **Average**	TT TT	TT TT	TT TT	TT TT	TT TT	Various natural and man-made sources
E	**SECONDARY STANDARDS - Aesthetic Standards**										
	Aluminum (d)	ppb	200	600	Range **Highest RAA**	ND - 220 110	ND - 240 140	61 - 99 86	ND ND	ND - 100 84	Residue from water treatment process; natural deposits erosion
	Chloride	ppm	500	NA	Range **Average**	63 - 76 70	70 - 75 72	59 - 69 64	62 - 83 72	27 - 38 32	Runoff/leaching from natural deposits; seawater influence
	Color	Units	15	NA	Range **Average**	1 - 2 2	1 1	1 1	1 1	1 1	Naturally occurring organic materials
	Odor Threshold (m)	TON	3	NA	Range **Average**	2 2	2 2	2 2	**3 - 24** **9**	3 3	Naturally occurring organic materials
	Specific Conductance	µS/cm	1,600	NA	Range **Average**	320 - 870 630	320 - 960 690	420 - 530 500	390 - 840 630	230 - 480 300	Substances that form ions in water; seawater influence
	Sulfate	ppm	500	NA	Range **Average**	120 - 170 150	150 - 170 160	54 - 58 56	78 - 150 110	22 - 42 32	Runoff/leaching from natural deposits; industrial wastes
	Total Dissolved Solids (TDS)	ppm	1,000	NA	Range **Average**	390 - 480 440	440 - 490 470	280 - 290 280	300 - 460 380	150 - 190 170	Runoff/leaching from natural deposits; seawater influence
	Turbidity (a)	NTU	5	NA	Range **Average**	0.02 - 0.07 0.05	0.03 - 0.25 0.05	0.03 - 0.09 0.03	0.04 - 0.08 0.05	0.04 - 0.07 0.05	Soil runoff

ABBREVIATIONS AND DEFINITIONS

CDPH	California Department of Public Health		
CFU/mL	Colony-Forming Units per milliliter	pCi/L	picoCuries per liter
DBP	Disinfection By-Products	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

				Range	0.7 - 1.0	0.5 - 1.0	0.7 - 0.9	0.7 - 0.9	0.2 - 0.8	Water additive for dental health
Fluoride (e) (treatment-related)	ppm	2.0	1	**Average**	0.8	0.8	0.8	0.8	0.7	
				Range	**Distribution System-Wide:** 0.2 - 1.0					
Nitrate (as N) (f)	ppm	10	10	Range **Average**	ND - 0.4 ND	ND - 0.4 ND	0.4 - 0.5 0.4	ND ND	ND - 0.7 0.5	Runoff and leaching from fertilizer use; sewage; natural deposits erosion
RADIONUCLIDES (g)										
Gross Alpha Particle Activity	pCi/L	15	(0)	Range **Average**	ND - 3 ND	ND - 3 3	ND ND	ND - 3 ND	ND ND	Erosion of natural deposits
Gross Beta Particle Activity (h)	pCi/L	50	(0)	Range **Average**	ND - 6 4	ND - 4 ND	ND - 4 ND	ND - 5 ND	ND ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	Range **Average**	1 - 2 2	2 2	ND - 2 1	ND - 2 1	ND - 1 1	Erosion of natural deposits
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Bromate (l)	ppb	10	0.1	Range **Highest RAA**	NA NA	NA NA	ND - 8.8 5.9	ND - 12 5.2	ND - 7.6 4.5	By-product of drinking water ozonation
DBP Precursor Control (TOC)	ppm	TT	NA	Range **Average**	TT TT	TT TT	TT TT	TT TT	TT TT	Various natural and man-made sources
E **SECONDARY STANDARDS - Aesthetic Standards**										
Aluminum (d)	ppb	200	600	Range **Highest RAA**	ND - 220 110	ND - 240 140	61 - 99 86	ND ND	ND - 100 84	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	Range **Average**	63 - 76 70	70 - 75 72	59 - 69 64	62 - 83 72	27 - 38 32	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	Range **Average**	1 - 2 2	1 1	1 1	1 1	1 1	Naturally occurring organic materials
Odor Threshold (m)	TON	3	NA	Range **Average**	2 2	2 2	2 2	**3 - 24** **9**	3 3	Naturally occurring organic materials
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ABBREVIATIONS AND DEFINITIONS

CDPH	California Department of Public Health
CFU/mL	Colony-Forming Units per milliliter
DBP	Disinfection By-Products
DLR	Detection Limits for Purposes of Reporting
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.
N	Nitrogen
NA	Not Applicable
ND	Not Detected
NL	Notification Level
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: The highest RAA is the highest of all RAAs calculated as average of all the samples collected within a twelve-month period.
TOC	Total Organic Carbon
TON	Threshold Odor Number
TT	Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)

Primary Standards (Primary Drinking Water Standards) - MCLs and 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) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.

(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2011, two of 8,014 samples analyzed were positive for total coliforms. The MCL was not violated.

(c) All distribution system samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL. Values are based on monthly median instead of monthly averages per State guidelines and recommendations.

(d) Aluminum has both primary and secondary standards.

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

(f) State MCL is 45 mg/L as nitrate, which is the equivalent of 10 mg/L as N.

(g) Data collected (trienally) from four consecutive quarters of monitoring in 2011.

(h) CDPH considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ.

(i) Metropolitan was in compliance with all provisions of the Stage 1 Disinfectants/ Disinfection By-Products (D/DBP) Rule. Compliance was based on the RAA.

(j) Metropolitan's Reporting level is 0.5 ppb for each of the trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) which is lower than the State DLR of 1 ppb.

(k) State DLR is 1 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid; and 2 ppb for monochloroacetic acid.

(l) Metropolitan's bromate reporting level is 3 ppb, which is lower than the State DLR of 5 ppb.

(m) Data for Skinner based on the state-required quarterly monitoring following exceedance of secondary standard. The quarterly samples reported to the State were 24 TON in January, 6 TON in April, and 3 TON in July and October. Metropolitan utilizes a flavor-profile analysis (FPA) method that can detect odor occurences more accurately and found the FPA samples from this location acceptable. No taste and odor event was observed and no complaints were received during this period.

Other **Detected Constituents** That May be of Interest to Consumers

Parameter	Units	NL (PHG)	Range Average	Treatment Plant Effluent: Weymouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant
Alkalinity	ppm	NA	Range	43 - 110	48 - 120	76 - 93	71 - 110	24 - 79
			Highest RAA	82	90	85	89	55
Boron	ppb	1,000	Range	130	130	190	130	130
			Average	130	130	190	130	130
Calcium	ppm	NA	Range	41 - 54	47 - 55	26 - 28	29 - 50	14 - 17
			Average	48	51	27	40	16
Chlorate	ppb	800	Range	42	48	26	50	70
			Range	**Distribution System-Wide:** ND - 58				
Chromium VI (a)	ppb	[0.02]	Range	0.09	0.10	0.20	0.13	0.14
			Average	0.09	0.10	0.20	0.13	0.14
Corrosivity (b) (as Aggressiveness Index)	AI	NA	Range	12.1	12.1	12.0	12.2	12.0
			Average	12.1	12.1	12.0	12.2	12.0
Corrosivity (c) (as Saturation Index)	SI	NA	Range	0.20 - 0.37	0.24 - 0.33	0.18 - 0.23	0.36 - 0.41	0.14 - 0.19
			Average	0.28	0.28	0.20	0.38	0.16
Hardness	ppm	NA	Range	60 - 250	57 - 270	100 - 120	100 - 220	48 - 98
			Average	170	190	110	160	65
Heterotrophic Plate Count (HPC) (d)	CFU/mL	NA	Range	ND - 1	ND - 1	ND - 1	ND - 1	ND
			Median	ND	ND	ND	ND	ND
Magnesium	ppm	NA	Range	16 - 21	19 - 21	12	13 - 20	7 - 8
			Average	18	20	12	16	8
N-Nitrosodimethylamine (NDMA) (e,f)	ppt	10	Range	ND	ND	ND - 6	3 - 5	ND - 2
			Range	**Distribution System-Wide:** ND - 8				
pH	pH Units	NA	Range	7.8 - 8.8	7.0 - 8.6	8.1 - 8.4	7.8 - 8.5	8.3 - 8.7
			Average	8.1	8.0	8.2	8.2	8.6
Potassium	ppm	NA	Range	3.4 - 4.1	3.6 - 4.0	2.7	3.0 - 3.8	1.6 - 2.1
			Average	3.8	3.8	2.7	3.4	1.8
Sodium	ppm	NA	Range	62 - 76	67 - 77	52 - 57	54 - 74	28 - 37
			Average	69	72	54	64	32
Total Organic Carbon (TOC)	ppm	NA	Range	1.7 - 2.9	1.7 - 3.0	1.6 - 2.1	1.8 - 2.7	1.4 - 2.9
			Highest RAA	2.3	2.4	1.9	2.2	2.1
Vanadium	ppb	50	Range	ND	ND	3.4	ND	ND
			Average	ND	ND	3.4	ND	ND

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

NL Notification Level - The level at which notification of the public water system's governing body is required. Prior to 2005, NL was known as action level (AL).

ppt parts per trillion or nanograms per liter (ng/L)

Footnotes

(a) Metropolitan's Chromium VI reporting level is 0.03 ppb, which is lower than the State DLR of 1 ppb.

(b) AI <10.0 = Highly aggressive and very corrosive water
AI ≥ 12.0 = Non-aggressive water
AI (10.0 - 11.9) = Moderately aggressive water

(c) Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes
Negative SI index = corrosive; tendency to dissolve calcium carbonate

(d) All distribution system samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL. Values are based on monthly median instead of monthly averages per State guidelines and recommendations.

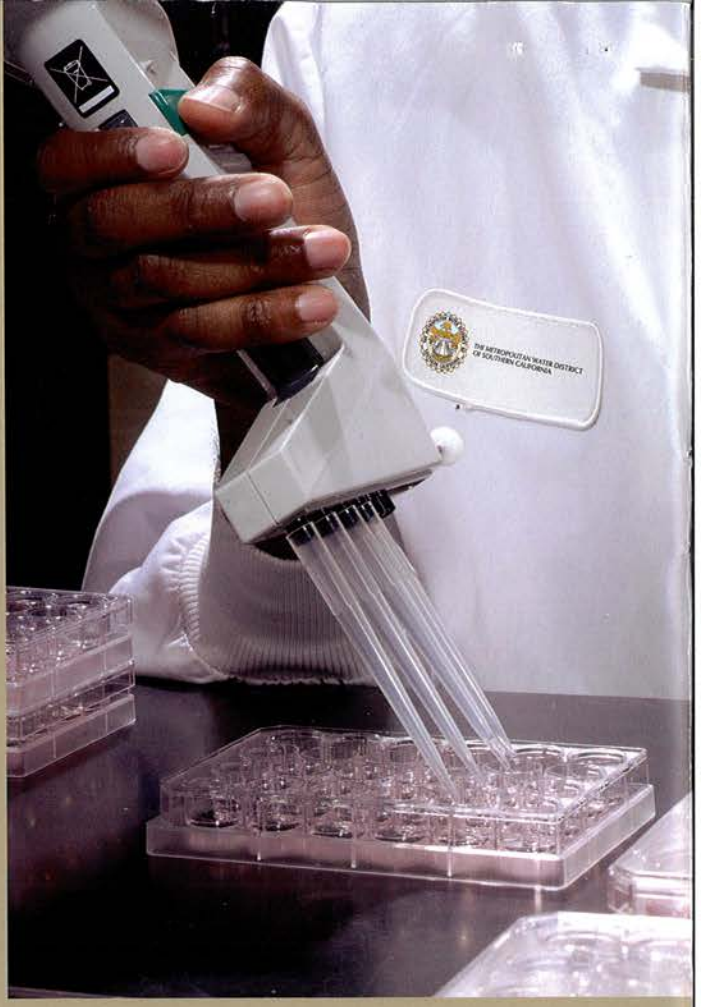
(e) Analysis was conducted by Metropolitan Water Quality Laboratory using Standard Methods 6450B (online edition).

(f) The Federal Unregulated Contaminants Monitoring Rule Second Cycle (UCMR 2) was conducted between November 2008 and August 2009 for the assessment monitoring of 10 chemical contaminants under List 1 and the screening survey of 15 contaminants under List 2. All List 1 and List 2 contaminants from the treatment plant effluent were not detected except for NDMA (List 2). Information on these samples is available upon request. Additionally, unregulated contaminants are those that do not yet have a federal drinking water standard. The purpose of the monitoring is to help USEPA decide whether the contaminants should have a standard.

The Metropolitan Water District of Southern California

Annual Drinking Water Quality Report 2012

Covering the reporting period of January – December 2011



This report is very important to read or have translated. The sentences below 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."

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។ សូមបកប្រែ ឬពិគ្រោះជាមួយអ្នកដែលមើលយល់របាយការណ៍នេះ។

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.

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