



City of  
**Manhattan Beach**  
*Annual Water*  
*Quality Report 2024*



# WATER QUALITY

The importance of water quality

## FRESHNESS

Regular testing ensures that water remains safe and clean for consumption.



## PURITY

Water quality data is essential for assessing environmental impact and public health.



## TRANSPARENCY

Clean water promotes health and well-being in communities.

## STAY INFORMED

Understanding water quality is essential for health.

Ensure clean water for a healthier future today!





## MANHATTAN BEACH 2024 ANNUAL WATER QUALITY REPORT

This report is a snapshot of last year's water quality. We included details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies. Your water is a blend of groundwater and imported surface water from Metropolitan Water District. Data below show the results for both of these sources.

Only detected results are shown; all results are from the most recent testing performed in accordance with State and Federal drinking water regulations.

Your tap water met all U.S. Environmental Protection Agency and State primary drinking water health standards last year.



## SUBSTANCES MONITORED FOR PUBLIC HEALTH

ORGANIC CHEMICALS	GROUNDWATER		SURFACE WATER		MCL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
None							
INORGANIC CHEMICALS ( b )	GROUNDWATER		SURFACE WATER		MCL	MCLG or	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE		PHG (a)	
Aluminum (µg/L)	ND	ND	52	ND-150	1,000	600	Erosion of natural deposits; residue from surface water treatment processes
Barium (µg/L)	101	ND-110	ND	ND-124	1,000	2,000	Oil drilling waste and metal refinery discharge; erosion of natural deposits
Fluoride (mg/L)	0.27	0.26-0.27	0.7	0.3-0.8	2	1	Erosion of natural deposits, water additive that promotes strong teeth
Nitrate (mg/L as N)	ND	ND	ND	ND- 0.5	10	10	Runoff and leaching from fertilizer use/septic tanks/sewage, natural erosion
RADIOLOGICAL ( c )	GROUNDWATER		SURFACE WATER		MCL	MCLG or	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE		PHG (a)	
Gross Alpha (pCi/L)	ND	ND	ND	ND-5	15	0	Erosion of natural deposits
Gross Beta (pCi/L)	NS	NS	ND	ND-5	50	0	Decay of natural and man-made deposits
Uranium (pCi/L)	ND	ND	1	ND-3	20	0.43	Erosion of natural deposits
MICROBIALS	DISTRIBUTION SYSTEM				MCL (STATE/ FEDERAL )	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	HIGHEST % POSITIVE IN A MONTH		RANGE % POSITIVE				
None							
DISINFECTION RESIDUAL	DISTRIBUTION SYSTEM				MRDL	mc	MAJOR SOURCES IN DRINKING WATER
	AVERAGE		RANGE				
Chlorine/chloramine Residual (mg/L as CL2)	1.7		0.3 - 2.8		4	4	Drinking water disinfectant added for treatment
DISINFECTION BYPRODUCTS ( d )	HIGHEST LRAA		RANGE OF RESULTS		MCL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
Trihalomethanes- TTHMS (µg/L)	47		29-60		80	-	Byproduct of drinking water disinfection
Haloacetic Acids (µg/L)	15		5.8-16		60	-	Byproduct of drinking water disinfection
Bromate (µg/L) ( e )	3.1		ND-9.2		10	0.1	Byproduct of drinking water disinfection



LEAD AND COPPER AT THE TAP ( f )	DISTRIBUTION SYSTEM			AL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	90TH PERCENTILE	RANGE	# SITES ABOVE AL			
Copper (mg/L)	0.29	ND-1.2	0	1.3	0.3	Internal corrosion of household plumbing, erosion of natural deposits
Lead (µg/L)	4.4	ND-50	2	15	0.2	Internal corrosion of household plumbing, industrial manufacturer discharges

## SECONDARY STANDARDS MONITORED AT THE SOURCE FOR AESTHETIC PURPOSES

CONSTITUENT ( b )	GROUNDWATER		SURFACE WATER		MCL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE			
Aluminum (µg/L) ( g )	ND	ND	52	ND-150	200	N/A	Erosion of natural deposits, surface water treatment process residue
Chloride (mg/L)	210	190-230	83	39-116	500	N/A	Runoff/leaching from natural deposits, seawater influence
Color (color units)	8	3-10	1.3	1-2	15	N/A	Naturally-occurring organic materials
Conductivity (µmhos/cm)	1,350	1,200-1,500	828	498-1,080	1,600	N/A	Substances that form ions when in water, seawater influence
Foaming Agents (µg/L)	55	ND-110	ND	ND	500	N/A	Municipal and industrial waste discharges
Manganese (µg/L)	52 ( h )	48-56	ND	ND	50, NL = 500	N/A	Leaching from natural deposits
Odor (threshold odor number)	ND	ND	ND	ND-1	3	N/A	Naturally-occurring organic materials
Sulfate (mg/L)	155	120-190	180	89-253	500	N/A	Runoff/leaching from natural deposits, industrial wastes
Total Dissolved Solids (mg/L)	835	740-930	520	291-690	1,000	N/A	Runoff/leaching from natural deposits
Turbidity (NTU)	0.3	ND-1.1	ND	ND	5	N/A	Soil runoff
N-Nitrosodi-n-butylamine (NDBA) (ng/L)	ND	ND	ND	ND-2.5	N/A	N/A	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
pH (standard unit)	7.9	7.7-8.0	8.2	8.2-8.3	N/A	N/A	



## SUBSTANCES MONITORED IN THE DISTRIBUTION SYSTEM-FOR AESTHETIC PURPOSES

CONSTITUENT	DISTRIBUTION SYSTEM		MCL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE			
Color (color units)	ND	ND-3	15	N/A	Naturally-occurring organic materials
Turbidity (NTU)	0.17	ND-0.4	5	N/A	Soil runoff

## OTHER PARAMETERS MONITORED AT THE SOURCE

CONSTITUENT ( b )	GROUNDWATER		SURFACE WATER		MCL	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
GENERAL MINERALS	AVERAGE	RANGE	AVERAGE	RANGE			
Alkalinity (as CaCO <sub>3</sub> ) (mg/L)	220	190-250	110	94-127	N/A	N/A	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
Calcium (mg/L)	96	81-111	58	38-78	N/A	N/A	Runoff/leaching of natural deposits
Magnesium (mg/L)	33	31-36	22	13-29	N/A	N/A	Runoff/leaching of natural deposits
Potassium (mg/L)	11	10-11	4.2	2.6-5.4	N/A	N/A	Salt present in the water; naturally-occurring
Sodium (mg/L)	120	110-130	85	46-117	N/A	N/A	Salt present in the water; naturally-occurring
Total Hardness (mg/L)	378	331-424	230	143-305	N/A	N/A	Runoff/leaching of natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
SUBSTANCES WITH NOTIFICATION LEVELS	GROUNDWATER		SURFACE WATER		Notification Level ( a )	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE			
Boron (µg/L)	NS	NS	150	140-170	1,000	N/A	Runoff/leaching from natural deposits; industrial wastes
Chlorate (µg/L)	NS	NS	76	71-80	800	N/A	Byproduct of drinking water chlorination; industrial processes



MISCELLANEOUS	GROUNDWATER		SURFACE WATER		MCL ( a )	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAG E	RANGE			
Corrosivity (as saturation index) ( i )	0.62	0.46- 0.78	0.54	0.36- 0.65	N/A	N/A	Natural/industrially-influenced balance of hydrogen/carbon/oxygen in water
Lithium (µg/L)	NS	NS	27	ND-47	N/A	N/A	Naturally-occurring; used in electrochemical cells, batteries, and organic syntheses and pharmaceuticals
N-Nitrosodi-n- butylamine (NDBA) (ng/L)	ND	ND	ND	ND-2.5	N/A	N/A	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
pH (standard unit)	7.9	7.7-8.0	8.2	8.2-8.3	N/A	N/A	

FIFTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR 5) ( j )

CONSTITUENT ( k )	GROUNDWATER EP		SURFACE WATER EP		MCL ( a )	MCLG or PHG (a)	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAG E	RANGE			
Lithium (µg/L)	46	44-47	49	46-51	N/A	N/A	Naturally-occurring; used in electrochemical cells, batteries, and organic syntheses and pharmaceuticals

Footnotes

( a ) Advisory Levels include: California PHGs and NLs; and Federal MCLGs and MRDLGs.
( b ) The State allows monitoring some contaminants less than once per year because the concentrations do not vary frequently. All this data is from the most recent monitoring (2022-2024) except nitrate, which is monitored annually.
( c ) Similar to (b), the most current results for radiological data cover samples from 2017, 2023, and 2024.
( d ) LRAA is used to calculate averages, ranges, and State and Federal MCL compliance.
( e ) Data are taken from imported water at Metropolitan Water District (MWD) treatment plant effluents.
( f ) 90th percentile from the most recent sampling at selected customer taps (33 samples in 2022).
( g ) Constituent has primary standard/action level and secondary standard.
( h ) Manganese exceeded the secondary MCL (sMCL) in one of the City's raw water wells in 2024. However, the water that is served to the distribution system is blended with treated surface water purchased from MWD reducing color disturbances. Compliance with the sMCL is based on a running annual average (RAA). The sMCL was set to protect you against unpleasant aesthetic effects such as color, taste, odor, and the staining of plumbing fixtures and clothing when washed. Exceeding the sMCL does not pose a health risk.
( i ) Positive SI= non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI= corrosive; tendency to dissolve calcium carbonate (taken at 20° C) Reference:Standard Methods (SM2330).
( j ) The Unregulated Contaminant Monitoring Rule (UCMR) is a program the EPA uses to monitor for the highest priority unregulated drinking water contaminants at public water systems across the United States. Data collected under UCMR 5 will be used as basis for future regulatory determinations and may support additional actions to protect public health.
( k ) UCMR 5 compounds included Lithium along with 29 different per- and polyfluoroalkyl substances (PFAS) using two different methods. Samples were taken at entry points (EPs) to the distribution system. Only detections are shown.

Abbreviations

N/A = Not applicable
ND = Not detected at the reporting limit
NS = Not sampled during this reporting period
mg/L = Milligrams per liter or parts per million (equivalent to 1 drop in 42 gallons)
MWD = Metropolitan Water District
µg/L = Micrograms per liter or parts per billion (equivalent to 1 drop in 42,000 gallons)
µmhos/cm = Micromhos per centimeter
ng/L = Nanograms per liter or parts per trillion (equivalent to 1 drop in 42,000,000 gallons)
NTU = Nephelometric turbidity units
pCi/L = Picocuries per liter





## Definitions

**Location Running Annual Average (LRAA):** Locational Running Annual Averages are calculated as an average of all samples collected within a 12-month period at a single site.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water set by California and the U.S. Environmental Protection Agencies (Cal EPA and U.S. EPA). Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect odor, taste, and appearance of drinking water. MCLs are based on the most stringent value between State and EPA MCLs. A contaminant with no MCL but requires compliance with other drinking water regulations is designated either as Treatment Technique (TT), Regulatory Action Level (AL), or Notification Level (NL).

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs are set by the U.S.EPA.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant added allowed in drinking water. There is strong evidence that disinfectant additions are necessary for microbial control.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment 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.

**Notification Level (NL):** Notification levels are health-based advisory levels established by the Division of Drinking Water (DDW) for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply. The level at which DDW recommends removal of a drinking water source from service is called the "response level."

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

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the Cal EPA.

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

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.



# Frequently Asked Questions (FAQs)



## Where Does My Tap Water Come From?

Your tap water comes from 2 sources: groundwater and surface water. We pump groundwater from local, deep wells. We also use Metropolitan Water District of Southern California's (MWD) surface water from both the Colorado River and the State Water Project in northern California. These water sources supply our service area, shown on the adjacent map. The quality of our groundwater and MWD's surface water supplies is presented in this report.

## How is My Drinking Water Tested?

Your drinking water is tested regularly for unsafe levels of chemicals, radioactivity and bacteria at the source and in the distribution system. We test weekly, monthly, quarterly, annually or less often depending on the substance. State and federal laws allow us to test some substances less than once per year because their levels do not change frequently. All water quality tests are conducted by specially trained technicians in state-certified laboratories.





# What Are Drinking Water Standards?

The U.S Environmental Protection Agency (USEPA) limits the amount of certain substances allowed in tap water. In California, the State Department of Health Services (Department) regulates tap water quality by enforcing limits that are at least as stringent as the USEPA's. Historically, California limits are more stringent than the Federal ones. There are two types of these limits, known as standards. Primary standards protect you from substances that could potentially affect your health. Secondary standards regulate substances that affect the aesthetic qualities of water. Regulations set a Maximum Contaminant Level (MCL) for each of the primary and secondary standards. The MCL is the highest level of a substance that is allowed in your drinking water.



Public Health Goals (PHGs) are set by the California Environmental Protection Agency. PHGs provide more information on the quality of drinking water to customers, and are similar to their federal counterparts, Maximum Contaminant Level Goals (MCLGs). PHGs and MCLGs are advisory levels that are Non enforceable. Both PHGs and MCLGs are concentrations of a substance below which there are no known or expected health risks.



## How Do I Read the Water Quality Table?

Although we test for over 100 substances, regulations require us to report only those found in your water. The first column of the water quality table lists substances detected in your water. The next columns list the average concentration and range of concentrations found in your drinking water. The following are columns that list the MCL and PHG or MCLG, if appropriate. The last column describes the likely sources of these substances in drinking water. To review the quality of your drinking water, compare

the highest concentration and the MCL. Check for substances greater than the MCL.

Exceedance of a primary MCL does not usually constitute an immediate health threat. Rather, it requires testing the source water more frequently for a short duration. If test results show that the water continues to exceed the MCL, the water must be treated to remove the substance, or the source must be removed from service.



# Why Do I See So Much Coverage in the News About the Quality Of Tap Water?

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

Contaminants that may be present in source water include:

- Microbial contaminants, including viruses and bacteria, 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, which 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 application, and septic systems;
- Radioactive contaminants, which 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 U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

All 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791. You can also get more information on tap water by logging on to these helpful web sites:

USEPA's Web Site

<https://www.epa.gov/ground-water-and-drinking-water>

Department of Public Health's Web Site

[https://www.waterboards.ca.gov/drinking\\_water/programs/index.html](https://www.waterboards.ca.gov/drinking_water/programs/index.html)



# Important Health Information



Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with 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. The USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection of *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline

## How Can I Participate in Decisions On Water Issues That Affect Me?

You can attend City Council Meetings on the 1st and 3rd Tuesday of each month at 6:00 PM, at 1400 Highland Avenue, Manhattan Beach, CA 90266.





# Source Water Assessment

The Metropolitan Water District of Southern California completed a vulnerability assessment of its Colorado River and State Water Project supplies in 2002. Colorado River supplies are considered most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered most vulnerable to contaminants from urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6000.

The City of Manhattan Beach conducted a vulnerability assessment of its groundwater supplies in 2003. Groundwater supplies are considered most vulnerable to metal plating/finishing/fabricating, chemical/petroleum processing/storage, automobile repair shops, automobile gas stations, dry cleaners, and historic gas stations. A copy of the approved assessment may be obtained by contacting Public Works at (310) 802-5324.



**BE INFORMED, BE INVOLVED**





## What are PFAS Compounds?

In April 2024, the U.S. EPA finalized new National Primary Drinking Water Regulations for six per- and polyfluoroalkyl substances (PFAS). The maximum contaminant levels (MCLs) were set at 4 parts per trillion (ppt) for PFOA and PFOS, and 10 ppt for PFHxS, PFNA, and GenX (HFPO-DA). A combined Hazard Index of 1.0 was also established for PFHxS, PFNA, PFBS, and GenX to account for their cumulative health effects.

Under the new rule, public water systems are required to begin monitoring for these PFAS within three years (by 2027) and must achieve full compliance by 2029. Based on our ongoing sampling using EPA-approved methods, no regulated PFAS compounds have been detected in the City's wells above regulatory levels. The City continues to monitor for PFAS in accordance with federal and state requirements and remains committed to protecting public health through proactive compliance with all drinking water standards.

## What's Prohibited under the California Emergency Water Conservation Regulations?

- Using potable water to wash sidewalks and driveways.
- Allowing runoff when irrigating with potable water.
- Using hoses with no shutoff nozzles to wash cars.
- Using potable water in decorative water features that do not recirculate the water.
- Using outdoor irrigation during and 48 hours following measurable precipitation.







Thank you for taking the time to review the City of Manhattan Beach's Water Quality Report. We appreciate your interest in staying informed about your water service and the steps we take to ensure its safety and reliability.

If you have any questions, need additional information, or would like to learn more about our water system, please don't hesitate to contact the Environmental Compliance Section at (310) 802-5338 or visit our website at [www.manhattanbeach.gov](http://www.manhattanbeach.gov)