

# Summer is Here

And we have the water you need for fun in the sun.

## This Report is About Your Water

In calendar year 2024, as in years past, your tap water met all U.S. Environmental Protection Agency and State of California drinking water regulations. It is our intent to provide this report to all of our customers. Please call us at 619-466-0585 for additional copies.

If you have questions about this report, please contact Lab Compliance Administrator Brett Kelley at waterquality@helixwater.org or 619-667-6248.

We also recommend visiting our Water Quality FAQs webpage, which explains the reasons and remedies for a wide variety of taste, odor and visual issues that can occur with tap water. You will also find an electronic form for asking questions. Go to hwd.fyi/water-quality-faqs.

#### **About Us**

Helix Water District is a not-for-profit, local government agency formed in 1913 to develop and manage a public water system for East County's economy and public health. Today, our regional water treatment plant supplies water to 500,000 East County residents and we distribute water to 278,000 people in the cities of La Mesa, El Cajon and Lemon Grove, and unincorporated areas including Mt. Helix, Spring Valley and Lakeside.

## B.Y.O.B.

Bring Your Own Bottle and infuse our water with your favorite fruits, veggies and spices.



100%

Compliance with U.S. and California Drinking Water Regulations

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Unlike other government, we are not funded by taxes. We charge fees to recover the cost of the services we provide, and state law prohibits us from collecting any additional revenue. We reinvest all of the revenue we collect in the operation and maintenance of the water supply, storage, treatment and distribution systems that provide your water.

We are governed by a board elected by the communities they live in. Board members represent your interests at Helix and the San Diego County Water Authority, where we collaboratively manage the San Diego region's water supply. They also represent East County with the organizations that shape water policy in California, and with our elected officials in Sacramento and Washington D.C.

The board meets on the first and third Wednesdays of the month at 3:30 p.m. and on the fourth Wednesday at 3 p.m. We encourage customers and the public to attend in person or on Zoom.com. Meeting agendas are posted on our homepage at hwd.com and the Zoom link for each meeting is displayed on the first page of the agenda.





## Our Water Supply

**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 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 U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

## **Protecting Lake Jennings**

Protecting watersheds prevents contamination of water supplies. The Lake Jennings Watershed Sanitary Survey is regularly updated in accordance with state regulations. The most recent update was March 2021. The purpose of such surveys is to assess the watershed to determine the existing and potential hazards of contamination sources that could reach the public water supply.

Lake Jennings serves as a recreational area for the public, and activities that may affect water quality are closely monitored. The March 2021 *Lake Jennings Watershed Sanitary Survey Update* found the lake's water quality to be vulnerable to spills, recreation, development, wastewater/septic systems and equestrian properties.

Through water quality monitoring and management of activities in and around the lake, along with community involvement, Helix Water District is able to minimize the risk of these potential sources of contamination. You can find the assessment on the *District Documents* page at hwd.com. If you would like a summary or have questions, please contact Helix Lab Compliance Administrator Brett Kelley at waterquality@helixwater. org or 619-667-6248.



When rain turns into runoff, it can carry chemicals from landscapes and streets into Lake Jennings.

## You Can Help



**Use a Poop Bag**You'll keep bacteria out of stormwater runoff.



**Use Less Fertilizer** Native and Mediterranean plants don't need it.



**Prevent Overwatering**Make an irrigation schedule at bewaterwise.com.



Trees hold rain in their canopy and slow stormwater runoff.



Add a Rain Garden
Holding rain on your property
reduces stormwater runoff.



**Use a Broom**Cleaning concrete with a water hose produces runoff.



Learn the Equine BMPs Read San Diego County's Equine Best Management Practices Handbook at hwd.fyi/equine.



**Maintain Your Septic Tank** Inspect it every 1-2 years and pump it out every 3-5 years.

## Water Treatment

#### **Our Advanced Treatment Process**

In 2024, 87.8% of the water Helix Water District customers received was treated at the R.M. Levy Water Treatment Plant in Lakeside. Helix uses a proven, highly effective, multistep water treatment process to produce high-quality water for our customers. The multistep water treatment process includes the use of ozone as a highly effective disinfecting agent. Ozone is able to inactivate and destroy a wide range of potentially harmful organisms and chemical compounds in the raw source water. Ozone also reduces disinfection byproducts and improves the taste and odor of the finished drinking water.

## **Continuous Water Quality Testing**

We continuously monitor and test the water during and after the treatment process. Our state-certified operators and lab staff collect and analyze over 200 water samples each day. Hands-on testing is completed in the field and in our state-certified laboratory, which also uses the latest analytical instruments to perform testing to continuously monitor the treatment process. The district's treated water consistently meets all primary federal and state quality standards.

#### **Educational Information**

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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. EPA and Centers for Disease Control and Protection guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



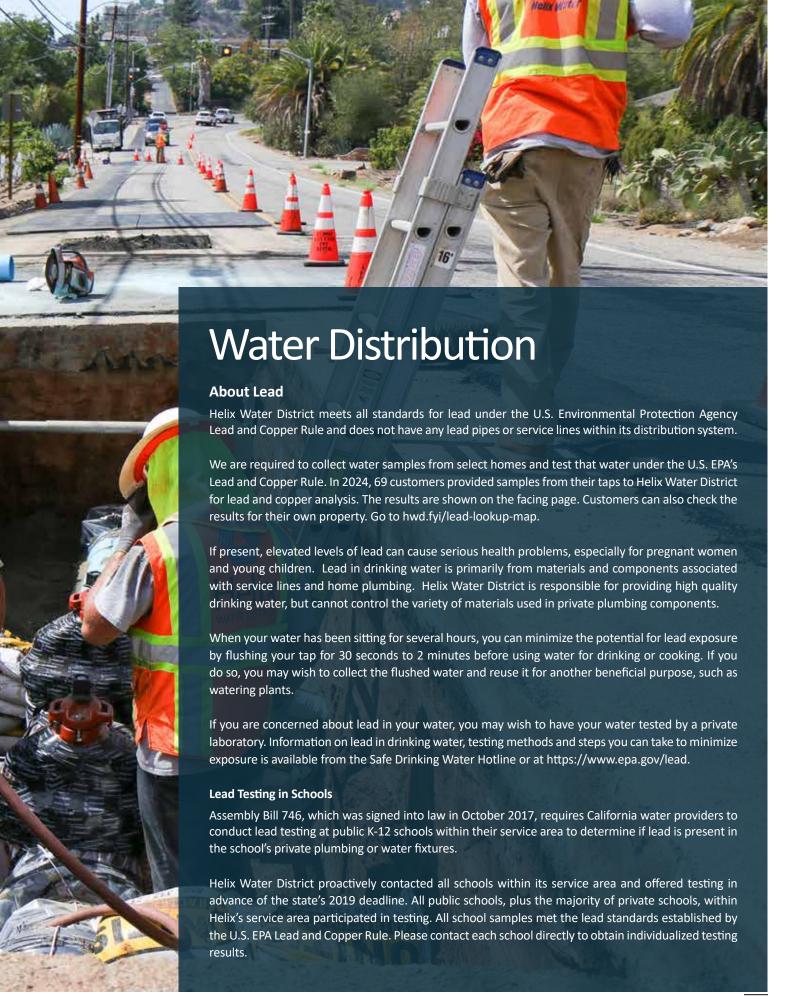






Photos: R.M. Levy Water Treatment Plant





## Water Quality Data

The following tables are a summary of the testing performed on your water from January 1 to December 31, 2024. The terms used in the tables are explained below.

## **Abbreviations**

AL: Regulatory Action Level

CCRDL: Consumer Confidence Report Detection Level

CFU: Colony-Forming Units

DBP: Disinfection Byproducts

DDW: Division of Drinking Water

DLR: Detection Limit for Reporting

Purposes

HWD: Helix Water District

LRAA: Locational Running Annual

Average

MCL: Maximum Contaminant Level

MCLG: Maximum Contaminant Level

Goal

mg/L: Milligrams per Liter

MRDL: Maximum Residual Disinfectant Level

Distillectant Level

MRDLG: Maximum Residual Disinfectant Level Goal

N/A: Not Applicable

ND: Not Detected

NL: Notification Level

NS: No Standard

NTU: Nephelometric Turbidity Units

pCi/L: picoCuries per liter

PDWS: Primary Drinking Water

Standards

PFAS: Perfluorinated Alkyl Substances

PHG: Public Health Goal

RAA: Running Annual Average

SWRCB: State Water Resources

Control Board

TOC: Total Organic Carbon

TON: Threshold Odor Number

TT: Treatment Technique

UCMR: Unregulated Contaminant

Monitoring Rule

ug/L: Micrograms per Liter

us/cm: MicroSiemens per Centimeter

USEPA: U.S. Environmental Protection Agency

## What are water quality standards?

Drinking water standards are mandated by the U.S. EPA and state of California. They set limits for substances that may affect consumer health or aesthetic qualities of water. Water quality standards are enforceable and violations are reported.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Primary MCLs: Set as close to the PHGs or MCLGs as is economically and technologically feasible.

Secondary MCLs: Set to protect the odor, taste and appearance of drinking water.

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

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

## What are water quality goals?

In addition to mandatory drinking water standards, the U.S. EPA and state have set nonenforceable water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice nor directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. Helix's 2022 Public Health Goals Report on Water Quality and our upcoming 2025 report are on the Water Quality Reports page at hwd.com.

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

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

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

## **Additional definitions**

**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.

**Disinfection Byproduct (DBP):** DBPs are formed when disinfectants (chlorine, chloramines, ozone or others) react with organic and inorganic compounds naturally occurring in the water.

## **Primary Drinking Water Standards (a)**

		<b>.</b>	2110		Helix Plant Purchased Water					
Water Leaving Treatment Plant	Units	State MCL	PHG (MCLG)	Min	Max	Avg	Min	Max	Avg	Major Sources
Clarity										
Highest Filter Effluent Turbidity (b)	NTU	TT=0.3	N/A	0.01	0.13	0.05	N/A	0.09	N/A	
Percentage of samples meeting turbidity limits (b)	%	TT=95% of samples ≤ 0.3 NTU	N/A	N/A	100%	N/A	N/A	100%	N/A	Soil runoff
Inorganic Chemicals										
Aluminum (c)	mg/L	1	0.6	0.06	0.23	0.14	ND	0.16	ND	Erosion of natural deposits, residue from some surface water
Arsenic	μg/L	10	0.004	ND	4.9	2.3	ND	ND	ND	treatment processes
Barium	mg/L	1	2	ND	ND	ND	ND	0.12	ND	Oil drilling wastes, metal refineries; erosion of natural deposits
Fluoride (d)	mg/L	2	1	0.3	0.9	0.7	0.6	0.8	0.7	Water additive and natural deposits
Nitrate as N	mg/L	10	10	ND	ND	ND	ND	ND	ND	Runoff and leaching from fertilizer use, septic tanks
Radionuclides (e)										
Gross Alpha Particle Activity	pCi/L	15	(0)	ND	3.8	ND	ND	4	ND	
Gross Beta Particle Activity	pCi/L	50	(0)	ND	ND	ND	ND	5	2.7	Erosion of natural deposits
Combined Radium	pCi/L	5	(0)	ND	ND	ND	ND	0.93	0.16	Liosion of natural deposits
Uranium	pCi/L	20	0.43	ND	2.57	1.30	ND	3.0	1.4	
Water in the Distribution System					He	lix Plant		Purchased Water		
Microbiological (f)(g)	Units	State MCL	PHG [MCLG]	Min	Max	Avg	Min	Max	Avg	Major Sources
Total Coliform Bacteria (State Revised Total Coliform Rule)	%	5.0%	0	0	0.6%	N/A		/.		Naturally present in the environment
E. Coli (State Revised Total Coliform Rule)	%	0	0%	0	0	N/A		N/A		Human and animal fecal waste
Disinfection Byproducts,		State	BUG							
Disinfection Residuals and DBP Precursors (Federal)	Units	MCL [MRDL]	PHG [MRDLG]	Min	Max	Avg	Min	Max	Avg	Major Sources
Total Trihalomethanes (TTHMs)(h)	μg/L	80	N/A	ND	36.5	19.9				Byproduct of drinking water chlorination
Haloacetic Acids (HAA5)(h)	μg/L	60	N/A	3.0	17.8	10.2		N/A		Byproduct of drinking water chlorination
Chloramines as Cl2	mg/L	[4.0]	[4.0]	1.9	2.0	1.9				Drinking water disinfectant added for treatment
Total Organic Carbon (TOC)	mg/L	TT	N/A	2.1	3.2	2.6	2.0	3.0	2.4	Natural and man-made sources
Bromate	μg/L	10	0.1	ND	ND	ND	ND	8.5	1.6	Byproduct of drinking water ozonation
Chlorate	μg/L	N/A	NL=800	N/A	N/A	N/A	80	380	186	Byproduct of drinking

## **Primary Drinking Water Standards (a)**

Samples from Customer Taps	Units	Action Level	PHG	90th Percentile	Number of Sites Sampled	Year Sampled	Number of Sites Above Action Level	Typical Sources
Lead and Copper (i)								
Lead	μg/L	15	0.2	ND	69	2024	1	Internal corrosion of household plumbing, industrial discharges, natural deposits
Copper	mg/L	1.3	0.3	0.054	69	2024	0	Internal corrosion of household plumbing, natural deposits, leaching from preservatives

## **Secondary Drinking Water Standards - Aesthetic Standards**

		Secondar	N/	Helix Plant			Purchased Water			
Parameter	Units	MCL	PHG	Min	Max	Avg	Min	Max	Avg	Major Sources
Aluminum (c)	μg/L	200	600	64	230	140	ND	160	63	Erosion of natural deposits, residue from some surface water treatment processes
Copper	mg/L	1	0.3	ND	ND	ND	ND	ND	ND	Internal corrosion of household plumbing systems; erosion of natural deposits
Chloride	mg/L	500	N/A	80	89	86	48	110	88	Runoff or leaching from natural deposits, seawater influence
Specific Conductance	μS/cm	1,600	N/A	760	830	800	242	917	723	Runoff or leaching from natural deposits
Sulfate	mg/L	500	N/A	130	150	140	12	217	135	Runoff or leaching from natural deposits, industrial waste
Total Dissolved Solids (TDS)	mg/L	1,000	N/A	460	500	483	149	614	450	Runoff or leaching from natural deposits
Turbidity	NTU	5	N/A	0.03	0.9	0.09		N/A		Soil runoff
Sodium and Hardness			'			'				
Hardness as CaCO3	mg/L	N/A	N/A	201	236	214	60	243	155	Sum of magnesium and calcium
Hardness in grains per gallon	gpg	N/A	N/A	11.7	13.8	12.5	3.5	14.2	9.1	cations present in the water and is naturally occurring
Sodium	mg/L	N/A	N/A	66	84	76	55	95	75	Sodium refers to the salt in water and is generally naturally occurring

## **Additional Parameters**

		State			Hel	ix Plant	Purchased Water		
Parameter	Units	MCL	PHG	Min	Max	Avg	Min	Max	Avg
Alkalinity - Total as CaCO3	mg/L	N/A	N/A	102	134	118	47	120	94
Aggressive Index	Al	N/A	N/A	12.2	12.3	12.3	12.3	12.4	12.4
Calcium	mg/L	N/A	N/A	48	55	51	20	62	43
Magnesium	mg/L	N/A	N/A	19	24	21	1.2	23	12
рН	рН	N/A	N/A	7.7	8.6	8.3	7.5	8.8	8.3
Potassium	mg/L	N/A	N/A	4.0	4.9	4.5	ND	33.9	6
Silica	mg/L	N/A	N/A	5.8	16	9.7		N/A	

## **Unregulated Chemicals Requiring Monitoring (j)**

		Notification		Helix Plant Purchased Water			d Water		
Parameter	Units	Level [PHG]	Min	Max	Avg	Min	Max	Avg	Major Sources
Boron	mg/L	1	ND	0.11	ND	0.13	0.92	0.39	Leaching of rocks, soils, wastewater and fertilizers/pesticides
Bromide	mg/L	N/A	ND	0.12	ND		N/A		Saltwater intrusion and naturally occurring
Bromochloromethane	μg/L	N/A	ND	0.078	ND				Fire extinguishing agent
Chlorate	μg/L	800	N/A	N/A	N/A	80	380	186	Byproduct of drinking water disinfection
Haloacetic Acids 9	μg/L	N/A	4.8	29.4	13.4		N/A		Byproduct of drinking water disinfection
Hexavalent Chromium	μg/L	[0.02]	ND	ND	ND	ND	0.32	ND	Erosion of natural deposits, discharges of oil drilling waste
Molybdenum	μg/L	N/A	2.9	4.3	3.8		N/A		Potential disinfection byproduct, naturally occurring
N. Nitrosodimethylamine (NDMA)	ng/L	10	ND	ND	ND	ND	2.5	ND	Potential disinfection byproduct, industrial discharges, naturally occurring
Perfluorooctane Sulfonic Acid (PFOS)	ng/L	6.5	ND	ND	ND	ND	ND	ND	
Perfluorooctanoic Acid (PFOA)	ng/L	5.1	ND	ND	ND	ND	ND	ND	
Perfluorohexanesulfonic Acid (PFHxS)	ng/L	3	ND	ND	ND	ND	ND	ND	Manufacturing and industrial facil-
Perfluorononanoic Acid (PFNA)	ng/L	N/A	ND	ND	ND	ND	ND	ND	ities, fire/crash training areas, and industrial or municipal waste sites
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	N/A	ND	ND	ND	ND	ND	ND	
Perfluorobutane Sulfonic Acid (PFBS)	ng/L	500	ND	ND	ND	ND	ND	ND	
Strontium	mg/L	N/A	0.56	1.1	0.86		N/A		Naturally occurring
Vanadium	μg/L	50	ND	4.7	ND	ND	ND	ND	Industrial discharges, naturally occuring
Lithium	μg/L	10 (k)	22	26	25	24	32	28	Naturally occurring

### **Footnotes**

- (a) Over 100 parameters are monitored. Primary Drinking Water Standards monitored but not detected are not listed on the table.
- (b) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our treatment process.
- (c) Aluminum has both primary and secondary standards.
- (d) State regulations require that fluoride levels in treated water are within a control range of 0.6 to 1.2 mg/L, with an optimal dose of 0.7 mg/L. Fluoride levels in our treated water ranged from 0.3 to 0.9 mg/L with an average of 0.7 mg/L. For more information on fluoridation visit the State Water Resources Control Board website at hwd.fyi/fluoridation.
- (e) Radiological sampling last performed in 2021.
- (f) No more than 5% of the monthly samples may be total-coliform-positive. This standard was met.
- (g) The occurrence of two consecutive total coliform-positive samples, one of which contains E. Coli, constitutes an acute MCL violation.
- (h) Compliance with the MCL for total trihalomethanes (TTHMs) and haloacetic acids (HAA5) is based on a locational running annual average (LRAA), calculated quarterly at each monitoring location. The values shown represent the range and average of individual sample results collected during the calendar year.
- (i) Lead and Copper Rule monitoring mandated every three years. Most recent monitoring conducted in 2024 at 69 sampling sites.
- (j) USEPA uses the Unregulated Contaminant Monitoring Rule to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards. UCMR 3 monitoring occurred in 2014, UCMR 4 monitoring occurred in 2019 and UCMR 5 monitoring occurred in 2024. Hexavalent Chromium, Boron and Vanadium results are from 2023.
- (k) Refers to Health Reference Level. Health Reference Levels are used in the EPA's Regulatory Determination process as risk-derived concentrations against which to evaluate occurrence data to determine if contaminants occur at levels of public health concern. HRLs are not legally enforceable federal standards. To determine the HRL for a chemical, the agency considers adverse health effects that may pose a greater risk to specific life stages and other sensitive groups which represent a meaningful portion of the population.



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## Calendar Year 2024

## Water Quality Report

This report contains important information about your drinking water. Please contact Helix Water District at 619-466-0585 for assistance.

### Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse con Helix Water District al 619-466-0585 para asistirle en español.

### Farsi/Persian

اید گنز ار شد حاوی اطلاعات مهمید در مورد آب آشامیدنیه شمامت. براید دریافت اطلاعات بیشتر با ما تماسه بگیرید Helix Water District, 619-466-0585

#### Korean

이 보고서는 당신의 식수에 관한 중요한 정보를 포함하고 있습니다. 한국어로 된도움을 원하시면 Helix Water District, 619-466-0585 로 문의 하시기 바랍니다.

### Mandarin

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Helix Water District 以获得中文的帮助: 619-466-0585.

## **Tagalog**

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Helix Water District o tumawag sa 619-466-0585 para matulungan sa wikang Tagalog.

## Vietnamese

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Vui lòng liên hệ với Helix Water District theo số 619-466-0585 để được hỗ trợ bằng tiếng Việt.