

2024 | Water Quality Report



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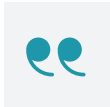
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SOLICITE LA VERSIÓN EN ESPAÑOL

Si desea solicitar esta información en español, visite WesternWaterCA.gov/WaterQualityReport seleccione español o llame al 951.571.7104 para solicitar una copia por correo.



CRAIG MILLER
GENERAL MANAGER



Every drop of water represents our commitment to high-quality service and a promise of innovation for generations to come. We are making sure that our water is monitored and regulated from source to tap. When customers turn on their tap, we want them to know they can count on their water being safe to drink—today and always.

MESSAGE FROM THE GENERAL MANAGER

Dear Valued Customer,

Each year, Western Municipal Water District (Western Water) is proud to share our Annual Water Quality Report. This report reflects our commitment to delivering safe, clean, and reliable water to the communities we serve.

It outlines the results of extensive testing and monitoring conducted throughout 2024. I'm pleased to report that our water meets all federal and state water quality standards.

In 2024, our team performed over 34,000 water quality tests across more than 116 locations throughout our service system. These rigorous tests ensure the water reaching your home, business, or school meets the highest standards. We monitor for a wide range of potential contaminants to protect public health and provide confidence in every drop.

Protecting public health and upholding your water quality are our top commitments to you. Western Water continues to invest in infrastructure, water supplies, technology, and the dedicated professionals that strengthen service reliability. At the same time, we are actively engaged in statewide efforts to shape water policy, secure long-term supply investments, and advocate for solutions that benefit our region and all Californians. From supporting legislation that prioritizes sustainable water management to advancing regional storage and supply-sharing programs, our work is focused on ensuring that water remains available, affordable, and dependable for current and future generations.

We encourage all customers to read this report to gain a better understanding of the quality of your water and the customer support programs we offer.

Thank you for placing your trust in us. We are honored to serve you and will continue working tirelessly to protect and deliver this most essential resource.


Craig Miller
GENERAL MANAGER



OUR MISSION

Western Water provides water supply, wastewater (sewer), recycled water services, and water resource management to the public in a safe, reliable, environmentally sensitive, and financially responsible manner.

OUR VISION

To enhance Western Water's leadership role by integrating the best-in-business processes and business systems while developing a leading-edge workforce that continuously creates greater efficiency and value for our customers.

WE GUARANTEE THE QUALITY AND RELIABILITY OF YOUR DRINKING WATER

Western Water has been dedicated to providing essential water, wastewater (sewer), and recycled water services to nearly 1 million people in western Riverside County. As an agency, we serve as both a direct water provider to customers and a wholesale water supplier to local water districts and cities.

The drinking water that Western Water provides to homes, businesses, and schools meets all state and federal water quality standards. The State Water Resources Control Board (SWB), Division of Drinking Water (DDW), and the Environmental Protection Agency (EPA) are the agencies responsible for establishing and enforcing drinking water quality standards.

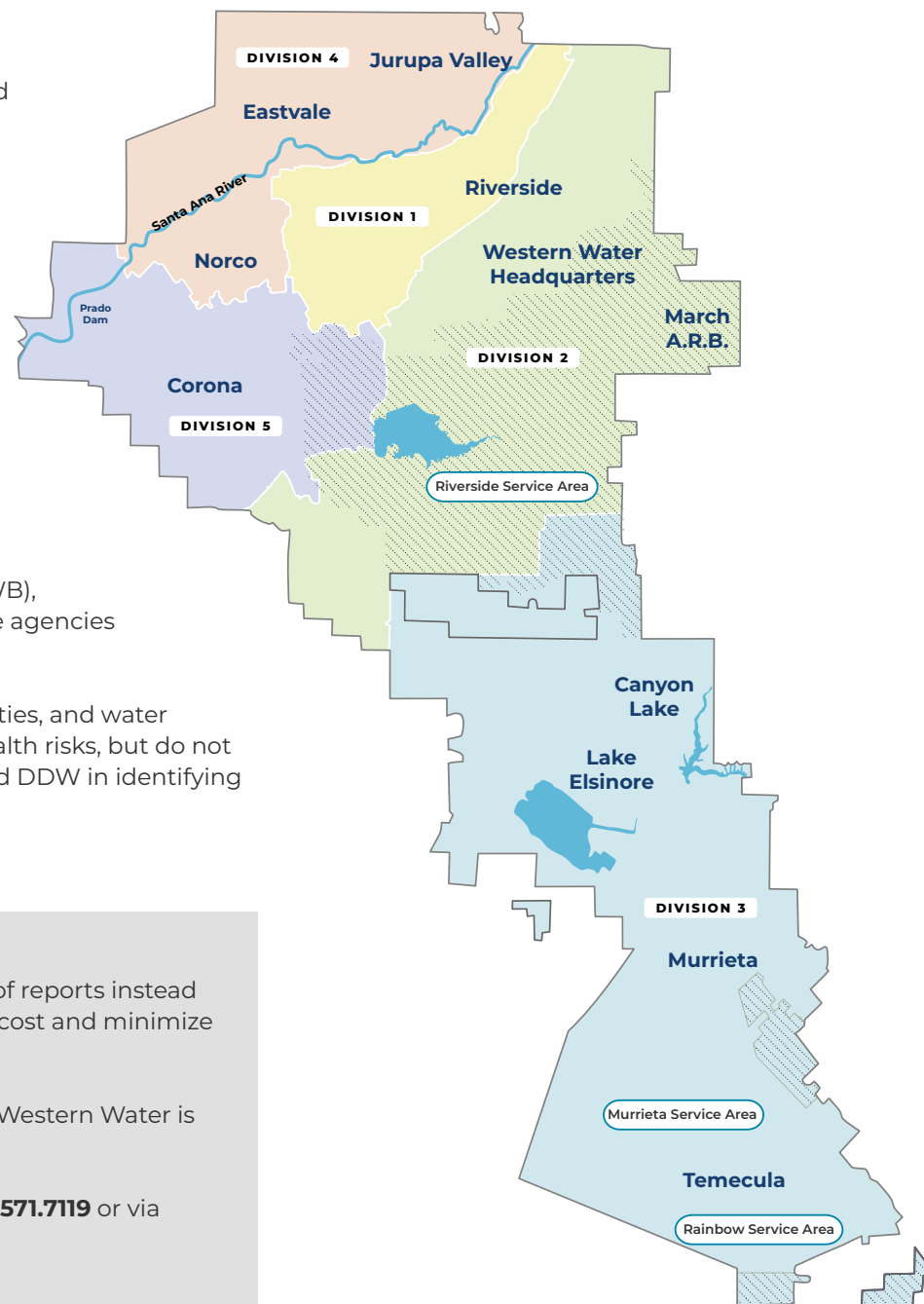
In addition to performing more than 34,000 tests for more than 230 contaminants, impurities, and water quality parameters, Western Water also tests for unregulated chemicals that may have health risks, but do not have drinking water standards. This monitoring of unregulated chemicals aids the EPA and DDW in identifying their presence and evaluating the need to establish new standards.



The State Water Resources Control Board allows for electronic delivery of reports instead of paper copies via mail. Electronic copies help Western Water reduce cost and minimize paper waste.

Please note that you may change your delivery preference at any time. Western Water is happy to mail you a paper copy of this report upon request.

To request a paper copy of this report you can do so by calling us at **951.571.7119** or via email to **outreach@wmwd.com**.



SOURCE WATER ASSESSMENT

A source water assessment lists possible contaminants that might affect the quality of your water sources. Assessments were completed for the two surface water sources Western Water relies on, the State Water Project and the Colorado River, to meet customer needs. The State Water Project underwent a reassessment in 2021, and the Colorado River was reevaluated in 2020 to address long-term reliability and resource planning. Both were found to be most vulnerable to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed-related factors that could affect water quality.

Drinking water source assessments were completed for Western Water's service areas to ensure continued safety and reliability. In 2020, an assessment was conducted for one of the groundwater wells serving the Murrieta area. In 2024, additional assessments were completed for wells in the Riverside-Arlington groundwater subbasin. These sources are considered most vulnerable to some of the following activities: historic gas stations, pest control storage, underground storage tanks, dry cleaners, metal plating and fabrication, automotive and machine shops, and sewer collection systems.

The vulnerability risks for the source water assessments mentioned above have either been mitigated through treatment or have not affected or degraded the applicable water supply, or treated water that is delivered to Western Water customers. Western Water remains committed to proactive planning and source monitoring to ensure the continued delivery of safe, high-quality drinking water.



Western Water staff testing a fireflow device



**YOUR DRINKING WATER IS CONSTANTLY
MONITORED AND TESTED,
FROM SOURCE TO TAP.**

CONDUCTING

34K +
TESTS

SERVING

527- SQUARE
MILES

116 SAMPLING
LOCATIONS

SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, who include those with cancer who are undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, and some elderly individuals and infants, can be particularly at risk of infections.

These individuals should seek advice about drinking water from their healthcare providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **1.800.426.4791**.

While drinking water in our Murrieta service area meets the federal and state standards for arsenic, it does contain low levels. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants less than 6 months old. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms can include shortness of breath and blueness of skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your healthcare provider.

The water in Western Water's service area is below the state and federal standards for Arsenic at 10 µg/L and Nitrate at 10 mg/L.



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**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, can naturally occur 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.

To ensure that tap water is safe to drink, the EPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

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 EPA Safe Drinking Water Hotline at **1.800.426.4791**.



Water being imported into Southern California

JUST THE FACTS ON PFAS

PFAS, short for per- and poly-fluoroalkyl substances, are a group of more than 4,700 synthetic chemicals created to repel water, oil, grease, and stains. Dating back to the 1940s, the chemicals have been found to be nearly indestructible over time. They appear in a range of industrial and everyday consumer products, including makeup, food wrappers, nonstick cookware, carpets, stain repellents, and firefighting foams.

Because PFAS have been so widely used, most Americans have been exposed to them through sources other than their drinking water. People ingest PFAS by eating, drinking, or breathing the chemicals when they are present in food, water, fire retardants, and consumer and industrial products. Based on research cited by the DDW, most people are exposed to PFAS through food—via food packaging, farming processes, or bioaccumulation (gradual chemical buildup).

Over time, PFAS have also accumulated in land near airports, industrial sites, military bases, and landfills. Once PFAS leach into the land, the chemicals can, in some cases, seep into the local groundwater.

Western Water continues to adhere to DDW's and the EPA's guidelines for monitoring of PFAS. DDW has established notification and reporting levels for PFAS, and EPA has recently established regulatory limits for PFAS that water systems must comply with by April 2029.

LEAD AND COPPER RULE

The Lead and Copper Rule (LCR) was developed to protect public health by minimizing lead and copper levels in drinking water. The most common source of lead and copper in drinking water is corrosion of plumbing materials. Plumbing materials that can be made with lead and copper include pipes, solder, fixtures and faucets. The LCR established an action level of 15 parts per billion (ppb) for lead and 1.3 parts per million (ppm) for copper based on the 90th percentile level of tap water samples. If more than 10 percent of the samples are above either action level, further actions are required. Lead and copper are sampled on a state-mandated 3-year testing cycle with sampling conducted at selected customer taps.

The LCR requires Western Water to sample at locations that may be particularly susceptible to high lead or copper concentrations. With a tiered system for prioritizing sampling sites, federal regulations prioritize sampling for single-family structures with copper pipes that have lead solder installed after 1982. Western Water’s sample locations remain the same for each sampling event unless voluntary participation from its customers is insufficient to meet the minimum required samples per the LCR.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Western Water is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components beyond the meter. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at **1.800.426.4791** or at **epa.gov/lead**.

LEAD SAMPLING IN SCHOOLS

No schools requested sampling for lead in 2024. To schedule lead testing for your school, contact Western Water’s Water Quality team at **951.789.5119**.



Lead and Copper Testing Regulated at Customer’s Tap	Lead (µg/L)	Copper (mg/L)
Action Level @ 90th Percentile	15	1.3
California Public Health Goal (PHG)	0.2	0.3
Detection Limits for Purposes of Reporting (DLR)	5	0.05
Riverside, 2022 Monitoring		
90th percentile value	ND	0.26
# of homes over action level	0 of 34	0 of 34
Murrieta, 2022 Monitoring		
90th percentile value	ND	0.15
# of homes over action level	0 of 30	0 of 30
Rainbow, 2024 Monitoring		
90th percentile value	ND	0.19
# of homes over action level	0 of 5	0 of 5

LEAD SERVICE LINE INVENTORY

After reviewing historical records and inspecting the field, Western Water has found that there are no lead or galvanized steel service lines that need to be replaced in its Rainbow, Murrieta, and Riverside service areas (except March Air Reserve Base). Learn more about Western Water’s initial Lead Service Line Inventory at **WesternWaterCA.gov/LeadServiceLineInventory**



WATER QUALITY TABLES

2024 WATER QUALITY TABLE

RETAIL SYSTEM



	Units of Measure	State/Fed MCL [MRDL]	PHG (MCLG) [MRDLG]	DLR (CCRD) [RL]	Riverside Service Area ^(a)				Murrieta Service Area ^(b)				Rainbow Service Area ^(c)		Primary Sources	
					Local Groundwater		Surface Water		Local Groundwater		Surface Water		Surface Water			
					Average	Range	Average	Range	Average	Range	Average	Range	Average	Range		
Primary Standards, Mandatory Health Related Standards																
Clarity					Highest	% ≤0.1	Highest	% ≤ 0.3			Highest	% ≤ 0.3	% ≤ 0.1	Highest	% ≤ 0.3	
Turbidity	NTU	TT ^(d)	NA	NA	0.17	99.3	0.08	100	NA	NA	0.74	100	97	0.07	100	Soil runoff
Disinfection Byproduct Precursors																
Total Organic Carbon (TOC)	mg/L	TT	NA	0.3	No Data	No Data	2.2	1.5 - 2.5	ND	ND - 2.3	2.6	2.0 - 3.2	2.6	2.3 - 3.0	Various natural and manmade sources	
Inorganic Chemicals																
Aluminum ^(e)	µg/L	1000	600	50	ND	ND - 52	ND	ND - 110	ND	ND - 54	ND	ND - 160	74	ND - 160	Erosion of natural deposits; residue from some surface water treatment processes	
Arsenic ^(f)	µg/L	10	0.004	2	ND	ND - 6.5	ND	NR	2	ND - 19	ND	ND - 2.3	ND	NR	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium	mg/L	1	2	0.1	ND	NR	ND	NR	0.1	ND - 0.3	ND	NR	ND	NR	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chromium, Hexavalent	µg/L	10	0.02	0.1	1.2	ND - 2.1	ND	NR	ND	NR	ND	NR	ND	NR	Runoff/leaching from natural deposits; discharge from industrial wastes	
Fluoride	mg/L	2	1	0.1	0.2	ND - 0.5	0.7	0.6 - 0.9	0.2	ND - 0.4	0.2	ND - 0.8	0.7	0.6 - 0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Nitrate (N)	mg/L	10	10	0.4	5.0	2.8 - 6.8	0.6	NR	0.8	ND - 3.4	ND	ND - 1.6	ND	NR	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Nitrite (N)	mg/L	1	1	0.4	ND	NR	ND	NR	ND	ND - 0.53	ND	ND - 0.8	ND	NR	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Perchlorate	µg/L	6	1	1	1.3	ND - 2.9	ND	NR	ND	NR	ND	NR	ND	NR	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.	
Selenium	µg/L	50	30	5	ND	ND - 16	ND	NR	ND	ND - 12	ND	NR	ND	NR	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)	

	Units of Measure	State/Fed MCL [MRDL]	PHG (MCLG) [MRDLG]	DLR (CCRD) [RL]	Riverside Service Area ^(a)				Murrieta Service Area ^(b)				Rainbow Service Area ^(c)		Primary Sources
					Local Groundwater		Surface Water		Local Groundwater		Surface Water		Surface Water		
					Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	
Radiological															
Gross Alpha	pCi/L	15	(0)	3	ND	ND - 4.7	ND	NR	3.5	ND - 10.6	ND	ND - 4	ND	ND - 4	Erosion of natural deposits
Gross Beta	pCi/L	50	(0)	4	No Data	No Data	ND	NR	7.5	ND - 20	12	ND - 19	4	ND - 5	Decay of natural and man-made deposits
Radium 226	pCi/L	NA	0.05	1	ND	NR	ND	NR	ND	ND - 1.2	ND	NR	ND	NR	Erosion of natural depositssq
Radium 228	pCi/L	NA	0.019	1	ND	NR	ND	ND - 1	ND	NR	ND	NR	ND	NR	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	3.4	ND - 11.7	ND	NR	ND	ND - 6.6	ND	ND - 3	2	ND - 3	Erosion of natural deposits
Secondary Standards – Aesthetic Standards															
Aluminum ^(e)	µg/L	200	600	50	ND	ND - 52	ND	ND - 110	ND	ND - 54	ND	ND - 160	74	ND - 160	Erosion of natural deposits; residual from some surface water treatment processes
Chloride	mg/L	500	NA	[2]	48	20 - 81	54	41 - 67	87	10 - 150	75	38 - 120	96	92 - 100	Runoff/leaching from natural deposits; seawater influence
Iron ^(f)	µg/L	300	NA	100	ND	NR	ND	NR	ND	ND - 668	ND	NR	ND	NR	Leaching from natural deposits; industrial wastes
Sulfate	mg/L	500	NA	0.5	40	4 - 72	34	21 - 47	47	10 - 177	92	15 - 224	199	195 - 203	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	mg/L	1000	NA	NA	292	120 - 380	220	178 - 263	350	196 - 582	361	157 - 715	566	560 - 572	Runoff/leaching from natural deposits
Manganese	µg/L	50	NL = 500	20	ND	NR	ND	NR	ND	ND - 37	ND	NR	ND	NR	Leaching from natural deposits
Specific Conductance	µS/cm	1600	NA	NA	470	200 - 580	392	317 - 466	579	307 - 1045	603	280 - 1210	910	903 - 917	Substances that form ions in water; seawater influence
Notification Levels, Nonregulatory Standards															
Boron	µg/L	NL = 1000	NA	100	ND	ND - 210	130	NR	124	ND - 508	127	ND - 175	130	NR	Runoff/leaching from natural deposits; industrial wastes
Chlorate ^(g)	µg/L	NL = 800	NA	[10]	No Data	No Data	78	NR	No Data	No Data	80	NR	80	NR	Byproduct of drinking water chlorination; industrial processes
N-Nitrosodimethylamine (NDMA) ^(g)	ng/L	NL = 10	3	[2]	ND	NR	ND	NR	No Data	No Data	2.5	NR	2.5	NR	Byproduct of drinking water chlorination; industrial processes
Perfluorooctanoic Acid (PFOA) ^(h)	ng/L	NL = 5.1	0.007	(4)	ND	NR	ND	NR	ND	ND - 4.7	ND	NR	ND	NR	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
Perfluorooctanesulfonic Acid (PFOS) ^(f)	ng/L	NL = 6.5	1	(4)	ND	NR	ND	NR	ND	ND - 4.1	ND	NR	ND	NR	
Perfluorohexanesulfonic Acid (PFHxS) ^(h)	ng/L	NL = 3	(10)	(3)	ND	ND - 3	ND	NR	ND	ND - 3	ND	NR	ND	NR	
Vanadium	µg/L	NL = 50	NA	3	ND	ND - 6.3	ND	NR	No Data	No Data	ND	NR	ND	NR	Naturally occurring; industrial waste discharge

	Units of Measure	State/Fed MCL [MRDL]	PHG (MCLG) [MRDLG]	DLR (CCRD) [RL]	Riverside Service Area ^(a)				Murrieta Service Area ^(b)				Rainbow Service Area ^(c)		Primary Sources
					Local Groundwater		Surface Water		Local Groundwater		Surface Water		Surface Water		
					Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	
Unregulated Contaminant Monitoring															
Chlorodibromoacetic Acid ^(f)	µg/L	NA	NA	NA	0.08	ND - 0.33	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	Byproduct of drinking water disinfection
Germanium ⁽ⁱ⁾	µg/L	NA	NA	(0.3)	ND	ND - 0.44	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	Naturally-occurring element; byproduct of zinc ore processing; used in solar, electronics and optic systems
Lithium ^(h)	µg/L	NA	NA	(9)	ND	ND - 9.1	ND	NR	ND	NR	9	ND - 32	28	24 - 32	Naturally-occurring; used in electrochemical cells, batteries, and organic syntheses and pharmaceuticals
Perfluorobutanoic Acid (PFBA) ^(h)	ng/L	NA	NA	(5)	ND	ND - 5.4	ND	NR	ND	NR	ND	NR	ND	NR	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
Perfluoropentanoic Acid (PFPeA) ^(h)	ng/L	NA	NA	(3)	ND	ND - 8.1	ND	NR	ND	NR	ND	NR	ND	NR	
Perfluorohexanoic Acid (PFHxA) ^(h)	ng/L	NA	NA	(3)	ND	ND - 4.4	ND	NR	ND	NR	ND	NR	ND	NR	
Other Parameters Tested															
Alkalinity, Total	mg/L	NA	NA	NA	117	40 - 180	70	68 - 71	101	23 - 210	87	57 - 135	105	103-107	Runoff/leaching of natural deposits
Calcium	mg/L	NA	NA	NA	46	17 - 67	18	15 - 22	43	5 - 110	36	14 - 83	62	61 - 62	
Hardness	mg/L	NA	NA	NA	154	54 - 210	84	68 - 99	134	14 - 457	149	65 - 326	242	242 - 243	
Magnesium	mg/L	NA	NA	[1.0]	9.3	2.5 - 13	9.7	8.4 - 11	6.4	ND - 44	15	7.4 - 29	22	22 - 23	
Potassium	mg/L	NA	NA	[1.0]	1.9	1.1 - 3.4	2.5	1.9 - 3.1	2.3	ND - 7.2	3.5	1.9 - 5.9	4.8	4.6 - 4.9	Salt present in the water; naturally-occurring
Silica	mg/L	NA	NA	NA	14	5.3 - 19	No Data	No Data	14	5 - 50	7.2	3.6 - 15	No Data	No Data	NA
Sodium	mg/L	NA	NA	NA	35	16 - 44	44	35 - 54	65	23 - 214	65	30 - 121	93	91 - 95	Salt present in the water; naturally-occurring

Monitored in the Distribution System											
	Units of Measure	MCL [MRDL]	PHG (MCLG) [MRDLG]	DLR (RL)	Riverside ^(a)		Murrieta ^(b)		Rainbow ^(c)		Primary Sources
					Average	Range	Average	Range	Average	Range	
Disinfection Byproducts					Highest LRAA or RAA		Highest LRAA or RAA		Highest LRAA or RAA		
Total Trihalomethanes (TTHMs) ^(j)	µg/L	LRAA = 80	NA	1.0	42	2 - 26	26	6 - 38	31	11 - 46	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5) ^(j)	µg/L	LRAA = 60	NA	1.0	9	ND - 7	7	ND - 10	9	5 - 15	
Bromate ^{(e)(g)}	µg/L	RAA = 10	0.1	1.0	7.9	ND - 19	1.5	ND - 6.0	1.5	ND - 6	

Monitored in the Distribution System

	Units of Measure	MCL [MRDL]	PHG (MCLG) [MRDLG]	DLR (RL)	Riverside ^(a)		Murrieta ^(b)		Rainbow ^(c)		Primary Sources
					Average	Range	Average	Range	Average	Range	
Microbiological					Highest %	2024 Total	Highest #	2024 Total	Highest #	2024 Total	
Total Coliform ^(k)	Monthly Positive Samples	TT: 5% (>40 Samples) 1 (<40 Samples)	(0)	NA	1%	1	0	0	0	0	Naturally present in the environment
Heterotrophic Plate County (HPC)	Monthly Samples > 500 CFU/mL and No Detectable Disinfectant Residual	TT	NA	NA	2024 Total		2024 Total		2024 Total		
					1		0		0		
Disinfectant											
Chloramines	mg/L	[4]	[4]	NA	1.45	ND - 3.06	1.41	ND - 3.23	1.97	0.7 - 2.9	Drinking water disinfectant added for treatment
Physical Parameters											
Color	Color Units	15	NA	(3)	ND	ND - 5	ND	ND - 10	ND	NR	Naturally-occurring organic materials
Odor	TON	3	NA	1	ND	ND - 1	ND	NR	ND	NR	Erosion of natural deposits
pH	pH units	NA	NA	NA	8.6	8.3 - 8.8	8.1	7.0 - 10.0	8.1	8.0 - 8.3	NA
Turbidity ^(l)	NTU	5	NA	0.1	ND	ND - 3.1	ND	ND - 4	ND	ND - 0.3	Soil runoff
Unregulated Contaminant Monitoring											
Haleoacetic Acids (HAA5) ^(m)	µg/L	NA	NA	NA	6.4	ND - 28	7.8	3.5 - 15	No Data	No Data	Byproduct of drinking water disinfection
Haleoacetic Acids (HAA6Br) ^(m)	µg/L	NA	NA	NA	5.6	ND - 15	7.9	3.9 - 14	No Data	No Data	
Haeloacetic Acids (HAA9) ^(m)	µg/L	NA	NA	NA	9.7	ND - 30	13	5.9 - 26	No Data	No Data	
Lithium ^{(h)(n)}	µg/L	NA	NA	(9)	ND	ND - 16	16	ND - 37	No Data	No Data	Naturally-occurring; used in electrochemical cells, batteries, and organic syntheses and pharmaceuticals
Perfluorooctanoic Acid (PFOA) ^{(h)(n)}	ng/L	NL = 5.1	0.007	(4)	ND	NR	ND	ND - 5	No Data	No Data	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
Perfluorooctanesulfonic Acid (PFOS) ^{(h)(n)}	ng/L	NL = 6.5	1	(4)	ND	NR	ND	ND - 4	No Data	No Data	
Perfluorobutanesulfonic Acid (PFBS) ^{(h)(n)}	ng/L	NL = 500	NA	(3)	ND	ND - 3	ND	NR	No Data	No Data	
Perfluorohexanesfulonic Acid (PFHxS) ^{(h)(n)}	ng/L	NL = 3	(10)	(3)	ND	ND - 3	ND	ND - 3	No Data	No Data	
Perfluoropentanoic Acid (PFPeA) ⁽ⁿ⁾	ng/L	NA	NA	(3)	ND	ND- 5	ND	NR	No Data	No Data	

KIDNEY DIALYSIS / AQUARIUMS

Western Water uses chloramines to disinfect its drinking water. Customers who have unique water quality needs or use specialized home treatments, such as kidney dialysis machines, should make the necessary adjustments to remove chloramines. Like chlorine, chloramines are toxic to dialysis water. Customers who have fish tanks in their homes or businesses should also take precautions to remove chloramines prior to adding water to tanks. Effective treatments include using granular activated carbon filters or chemicals specifically designed to remove chloramines.

MEASUREMENT TERMS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in safe 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. The standards listed in our water quality table are the most conservative set by the State. Individual measurements above a primary or secondary MCL listed in the table do not indicate an exceedance of the regulatory standard.

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. Adding a disinfectant is necessary to control microbial contaminants.

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

Notification Level (NL): Notification levels are health-based advisory levels established by DDW for chemicals in drinking water that lack MCLs.

Primary Drinking Water Standards (PDWS or Primary Standards): MCLs, MRDLs, and treatment techniques (TTs) 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 for which there is no known or expected health risk. PHGs are set by the California Environmental Protection Agency.

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

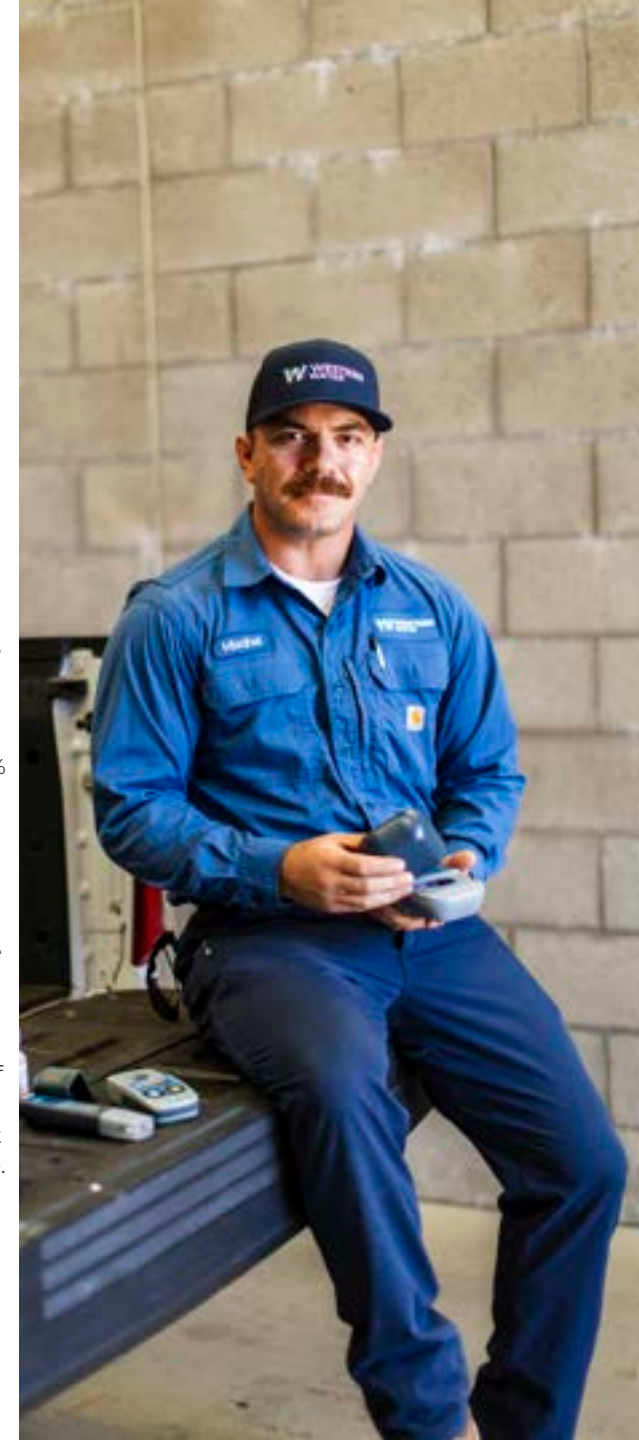
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

ABBREVIATIONS

CCRD	Consumer Confidence Report Detection Level
DLR	Detection Limits for Purposes of Reporting
HAA5	Sum of Five Regulated Haloacetic Acids (HAAs): Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Dibromoacetic Acid, and Trichloroacetic Acid
HAA6Br	Sum of Bromochloroacetic Acid, Bromodichloroacetic Acid, Dibromoacetic Acid, Dibromochloroacetic Acid, Monobromoacetic Acid, and Tribromoacetic Acid
HAA9	Sum of Bromochloroacetic Acid, Bromodichloroacetic Acid, Chlorodibromoacetic Acid, Dibromoacetic Acid, Dichloroacetic Acid, Monobromoacetic Acid, Monochloroacetic Acid, Tribromoacetic Acid, and Trichloroacetic Acid
LRAA	Locational Running Annual Average
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NA	Not Applicable
ND	Not Detected at or above CCRDL, DLR, or RL
NL	Notification Level
No Data	No data for reporting year and/or previous 9 years.
NR	No Range
PHG	Public Health Goal
RAA	Running Annual Average
RL	Reporting Limit (Laboratory)
TT	Treatment Technique
µg/L	micrograms per liter
mg/L	milligrams per liter
ng/L	nanograms per liter
CFU/mL	colony-forming units per milliliter
pCi/L	picocuries per liter (a measure of radioactivity)
µS/cm	microSiemen per centimeter
NTU	Nephelometric Turbidity Units

FOOT NOTES

- (a) The Riverside service area benefits from multiple sources of groundwater, including the Arlington Basin (through Western's Arlington Desalter), the Bunker Hill Basin (provided by the City of Riverside), and the Chino Basin (supplied by the Chino Desalter Authority). These groundwater sources complement the imported surface water received from the Henry J. Mills Water Filtration Plant, operated by the Metropolitan Water District, that is sourced from the California State Water Project. To provide an accurate representation, the reported averages for the Riverside service area groundwater encompass the collective average of all groundwater sources distributed throughout the reporting year within the service area. Similarly, the reported ranges for the Riverside service area groundwater capture the entire spectrum of groundwater sample results obtained from the various sources within the service area.
- (b) The Murrieta service area benefits from multiple sources of groundwater, including the Temecula Valley Basin (through Western's groundwater wells) and the Elsinore Valley and San Jacinto Basins (provided by Eastern Municipal Water District). These groundwater sources complement the imported surface water received from the Robert F. Skinner Water Filtration Plant (operated by the Metropolitan Water District) and Hemet Water Filtration Plant and Perris Water Filtration Plant (operated by Eastern Municipal Water District). These surface water contributions are sourced from the California State Water Project and the Colorado River. To provide an accurate representation, the reported averages for the Murrieta service area encompass the collective average of all sources distributed throughout the reporting year within the service area for each respective source type (groundwater or surface water). Similarly, the reported ranges for the Murrieta service area capture the entire spectrum of sample results obtained from the various sources within the service area.
- (c) The Rainbow Service Area only receives imported water from Metropolitan Water District's Robert F. Skinner Water Filtration Plant, that is sourced from the California State Water Project and Colorado River.
- (d) The turbidity level in the combined filter effluent at Mills and Skinner Filtration plants must be less than or equal 0.3 NTU in 95% of monthly measurements, with no readings exceeding 1 NTU. Similarly, Riverside's John W. North Treatment Plant and Eastern Municipal Water District's Hemet and Perris Water Filtration plants must maintain a turbidity level less than or equal 0.1 NTU in 95% of monthly measurements, with no readings exceeding 1 NTU.
- (e) Compliance with the State MCL is based on a RAA. The average value shown is the highest RAA calculated in 2024.
- (f) Compliance with the State MCL is determined by the average of all samples collected within a year.
- (g) The values reported are based solely on Metropolitan Water District's Mills and/or Skinner Water Treatment Plants only, as applicable to Service Area.
- (h) The CCRDL is based on the United States Environmental Protection Agency (EPA) Fifth Unregulated Contaminant Monitoring Rule (UCMR5) minimum reporting levels (MRLs) for 25 EPA 533 constituents and lithium.
- (i) The average and range reported are based on only a single water source since only one water source was sampled for the reported constituent.
- (j) For the Riverside system, the RAA includes samples taken in 2023 in the calculation, which is the reason it is outside of the range of values, which only represent samples collected in 2024.
- (k) Total coliform compliance is determined based on the total number of monthly samples collected. For a water system collecting at least 40 samples per month (Riverside system), the treatment technique (TT) trigger is set at 5% of monthly samples being positive. For a water system collecting fewer than 40 samples per month (Murrieta and Rainbow systems), the treatment technique (TT) trigger is set at one positive monthly sample.
- (l) Turbidity is a measure of the cloudiness of the water. High turbidity can hinder the effectiveness of disinfectants. Western Water monitors it because it's a good indicator of water quality and the effectiveness of filtration systems, where used.
- (m) This data is from the Fourth Unregulated Contaminant Monitoring Rule (UCMR4) program that was conducted by Western Water in the Riverside and Murrieta Service Area distribution systems in 2018 through 2019.
- (n) This data is from the Fifth Unregulated Contaminant Monitoring Rule (UCMR5) program that was conducted by Western Water at the various entry points to the distribution system for the Riverside and Murrieta Service Areas in 2023 through 2024.



2024

WATER QUALITY REPORT

VIEW THIS REPORT AT [WESTERNWATERCA.GOV/WATERQUALITYREPORT](https://westernwaterca.gov/waterqualityreport)

As required by the Environmental Protection Agency and State Water Resources Control Board Division of Drinking Water, Western Water is pleased to make this important report available to all customers.

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