

2024

ANNUAL WATER QUALITY REPORT



CONSUMER CONFIDENCE REPORT
ISSUED JUNE 2025

RAINBOWMWD.CA.GOV

2024

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Water Resources

For more information contact

Rainbow Water District
rainbowmwd.ca.gov
(760) 728-1178

Metropolitan Water District
mwdh2o.com
(213) 217-6000

U.S. Environmental Protection Agency
epa.gov/ccr
Safe Drinking Water Hotline
(800) 426-4791

State Water Resources Control Board
waterboards.ca.gov
(866) 792-4977

Rainbow Water met or exceed all Environmental Protection Agency and California State Drinking Water Standards in 2024.



Robert A. Skinner Treatment Plant at Lake Skinner in Riverside County.

View the Report Online

The Water Quality Report is now available in English and Spanish. Please view the report electronically by scanning the code below or visit rainbowmwd.ca.gov/ccr

Spanish Water Quality Report

Este informe contiene información muy importante sobre la calidad de su agua de beber. Para español escanea el código o visita rainbowmwd.ca.gov/ccr



Frequently Asked Questions

Does Rainbow Water have hard or soft water?

During the past year, Rainbow Water has reported a average water hardness of 242 milligrams per liter (mg/L) (equal to 14.15 grains per gallon, 1 grain = 17.1 mg/L). This reported level is considered “hard” water.

What about fluoride?

The Robert A. Skinner Filtration Plant treats water from the Colorado River and State Water Project. The Skinner Plant adjusts the fluoride levels in the water to an optimal level recommended by the State Water Resources Control Board - Division of Drinking Water (SWRCB-DDW) for oral health and uses chloramine for final disinfection. To obtain more information about fluoridation, please scan the code to view the State Water Resources Control Board website.



Who regulates drinking water quality?

The United States Environmental Protection Agency establishes and enforces national drinking water standards. In California, enforcement of drinking water standards falls under the SWRCB-DDW. The Agency set maximum contaminant level's (MCLs) for various compounds in water to provide safe drinking water supplies.



Where Does My Water Come From?

Imported Water Sources from Across California

For more than 70 years, Rainbow Water has delivered safe and reliable water to the community from 100% importation of the water supply through the State Water Project and Colorado River Aqueduct. Before water reaches the taps of over 9,000 customers in Rainbow Water's service area, it travels across two thirds of the state through Metropolitan Water District of Southern California's (Metropolitan) extensive distribution system to be treated at Metropolitan's Robert H. Skinner Treatment Plant in Temecula.

The Skinner Treatment Plant has served as a portion of Rainbow Water's water supply since 1976, and receives a blend of water from the State Water Project and Colorado River Aqueduct. The water finally makes its way to Rainbow Water through direct connections to Metropolitan's pipelines to northern San Diego County. Rainbow Water staff regularly check the imported water supply to ensure the quality is maintained before it is delivered to residences and businesses in the service area.

The cost for the transportation, treatment and storage of water are part of Rainbow Water's monthly fixed fees billed to customers. These shared costs play a key role to maintain and deliver water to customers across the 82 square mile service area.

Who is Metropolitan Water District of Southern California?

Established in 1928, Metropolitan is the largest wholesale treated water supplier in the country. Metropolitan purchases and sells water to a cooperative of 26 member agencies in Southern California, including Eastern Municipal Water District. Metropolitan's water connects a vast system of water treatment facilities, pipelines, and tunnels to distribute imported water sourced from the State Water Project in Northern California and across the Mojave Desert from the Colorado River Aqueduct.

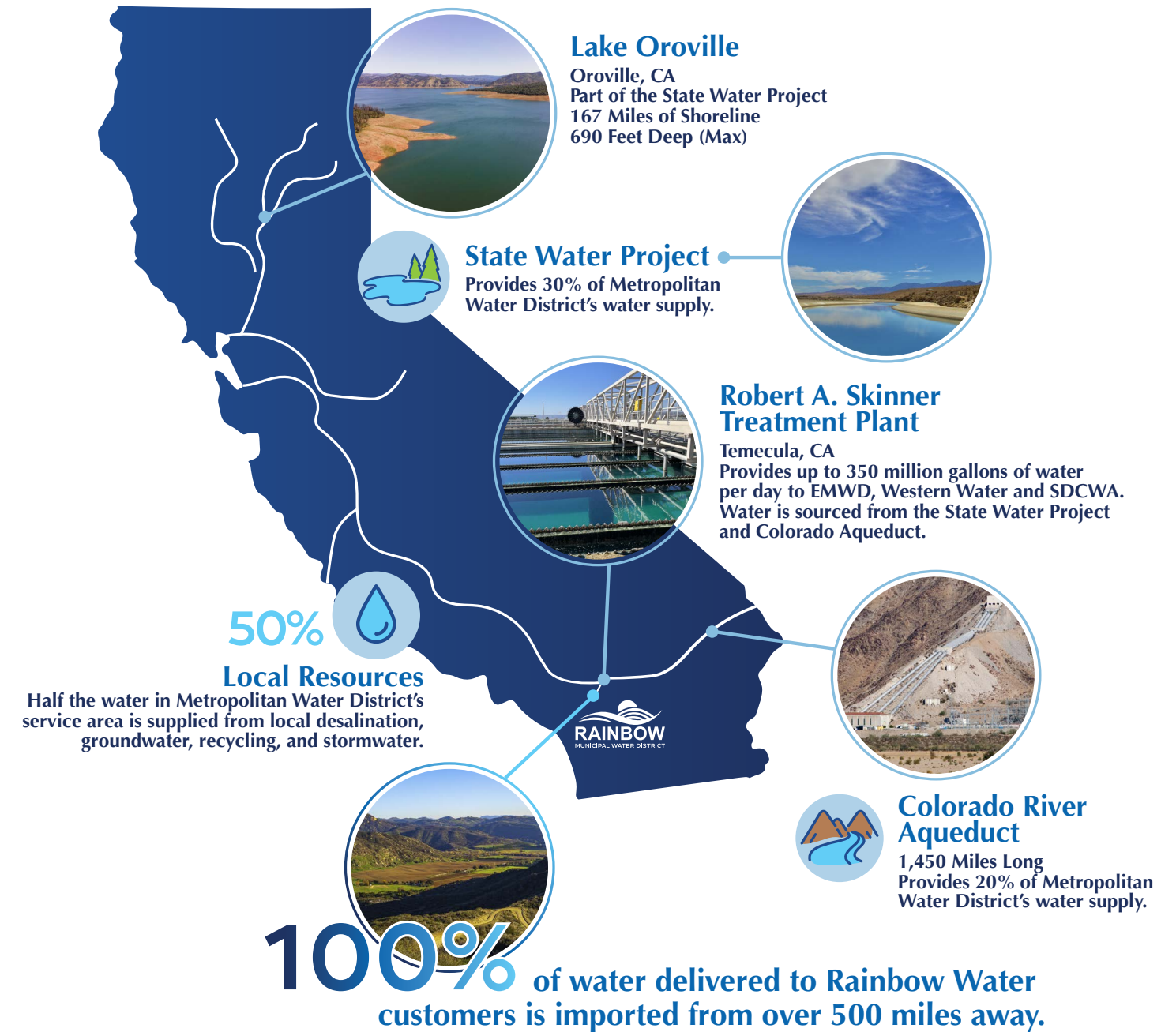
Who is Eastern Municipal Water District?

The Eastern Municipal Water District (EMWD) is California's sixth-largest water agency. As a member agency of Metropolitan, EMWD purchases water from Metropolitan and sells it to retail customers and retail water agencies, including Rainbow Water.

Rainbow Water purchases water from EMWD where it travels through Metropolitan's pipelines to the service area. EMWD charges Rainbow Water the Metropolitan wholesale rate plus a nominal administrative fee of \$12 per acre-foot. An acre-foot is 325,800 gallons or approximately equal to the amount of water it would take to fill a football field one foot deep.

What is the State Water Project?

The California Department of Water Resources (DWR) manages the State Water Project (SWP), the country's largest state-owned and customer-financed water delivery system. The SWP spans 704 miles from the Northern Sierra Mountains to San Diego County to deliver clean water to 30 million Californians through a complex system of canals, pipelines, and reservoirs. Rainbow Water benefits from the SWP, as it is one of the sources of water treated at the Skinner Treatment Plant and eventually delivered to Rainbow Water customers through a Metropolitan pipeline connection.



Take a Virtual Tour of the Water Supply

Explore the State Water Project and Colorado River Aqueduct systems with a 360 degree virtual tour of the journey your water takes before it reaches the tap. Scan the code to learn more about the engineering marvels built by Metropolitan Water District nearly 70 years ago.

Visit the sites below to view the video tour:

State Water Project Video:
rainbowmwd.ca.gov/state-water-project

Colorado River Aqueduct Video:
rainbowmwd.ca.gov/colorado-river-aqueduct



About Your Drinking Water

Why are there contaminants in my drinking 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 United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at: (800) 426-4791 or the EPA's Safe Drinking Water website: [epa.gov](https://www.epa.gov)

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, radio-active 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 which 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Coliform bacteria** are a commonly used indicator of sanitary quality of foods and water.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water 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 storm water runoff and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.



Metropolitan's Diamond Valley Lake in Hemet is Southern California's largest drinking water reservoir.

What about lead in my drinking water?

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. Rainbow Water is responsible for providing high-quality drinking water but cannot control the variety of materials used in privately owned plumbing components. 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.

As part of the USEPA Lead & Copper Rule, every three years Rainbow Water is required to collect samples based on population and service connections within the distribution system. If you are concerned about lead in your water, you may request to have your water tested by calling Rainbow Water Customer Service.

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 (800) 426-4791 or at: [epa.gov/lead](https://www.epa.gov/lead).

California Assembly Bill 746 has required community water systems to test lead levels in drinking water since 2019 at all California public, K-12 school sites that were constructed before January 1, 2010.

A service line inventory was performed by Rainbow Water and the results concluded there was no lead detected in the distribution system. The lead and copper service line inventory is available for download on the Rainbow Water website: rainbowmwd.ca.gov/lead-and-copper-service-line-inventory

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and 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 and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline: (800) 426-4791. When ingested by humans, they may result in a variety of gastrointestinal symptoms including diarrhea, nausea and fever. Metropolitan has tested for cryptosporidium in treated water supplies for decades, and the organism has not been detected Metropolitan's source water or treated water since 1997.



About the Annual Water Quality Report

Water Quality Monitoring

This report provides water quality information compiled during 2024, with details about where your water comes from, what it contains, and how it compares to Federal and State standards. Rainbow Water routinely monitors the distribution system for drinking water constituents of concern. Last year, in addition to dozens of other water quality tests, Rainbow Water conducted 312 tests for total coliform bacteria. The State Water Resources Control Board - Division of Drinking Water (SWRCB-DDW) requires that no more than 5% of the water samples collected per month may test positive for total coliform. *Rainbow Water was in compliance for the entire year.*

Storage Facility Inspections

Rainbow Water's water storage and distribution system includes over 344 miles of pipeline, 12 closed steel tanks, one concrete tank and three covered reservoirs. Weekly tank and reservoir inspections were completed by Rainbow Water as part of its routine preventative maintenance plan. Yearly tank inspections are conducted for safety and sanitation compliance by a third-party inspection firm. Every two years, each tank is taken offline to receive a detailed interior inspection, undergo a robust interior cleaning, and receive repairs as needed.



1 Concrete Tank



12 Closed Steel Tanks



3 Covered Reservoirs

The water contains a mixture of chlorine and ammonia, which creates a strong disinfectant known as chloramines. Chloramine residuals are constantly monitored, and when applicable, small amounts of chlorine is injected into the water throughout Rainbow Water facilities. However, certain portions of the distribution system convert from chloramine to free chlorine based on specific operating conditions. Should a water quality problem occur, Rainbow Water is prepared to take remedial action as set forth in an Operational Plan approved by the SWRCB-DDW.



Source Water Assessment

In 2011, Metropolitan completed the source water assessment of the Colorado River Aqueduct and State Water Project supplies.



Colorado River Aqueduct

Supplies are considered to be most vulnerable to recreation, urban/storm runoff, increasing urbanization in the watershed and wastewater.



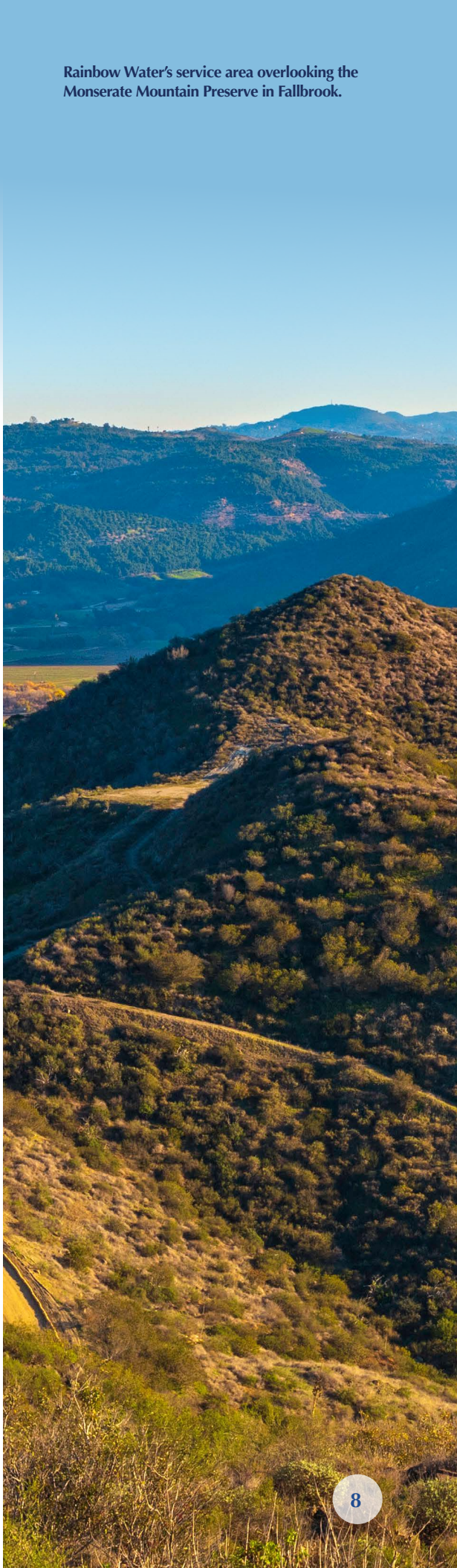
State Project Water

Supplies are regarded as the most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater.

Source water protection is not only important for the environment, but also for California residents by ensuring safe drinking water. A copy of the assessment can be obtained on the Metropolitan website at mwdh2o.com, or by calling: (800) 225-5693.

Certified Operators

Rainbow Water's water system operators are certified in both water distribution and water treatment. Water system operator competency is critical for the protection of public health and the maintenance of safe, optimal and reliable operations of water treatment and distribution facilities. SWRCB-DDW guidelines ensure that operators have the operational skills, knowledge, experience, education and training required to operate a water system. Once water system operators are initially trained and certified, they are required to recertify every three years through continued education to ensure competency. The requirements issued by SWRCB-DDW will provide baseline standards for efficient and effective State Water Operator Certification programs.



Consumer Confidence Report

Primary Standards — Mandatory Health-Related Standards▲



Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
MICROBIOLOGICAL					
Total Coliform Bacteria (b)	2 in the year	0	For water systems collecting fewer than 40 samples per month: no more than one positive monthly samples	0	Naturally present in the environment
Fecal Coliform or E. coli	1 in the year	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli	0	Human and animal fecal waste

Lead & Copper (Completed if detected of lead or copper in last sample set)	No. of Samples Collected	90th Percentile Level Detected	No. of Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
INORGANIC COMPOUNDS – SAMPLED IN HOME TAPS IN 2024 (sampled every 3 years)						
Copper (d) (ppm)	30	0.24	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits
Lead (d) (ppb)	30	0.0022	0	15	0.2	Internal corrosion of household water plumbing systems; Discharges from industrial manufacturers, erosion of natural deposits

SPECIAL LEAD & COPPER MONITORING DUE TO NEW SOURCE AS REQUIRED BY SWRCB						
Copper (d) (ppm)	0	0	0	0	0	Internal corrosion of household plumbing systems; erosion of natural deposits
Lead (d) (ppb)	0	0	0	0	0	Internal corrosion of household water plumbing systems; Discharges from industrial manufacturers, erosion of natural deposits

	Skinner WTP		Twin Oaks WTP ▶		Carlsbad Desal Plant ▶				
	Average	Range	Average	Range	Average	Range	MCL [MRDL]	MCLG [MRDLG]	Major Sources in Drinking Water
INORGANIC COMPOUNDS									
Aluminum (ppb)	74	ND-160	0.05	ND-0.16	ND	ND	1,000	600	Natural deposits erosion; residue from water treatment process
Arsenic (ppb)	ND	ND	Single Sample 2.1	NA	ND	ND	10	0.004	Natural deposits erosion; glass and electronics production waste
Barium (ppb)	ND	ND	113	95-122	ND	ND	1,000	2,000	Oil and metal refineries discharge: natural deposits erosion
Fluoride (ppm)	0.7	0.6-0.8	0.64	0.6-0.7	0.696	0.6-0.799	2.0	1	Water additive that promotes strong teeth; erosion of natural deposits

CLARITY									
	% <0.3	Highest	% <0.1	Highest	% <0.1	Highest	MCL [MRDL]	MCLG [MRDLG]	Major Sources in Drinking Water
Combined Filter (NTU)	100%	0.07	0.03	0.02-0.087	NA	0.08	TT	NA	Soil runoff
Effluent Turbidity (%)	100%	0.07	100%	NA	100%	NA	95 (a)	NA	Soil runoff

Glossary

Terms and abbreviations used in the tables above.

Through our monitoring and testing we learned some contaminants were detected. However, the EPA has determined that your water meets all drinking water health standards at these levels (c).
▶ Prior to detachment, Rainbow Water received imported water from the San Diego Water Authority from July 1 - October 31, 2024.
▲ The State allows water agencies to monitor for some contaminants less than once per year because the concentrations do not change frequently.
▲ PFAS/UCMR5 data reported all not detected (ND) with the exception of Lithium.

AL: Regulatory Action Level: The concentration level of a contaminant, which if exceeded triggers treatment or other requirements, which a water system must follow.
Cryptosporidium: A protozoan that infects a wide variety of vertebrates, including humans, causing acute gastroenteritis.
LRAA: Locational Running Annual Averages: The highest LRAA for TTHM and HAA5, the range of individual samples results for all monitoring locations. If more than one monitoring location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.
MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to public health goals (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 maximum level of a contaminant where there is no known or expected risk to health. MCLGs are set by the U.S. Environmental

Protection Agency.
mg/L or ppm: Milligrams per liter (mg/L) or Parts per million (ppm) 1 part per million = 1 drop in 10 gallons.
MRDL: Maximum Residual Disinfectant Level: The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.
MRDLG: Maximum Residual Disinfectant Level Goal: The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.
NA: Not applicable.
ND: Not Detected: Laboratory analysis indicates that the constituent is not present.
NL: Notification Level: Notification levels are health based advisory levels established by CDPH
NRA: No running average.
NTU: Nephelometric Turbidity Units: A measure of the cloudiness of the water.

Parameter (a)	Average	Range	MCL [MRDL]	(MCLG) [MRDLG]	Major Sources in Drinking Water
DETECTION OF CONTAMINANTS WITH A PRIMARY STANDARD					
Haloacetic Acids (HAA5) (c)(ppb)	15	ND-15	60	NA	Compliance is determined based on a locational running annual average (LRAA)
TTHM (c)(ppb) [Total trihalomethanes]	57	11-72	80	NA	Compliance is determined based on a locational running annual average (LRAA)
Total Chlorine Residual (ppm)	1.91	0.4-3.0	[4]	[4]	Drinking water disinfectant added for treatment

	Skinner WTP		Twin Oaks WTP*		Carlsbad Desal Plant *				
	Average	Range	Average	Range	Average	Range	MCL [MRDL]	MCLG [MRDLG]	Major Sources in Drinking Water
RADIONUCLIDE (pCi/L)									
Gross Alpha Particle Activity (pCi/L)	ND	ND-4	ND	ND-4	ND	ND	15	(0)	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	ND	ND-8	5	4.9-5.1	ND	ND	50	(0)	Decay of natural and man-made deposits
Uranium (pCi/L)	2	ND-3	ND	ND	ND	ND	20	0.43	Erosion of natural deposits

SECONDARY STANDARDS - AESTHETICS STANDARDS									
Aluminum (ppb)	74	ND-160	0.05	ND-0.16	ND	ND	200	600	Natural deposits erosion; residue from water treatment process
Chloride (ppm)	96	92-100	100	100	80	48-110	500	NA	Runoff/leaching from natural deposits; Seawater influence
Color (units)	2	1-2	ND	ND-1	ND	ND	15	NA	Naturally occurring organic materials
Iron (ppm)	ND	ND	ND	ND	ND	ND	300	ND	Leaching from natural deposits; industrial waste
Odor Threshold (TON)	1	1	ND	ND	ND	ND	3	ND	Naturally occurring organic materials
Specific Conductance (uS/cm)	910	903-917	Single Sample 827	152-217	430.8	242.3-551.4	1,600	NA	Substances that form ions when in water; seawater influence
Sulfate (ppm)	199	195-203	191	ND-191	14.8	12-17	500	NA	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (TDS) (ppm)	566	560-572	545	474-614	240	149-311	1,000	NA	Runoff/leaching from natural deposits

ADDITIONAL PARAMETERS									
Hardness (ppm)	242	242-243	Single Sample	NA	68.1	60.4-75.2	NA	NA	Leaching from natural deposits
Sodium (ppm)	93	91-95	99	NA	57.0	54.6-61.5	NA	NA	Runoff/leaching from natural deposits; Seawater influence
Boron (ppb)	130	130	Single Sample 140	NA	0.65	0.44-0.92	NA	NL=1	Leaching from natural deposits

UNREGULATED CONTAMINANTS RESULTS ▲					
Contaminant Detected	Result Range	Reporting Detection Limit	Unit	Sample Date	Major Sources in Drinking Water
Lithium	31-44	9.0	µg/L	2024	Naturally-occurring; used in electrochemical cells

pCi/L: PicoCuries per liter: A measure of radioactivity.
PHG: Public Health Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Agency.
PDWS: Primary Drinking Water Standard: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
TON: Threshold odor number.
TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Umho/cm: Micromhos per centimeter (a measure of a substance's ability to convey electricity).
µS/cm/cm: MicroSeimen per centimeter.
µg/L or ppb: Micrograms per liter (µg/L) or Parts per billion (ppb). One part per billion equals one drop in 10,000 gallons.

(a): Data shown are annual averages and ranges.
(b): Total coliform MCLs: For a water system collecting fewer than 40 samples per month, no more than 1 of the monthly samples may be total coliform positive.
(c): Calculated from the locational running annual average of quarterly samples.
(d): The Federal and State requirements for exceeding the action levels may include installing corrosion control treatment, collecting water quality parameter samples, or replacing lead service lines.
(e): The turbidity performance standards regulated by a treatment technique shall be less than or equal to 0.3 NTU in 95% of the measurements at Skinner WTP and less than or equal to 0.1 NTU in 95% of the measurements at the CDP and TOVWTP. Turbidity is the measure of the cloudiness of the water and is an indicator of treatment performance.

About Your Local Water Agency

Founded in 1953, Rainbow Water treats and delivers water to over 8,800 water customers and 3,260 sewer customers within an 82-square mile service area. As a small government agency, Rainbow Water works tirelessly to maintain service 24 hours a day and 365 days per year.

Mission

To provide our customers reliable, high quality water and water reclamation service in a fiscally sustainable manner.

Core Values

Integrity, Professionalism, Responsibility, Teamwork, and Innovation.

Stay Connected

Have you recently moved or changed your phone number? The Customer Service team is available to update your contact information to ensure you receive monthly invoices, newsletters, and service updates. Learn more about payment plans, bill payments, and rate options by calling (760) 728-1178.



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