



# 2023 Water Quality Report



***Providing an abundance of local, reliable, clean, safe water.***

Data Collected in 2022

# Serving High-Quality Water for 63 Years

Mesa Water District (Mesa Water®) is an independent special district governed by a publicly-elected 5-member Board of Directors (Board) that provides water service to 110,000 customers in most of Costa Mesa, a portion of Newport Beach, and some unincorporated areas of Orange County. Mesa Water conducts more than 30,000 water quality tests annually to ensure our water meets or surpasses all state and federal drinking water regulations.

Mesa Water is committed to transparency and fiscal responsibility. It is the most efficient water agency in Orange County



based on expenditures per capita, according to an annual study by Raftelis Financial Consultants. The award-winning agency holds AAA credit ratings from both Fitch and S&P Global Ratings – the highest achievable by an organization.

Mesa Water was formed in 1960 when four local water providers merged. The agency's combined resources, along with an

independent Board focused on providing a reliable supply of drinking water to its service area, allowed Mesa Water to build and improve its water delivery infrastructure for its customers.

## Mesa Water Invests in Infrastructure to Ensure Water Reliability

Mesa Water continually invests in, and proactively maintains our infrastructure, which pumps, treats and delivers nearly five billion gallons of clean, safe drinking water to residential and business customers each year.

Mesa Water recently completed the construction of Croddy Well 14 and is scheduled to complete Chandler Well 12 later this summer, along with the pipeline to connect them to the main distribution system, which will increase local groundwater production capacity. The two new groundwater wells will be Mesa Water's largest producing wells, each pumping approximately 4,000 gallons per minute of local, clean, safe water, and adding more than 50% to the community's water supply.

Mesa Water is committed to ensuring an abundant, drought-resilient supply of reliable water for future generations.



## Community Benefits from 100% Local Water Supply with Additional Source from the Mesa Water Reliability Facility

More than a decade ago, we upgraded and re-opened the Mesa Water Reliability Facility, which catapulted the organization to achieve its goal of providing customers 100% local groundwater and eliminating our dependence on imported water – a truly unique accomplishment in Orange County.



Today, the benefits of 100% local water to our community are boundless. By providing this unique source of water, Mesa Water is able to pass the savings

on to you – our customers – because local water is less expensive than imported water due to the cost of energy to bring the water to Orange County and the higher treatment costs. Additionally, Mesa Water's carbon footprint is about half of what it once was when the district was reliant on imported water. Using local water rather than imported water helps us reduce greenhouse gas emissions.

Mesa Water's abundant, local and safe water supply is available when and where you need it.

**Learn more at [MesaWater.org/mwrf](http://MesaWater.org/mwrf).**

# The Quality of Your Water is Our Top Priority

## The Orange County Groundwater Basin

Mesa Water provides 100% local, reliable, clean, safe water to its customers that meets or surpasses all state and federal drinking water standards. The water is a blend of local groundwater sources. Groundwater, or well water, is pumped from Orange County's natural underground reservoir, or groundwater basin, via Mesa Water's seven wells.

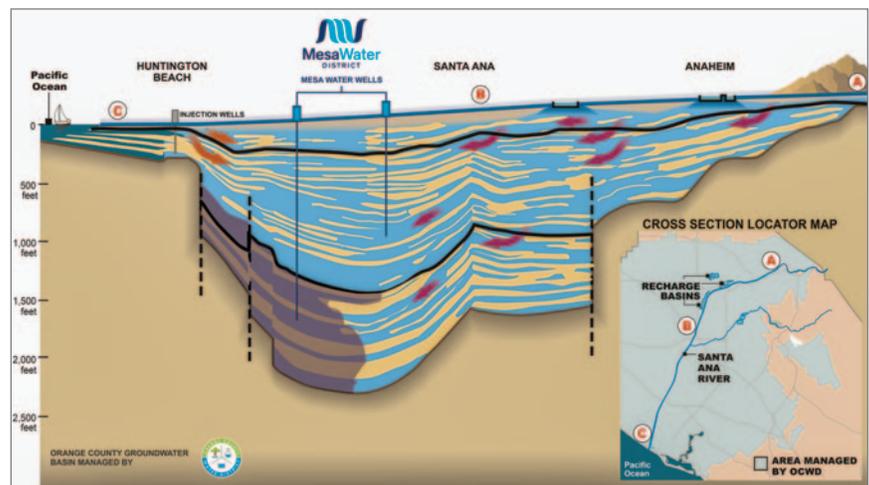
The groundwater basin is layered with sand and gravel, and was formed over thousands of years by the Santa Ana River flowing from the San Bernardino Mountains to the Pacific Ocean. It underlies north-central Orange County, from the Los Angeles County border south to Irvine, and from Yorba Linda in the east to Huntington Beach in the west.

The groundwater basin works as a natural filter and is replenished by water from both the Santa Ana River, Groundwater Replenishment System, and Metropolitan Water District of Southern California. Mesa Water's groundwater is disinfected with chloramines — a combination of chlorine and ammonia — before it enters the distribution system.

Mesa Water supplements its groundwater with water from the MWRP. Source water for the MWRP is pulled from deep below ground. This water, which is safe to drink prior to treatment, has an amber tint from ancient redwoods trees, which grew along the Orange County coast more than 100,000 years ago.

The trees decayed under the surface of the earth and colored the water in the deep aquifer. Using state-of-the-art nanofiltration technology, the amber organic color is removed and the clear water is added to Mesa Water's water supply.

If needed as backup supply, Mesa Water can import water from the Municipal Water District of Orange County (MWDOC). MWDOC delivers water supplies imported by Metropolitan from the State Water Project and the Colorado River. This imported water is filtered at Metropolitan's Diemer and Weymouth Filtration Plants, which also use chloramines for disinfection.



## Monitoring for Drinking Water Contaminants to Ensure Your Water is Safe

Sources of drinking water (for both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land, or through the layers of the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and 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, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and 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, which are by-products of industrial

processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application, and septic systems; and/or,

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

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (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 State Water Board allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. 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. 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's Safe Drinking Water Hotline at 800.426.4791.

# Important Information the Environmental Protection Agency Would Like You to Know

## Drinking Water Fluoridation

Mesa Water provides drinking water that contains naturally-occurring fluoride. Mesa Water does not add fluoride to the water it provides. Mesa Water occasionally supplements its local groundwater supply with water purchased from Metropolitan to use as a backup supply if needed. In November 2007, Metropolitan began adding fluoride to drinking water. Fluoride levels in drinking water are limited under California state regulations to a maximum dosage of 2 parts per million. Metropolitan was in compliance with all provisions of the State's fluoridation system requirements.



ordinary household products (cosmetics, deodorants, and shampoos). The U.S. EPA has classified 1,4-dioxane as a probable human carcinogen. Due to limited data on health effects, there is no federal or state drinking water standard or maximum contaminant level (MCL). The State Water Board established a Notification Level of 1 part per billion (1 ppb) for 1,4-dioxane. The State Water Board does not recommend treatment or removal from service at the levels detected in

Mesa Water's groundwater.

Mesa Water believes that the 1,4-dioxane found in the groundwater originated from the seawater injection barrier. An industrial discharger was identified as the principal source in the recycled water. This source was eliminated and an additional advanced oxidation treatment step was added to reduce 1,4-dioxane from future injection water.

For more information on 1,4-dioxane or other contaminants go to: [waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/14-Dioxane.html](http://waterboards.ca.gov/drinking_water/certlic/drinkingwater/14-Dioxane.html).

For more information about Metropolitan's fluoridation program, please contact:  
**Metropolitan Water District of Southern California**  
800.354.4420  
Additional information about the fluoridation of drinking water is available from:  
**U.S. Centers for Disease Control and Prevention**  
800.232.4636 • [cdc.gov/fluoridation](http://cdc.gov/fluoridation)  
**American Water Works Association**  
[awwa.org](http://awwa.org)

## Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and human wastes and may be in surface water.

Metropolitan tested their source water and treated surface water for Cryptosporidium in 2022 but did not detect it. If it ever is detected, Cryptosporidium is eliminated by an effective treatment combination including sedimentation, filtration, and disinfection.

The U.S. EPA and Centers for Disease Control guidelines on the appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from U.S. EPA's Safe Drinking Water Hotline at 800.426.4791.

## 1,4-dioxane

1,4-dioxane is a chemical contaminant primarily used as an industrial stabilizer to enhance performance of solvents in many manufacturing processes. It is found in foods (shrimp, chicken, tomatoes, etc.) and food additives and

## About Lead in Tap 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. Mesa Water is responsible for providing high-quality drinking water, but cannot control the variety of materials used in 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 2 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 800.426.4791 or at [epa.gov/lead](http://epa.gov/lead).



## Questions About Your Water?

For more information please contact Kay Lee, Mesa Water District Water Quality & Compliance Supervisor, at 949.207.5491.

Mesa Water's Board of Directors meets on the second and fourth Wednesday of each month at 4:30 p.m. at 1965 Placentia Avenue in Costa Mesa.

Learn more at [MesaWater.org](http://MesaWater.org).

## Additional Information of Interest About Water Quality

### Chloramines

Mesa Water's supply, like Metropolitan's, is treated with chloramines, a combination of chlorine and ammonia, as the drinking water disinfectant. Chloramines are effective in controlling the growth of bacteria and other microorganisms that may cause disease. Chloramines form fewer disinfection byproducts.

People who use kidney dialysis machines may want to take special precautions and consult their physician for the appropriate type of water treatment.

Customers who maintain fish ponds, tanks, or aquariums should also make necessary adjustments in water quality treatment, as these disinfectants are toxic to fish.

For further information or if you have any questions about chloramines, please call Kay Lee, Mesa Water's Water Quality & Compliance Supervisor at 949.207.5491.



### Immunocompromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people – such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants – can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

### Unregulated Contaminants

Mesa Water conducted sampling under the Fourth Unregulated Contaminants Monitoring Rule (UCMR 4) in 2018 and 2019. The most recent results for the detected contaminants are listed at the bottoms of Tables 1, 2 and 3. To obtain additional information on this testing, please contact Kay Lee, Mesa Water District Water Quality & Compliance Supervisor, at 949.207.5491.

Your  
Water  
is Safe!

## Source Water Assessments

### Imported (Metropolitan) Water Assessment

Every five years, Metropolitan is required by the State Water Board to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

The most recent surveys for MWDSC's source waters are the Colorado River Watershed Sanitary Survey – 2020 Update, and the State Water Project Watershed Sanitary Survey – 2021 Update.

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

U.S. EPA also requires Metropolitan to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. Metropolitan completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling Metropolitan at 800.225.5693.

### Groundwater Assessment

An assessment of the drinking water sources for Mesa Water was completed in December 2002 and was updated in 2022. The sources are considered most vulnerable to the following activities: dry cleaners, gas stations, known contaminant plumes, metal plating/finishing/fabricating, plastics/synthetics producers, bus maintenance, automobile body shops/repair shops, boat services/repair/refinishing, machine shops, electronic manufacturing, furniture repair/manufacturing, sewer collection systems (residential), and underground storage tanks (non-regulated tanks).

A copy of the complete assessment is available at the State Water Resources Control Board, Division of Drinking Water, Santa Ana District, 2 MacArthur Place, Suite 150, Santa Ana, California 92707.

You may request a summary of the assessment by contacting Kay Lee, Mesa Water District Water Quality & Compliance Supervisor, at 949.207.5491.

**Table 1: 2022 Metropolitan Water District of Southern California Treated Surface Water**

Constituent	MCL	PHG (MCLG)	Diemer Average	Weymouth Average	Range of Detections	MCL Violation?	Typical Source in Drinking Water
<b>Radiologicals – Tested in 2020 and 2022</b>							
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND	ND – 3	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	6	6	ND – 9	No	Decay of Natural and Man-made Deposits
Combined Radium (pCi/L)	5	(0)	ND	ND	ND – 1	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2	2	1 – 3	No	Erosion of Natural Deposits
<b>Inorganic Chemicals – Tested in 2022</b>							
Aluminum (ppm)	1	0.6	0.14	0.156	0.058 – 0.24	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.107	0.107	0.107	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	ND	ND	ND – 7.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) treatment-related	2	1	0.7	0.7	0.6 – 0.8	No	Water Additive for Dental Health
<b>Secondary Standards* – Tested in 2022</b>							
Aluminum (ppb)	200*	600	140	156	58 – 240	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	101	102	98 – 105	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	1	1	1	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	3	3	3	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	988	992	964 – 1,020	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	221	222	212 – 232	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	628	638	608 – 648	No	Runoff or Leaching from Natural Deposits
<b>Unregulated Chemicals – Tested in 2022</b>							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	126	127	125 – 128	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	Not Regulated	n/a	0.13	0.14	0.13 – 0.14	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	70	66 – 71	n/a	Runoff or Leaching from Natural Deposits
Chlorate (ppb)	Not Regulated	n/a	90	88	88 – 90	n/a	Byproduct of Drinking Water Chlorination
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	278	279	275 – 281	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	16	16	16	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	25	26	24 – 26	n/a	Runoff or Leaching from Natural Deposits
pH (units)	Not Regulated	n/a	8.1	8.1	8.1	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.6	4.6	4.4 – 4.8	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	98	100	95 – 103	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	Not Regulated	n/a	2.5	2.4	1.7 – 2.6	n/a	Various Natural and Man-made Sources

MCL = Maximum Contaminant Level; PHG = California Public Health Goal; (MCLG) = federal MCL Goal; pCi/L = picoCuries per liter; ppm = parts per million; ppb = parts per billion; µmho/cm = micromhos per centimeter; ND = not detected; n/a = not applicable \*Constituent is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Turbidity – combined filter effluent Metropolitan Water District Filtration Plants	Treatment Technique	Turbidity Measurements		TT Violation?	Typical Source in Drinking Water
		Diemer	Weymouth		
1) Highest single turbidity measurement (NTU)	0.3	0.03	0.04	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. NTU = nephelometric turbidity units  
Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT).  
A treatment technique is a required process intended to reduce the level of chemicals in drinking water that are difficult and sometimes impossible to measure directly.

**Metropolitan Water District of Southern California Unregulated Constituents Requiring Monitoring**

Constituent	NL	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Germanium (ppb)	n/a	n/a	ND	ND – 0.4	2018
Manganese (ppb)**	SMCL = 50	n/a	1.7	0.8 – 2.5	2018

NL = Notification Level; PHG = California Public Health Goal; SMCL = Secondary MCL; ppb = parts per billion; n/a = not applicable; ND = not detected \*\*Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated constituents requiring monitoring.

**Table Legend**

**Types of Water Quality Standards:**

- ◆ **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- ◆ **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.
- ◆ **Secondary MCLs:** Set to protect the odor, taste, and appearance of drinking water.
- ◆ **Primary Drinking Water Standard:** MCLs, MRDLs and treatment techniques for contaminants that affect health along with their monitoring and reporting requirements.
- ◆ **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.
- ◆ **Notification Level (NL):** Health-based advisory levels established by the Division of Drinking Water (DDW) for chemicals in drinking water that lack MCLs.

**Types of Water Quality Goals:**

In addition to mandatory water quality standards, U.S. EPA and the State Water Board have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The charts in this report include three types of water quality goals:

- ◆ **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 U.S. 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.
- ◆ **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 Environmental Protection Agency.

**How are Contaminants Measured?**

Water is sampled and tested throughout the year. Contaminants are measured in:

- ◆ parts per million (ppm) or milligrams per liter (mg/L)
- ◆ parts per billion (ppb) or micrograms per liter (µg/L)
- ◆ parts per trillion (ppt) or nanograms per liter (ng/L)

**Table 2: 2022 Mesa Water District Groundwater Quality**

Constituent	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source in Drinking Water
<b>Radiologicals</b>							
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND – 3.77	No	2022	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	1.08	ND – 2.83	No	2022	Erosion of Natural Deposits
<b>Inorganic Constituents</b>							
Arsenic (ppb)	10	0.004	ND	ND – 2.2	No	2022	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.47	0.25 – 0.79	No	2022	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	0.40	ND – 1.18	No	2022	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	0.40	ND – 1.18	No	2022	Fertilizers, Septic Tanks
<b>Secondary Standards*</b>							
Color (color units)	15*	n/a	ND	ND	No	2022	Erosion of Natural Deposits
Chloride (ppm)	500*	n/a	63	13 – 143	No	2022	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	ND	ND – 1	No	2022	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	561	254 – 760	No	2022	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	61	2.3 – 232	No	2022	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	338	154 – 466	No	2022	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	0.14	ND – 0.55	No	2022	Erosion of Natural Deposits
<b>Unregulated Constituents</b>							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	145	93.6 – 194	n/a	2022	Erosion of Natural Deposits
Bicarbonate (ppm as HCO <sub>3</sub> )	Not Regulated	n/a	170	114 – 212	n/a	2022	Erosion of Natural Deposits
Boron (ppm)	Not Regulated	n/a	0.22	ND – 0.53	n/a	2022	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	31	7 – 66	n/a	2022	Erosion of Natural Deposits
1,4-Dioxane (ppb)	Not Regulated	n/a	1.17	ND – 4.1	n/a	2022	Treated Wastewater
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	112	21.9 – 233	n/a	2022	Erosion of Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	6.6	1.3 – 14	n/a	2022	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	6.5	0.6 – 14.5	n/a	2022	Erosion of Natural Deposits
N-Nitrosodimethylamine (NDMA) (ppt)	Not Regulated	3	ND	ND	n/a	2022	Treated Wastewater
pH (units)	Not Regulated	n/a	8.2	7.9 – 8.7	n/a	2022	Acidity, hydrogen ions
Potassium (ppm)	Not Regulated	n/a	1.6	0.9 – 2.3	n/a	2022	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	77.5	30.9 – 162	n/a	2022	Erosion of Natural Deposits
Vanadium (ppb)	Not Regulated	n/a	4.8	3.4 – 6.4	n/a	2022	Erosion of Natural Deposits

MCL = Maximum Contaminant Level; PHG = California Public Health Goal; (MCLG) = federal MCL Goal; pCi/L = picoCuries per liter; NTU = nephelometric turbidity units; ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; µmho/cm = micromho per centimeter; ND = not detected; n/a = not applicable \*Constituent is regulated by a secondary standard to maintain aesthetic qualities.

**Mesa Water District Groundwater Unregulated Constituents Requiring Monitoring**

Constituent	NL	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Bromide (ppm)	n/a	n/a	0.32	0.038 – 0.817	2019
Germanium (ppb)	n/a	n/a	ND	ND – 1.2	2019
Manganese (ppb)**	SMCL = 50	n/a	7.13	ND – 28.4	2019
Total Organic Carbon (Unfiltered) (ppm)	n/a	n/a	1.68	0.09 – 5.58	2019

NL = Notification Level; PHG = California Public Health Goal; ppm = parts-per-million; ppb = parts-per-billion; n/a = not applicable; SMCL = Secondary MCL; ND = not detected \*\*Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated constituents requiring monitoring.

**Table 3: 2022 Mesa Water District Distribution System Water Quality**

Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source in Drinking Water
Total Trihalomethanes (ppb)	80	14	ND – 29	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	4	ND – 8	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.74	0.32 – 2.73	No	Disinfectant Added for Treatment
<b>Aesthetic Quality</b>					
Color (color units)	15*	ND	ND – 5	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	ND	ND – 0.55	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; 25 locations are tested monthly for color, odor and turbidity. Odor was not detected in 2022. MCL = Maximum Contaminant Level; MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ppb = parts per billion; ppm = parts per million; NTU = nephelometric turbidity units; ND = not detected \*Constituent is regulated by a secondary standard to maintain aesthetic qualities.

**Lead and Copper Action Levels at Residential Taps**

	AL	PHG	90 <sup>th</sup> Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source in Drinking Water
Copper (ppm)	1.3	0.3	ND	0 / 52	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	ND	0 / 52	No	Corrosion of Household Plumbing

Every three years, at least 50 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2020. Lead was detected in one (1) sample. Copper was detected in five (5) samples. None of the lead and copper detections exceeded the action level. A regulatory action level is the concentration of a constituent which, if exceeded, triggers treatment or other requirements that a water system must follow.

AL = Action Level; PHG = California Public Health Goal; ppm = parts per million; ppb = parts per billion; ND = not detected;

**Mesa Water District Distribution System Unregulated Constituents Requiring Monitoring**

Constituent	NL	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Bromochloroacetic Acid (ppb)	n/a	n/a	1.1	ND – 2.5	2019
Bromodichloroacetic Acid (ppb)	n/a	n/a	ND	ND – 1	2019
Chlorodibromoacetic Acid (ppb)	n/a	n/a	0.42	ND – 1.2	2019
Dibromoacetic Acid (ppb)	n/a	n/a	1.9	ND – 5.2	2019
Dichloroacetic Acid (ppb)	n/a	MCLG = 0	0.89	ND – 3.4	2019
Monobromoacetic Acid (ppb)	n/a	n/a	ND	ND – 0.4	2019
Tribromoacetic Acid (ppb)	n/a	n/a	ND	ND – 3.7	2019
Trichloroacetic Acid (ppb)	n/a	MCLG = 20	ND	ND – 1.1	2019

NL = Notification Level; PHG = California Public Health Goal; ppb = parts per billion; n/a = not applicable; MCLG = federal MCL Goal; ND = not detected



1965 Placentia Avenue, Costa Mesa, California 92627

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PLACE  
STAMP  
HERE

This report contains important information about your drinking water. Please contact Mesa Water District at 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201, for assistance.

#### Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse a Mesa Water District, 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201 para asistirlo en español.

#### Vietnamese

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Mesa Water District tại 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201, để được trợ giúp bằng tiếng.

#### Korean

이 보고서는 당신의 식수에 관한 중요한 정보를 포함하고 있습니다. 한국어로 된 도움을 원하시면 Mesa Water District, 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201, 로 문의 하시기 바랍니다.

#### Japanese

この報告書には上水道に関する重要な情報が記されております。ご質問等ございましたら、Mesa Water District, 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201, まで日本語でご連絡下さい。

#### Arabic

يحتوي هذا التقرير على معلومات هامة حول مياه الشرب الخاصة بك. للحصول على المساعدة، يرجى التواصل مع Mesa Water District على العنوان التالي: 1965 Placentia Avenue, Costa Mesa, CA 92627، رقم الهاتف: 949.631.1201

#### Chinese

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 Mesa Water District 以获得中文的帮助: 1965 Placentia Avenue, Costa Mesa, CA 92627, 949.631.1201.

## Be Mesa Water Wise

Using water efficiently is a way of life and an important responsibility that comes along with the benefits of living in a Mediterranean-like climate that residents in the Mesa Water service area enjoy. Outdoors is where customers use the most water, so efficient outdoor water use is where customers can make the greatest impact because it's difficult to capture and recycle outdoor water use. Whereas, most of the water Mesa Water customers use indoors is recycled. Check out these helpful tips to encourage water use efficiency:

- ◆ Plant California-friendly trees and plants.
- ◆ Adjust sprinkler heads and fix leaks.
- ◆ Invest in a smart sprinkler timer.
- ◆ Report water waste to your local water provider.
- ◆ Water landscapes only before 8 a.m. or after 5 p.m.
- ◆ Refrain from watering hard or paved surfaces.
- ◆ Refrain from watering during or 48 hours after rainfall.
- ◆ Prevent excess runoff from watering landscapes.

For more tips, visit:

[MesaWater.org/BeMesaWaterWise](http://MesaWater.org/BeMesaWaterWise)

