# **2022** Water Quality Report



# **MesaWater** DISTRICT®

#### Data for 2021

# **Serving Our Community for 62 Years**

Mesa Water District (Mesa Water<sup>®</sup>) 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 an 18-square-mile area that includes most of Costa Mesa, a portion of

Newport Beach, and some unincorporated areas of Orange County, including John Wayne Airport.

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

# Celebrating the 10th Anniversary of Providing Our Customers 100% Local Water

This year, Mesa Water is celebrating its 10th anniversary of providing 100% local, reliable, clean, safe water – the only water district in Orange County to fulfill water demand entirely from local groundwater supplies.

Mesa Water uses only groundwater that is pumped from the Orange County Ground-



water Basin (Basin). The basin is replenished with water from the Groundwater Replenishment System (GWRS) managed by the Orange County Water District (OCWD).

Mesa Water's Board took significant steps to ensure local water reliability by authorizing

construction of the Mesa Water Reliability Facility

(MWRF). Raw water that meets all water quality standards is pulled from deep below ground by the MWRF's two wells.

Seventy-seven percent of the water Mesa Water provides is pumped from the Basin managed by OCWD – and the MWRF provides the rest and can serve up to 50% of our community's water needs if needed.

# How 100% Local Water Benefits Mesa Water Customers

- Local water costs less than imported water because there are higher treatment costs for imported water and it takes a tremendous amount of energy to pipe imported water to Orange County.
- 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 water supply is reliable during dry seasons.

Mesa Water will continue to support the development of cost-effective and environmentally-sensitive regional sources of water, to ensure high-quality water for the health and well-being of our customers for generations to come.

## Providing an abundance of local, reliable, clean, safe 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.

When Mesa Water was formed, nearly all of the water provided to its service area was imported from the Colorado River by Metropolitan Water District of Southern California (Metropolitan). As the price of imported water started to rise in the 1970s,

Mesa Water turned to its own local groundwater supplies and is no longer dependent on imported water.



# 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.

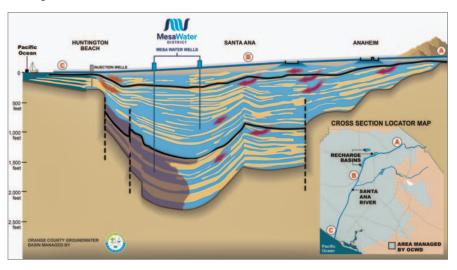
The groundwater basin is layered with sand and gravel, and was formed over thousands of years by the Santa Ana River flowing from the San Bernardino Mountains to the Pacific Ocean. It underlies north-central Orange County, from the Los Angeles

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, GWRS, and Metropolitan. 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 MWRF. Source water for the MWRF 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.

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

#### American Water Works Association

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 2021 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 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.

#### 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

### 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 Wednesday of each month at 4:30 p.m. at 1965 Placentia Avenue in Costa Mesa.

> Learn more at MesaWater.org.



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.

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# 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.

### **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 – 2016 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 2017. The sources are considered most vulnerable to the following activities: dry cleaners, gas stations, known contaminant plumes, metal plating/finishing/fabricating, plastics/synthetics producers, and bus maintenance.

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: 2021 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	
Radiologicals – Tested in 2020 and 2021								
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)	5	5	4-6	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	
Inorganic Chemicals – Tested	in 2021							
Aluminum (ppm)	1	0.6	0.141	0.148	ND - 0.240	No	Treatment Process Residue, Natural Deposits	
Barium (ppm)	1	2	0.111	0.110	0.110 - 0.111	No	Refinery Discharge, Erosion of Natural Deposits	
Bromate (ppb)	10	0.1	ND	ND	ND - 7.0	No	Byproduct of Drinking Water Ozonation	
Fluoride (ppm) treatment-related	2	1	0.7	0.7	0.6 - 0.9	No	Water Additive for Dental Health	
Secondary Standards* – Test	ed in 2021							
Aluminum (ppb)	200*	600	141	148	ND – 240	No	Treatment Process Residue, Natural Deposits	
Chloride (ppm)	500*	n/a	96	96	95 - 97	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	2	1	1 – 2	No	Naturally-occurring Organic Materials	
Specific Conductance (µmho/cm)	1,600*	n/a	958	964	950 - 965	No	Substances that Form Ions in Water	
Sulfate (ppm)	500*	n/a	214	219	214 - 221	No	Runoff or Leaching from Natural Deposits	
Total Dissolved Solids (ppm)	1,000*	n/a	597	604	597 - 609	No	Runoff or Leaching from Natural Deposits	
<b>Unregulated Chemicals – Tes</b>	ted in 2021							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	125	126	123 – 128	n/a	Runoff or Leaching from Natural Deposits	
Boron (ppm)	Not Regulated	n/a	0.13	0.13	0.13	n/a	Runoff or Leaching from Natural Deposits	
Calcium (ppm)	Not Regulated	n/a	66	67	64 - 70	n/a	Runoff or Leaching from Natural Deposits	
Chlorate (ppb)	Not Regulated	n/a	59	55	55 — 59	n/a	Byproduct of Drinking Water Chlorination	
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	274	272	270 – 276	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	4.4	4.6	4.2 - 4.7	n/a	Runoff or Leaching from Natural Deposits	
Sodium (ppm)	Not Regulated	n/a	94	98	93 - 101	n/a	Runoff or Leaching from Natural Deposits	
Total Organic Carbon (ppm)	Not Regulated	n/a	2.4	2.4	1.8 - 2.8	n/a	Various Natural and Man-made Sources	

**MCL** = Maximum Contaminant Level; (**MCLG**) = federal MCL Goal; **PHG** = California Public Health Goal \*Chemical is regulated by a secondary standard.

Turbidity – combined filter effluent Metropolitan Water District Filtration Plants	тт		easurements —— Weymouth	TT Violation?	Typical Source in Drinking Water
1) Highest single turbidity measurement (NTU)	0.3	0.03	0.03	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. 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 Chemicals Reguiring Monitoring

				<u> </u>				
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			
SMCL = Secondary MCL	**Manganese is regulated with a seco	**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.						

NL = Notification Level

\*Manganese is regulated with a secondary standard of 50 ppb but was not detected, ba 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:

NTU = nephelometric turbidity units

- 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) ۵
- parts per trillion (ppt) or nanograms per liter (ng/L) ۵

				ater District			
Constituent	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source in Drinking Water
Radiologicals							
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND – 3.77	No	2021	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	1.24	ND – 2.83	No	2021	Erosion of Natural Deposits
norganic Constituents							
Arsenic (ppb)	10	0.004	ND	ND – 2.2	No	2021	Erosion of Natural Deposits
luoride (ppm)	2	1	0.49	0.25 - 0.85	No	2021	Erosion of Natural Deposits
litrate (ppm as N)	10	10	0.41	ND – 1.17	No	2021	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	0.46	ND – 1.17	No	2021	Fertilizers, Septic Tanks
Secondary Standards*							
Color (color units)	15*	n/a	ND	ND – 4	No	2021	Erosion of Natural Deposits
hloride (ppm)	500*	n/a	60.1	12.2 - 130	No	2021	Erosion of Natural Deposits
dor (threshold odor number)	3*	n/a	ND	ND	No	2021	Naturally-occuring Organic Materials
pecific Conductance (µmho/cm)	1,600*	n/a	562	263 - 783	No	2021	Erosion of Natural Deposits
ulfate (ppm)	500*	n/a	59.7	1.9 - 232	No	2021	Erosion of Natural Deposits
urfactants (MBAS) (ppb)	500*	n/a	ND	ND – 30	No	2021	Municipal and Industrial Waste Discharge
otal Dissolved Solids (ppm)	1,000*	n/a	340	135 - 502	No	2021	Erosion of Natural Deposits
urbidity (NTU)	5*	n/a	0.17	ND - 0.7	No	2021	Erosion of Natural Deposits
Inregulated Constituents							
Ikalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	141	91.1 – 189	n/a	2021	Erosion of Natural Deposits
icarbonate (ppm as HCO <sub>3</sub> )	Not Regulated	n/a	167	111 – 217	n/a	2021	Erosion of Natural Deposits
Boron (ppm)	Not Regulated	n/a	0.2	ND – 0.5	n/a	2021	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	34.2	7 - 69.4	n/a	2021	Erosion of Natural Deposits
,4-Dioxane (ppb)	Not Regulated	n/a	1.2	ND – 3.7	n/a	2021	Treated Wastewater
lardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	112	19 – 233	n/a	2021	Erosion of Natural Deposits
lardness, total (grains/gal)	Not Regulated	n/a	6.5	1.1 – 14	n/a	2021	Erosion of Natural Deposits
lagnesium (ppm)	Not Regulated	n/a	6.4	ND – 14.5	n/a	2021	Erosion of Natural Deposits
I-Nitrosodimethylamine (NDMA) (ppt)	Not Regulated	3	ND	ND	n/a	2021	Treated Wastewater
H (units)	Not Regulated	n/a	8.0	7.6 - 8.5	n/a	2021	Acidity, hydrogen ions
otassium (ppm)	Not Regulated	n/a	1.6	0.7 – 2.3	n/a	2021	Erosion of Natural Deposits
odium (ppm)	Not Regulated	n/a	78.9	31.7 - 164	n/a	2021	Erosion of Natural Deposits
Vanadium (ppb)	Not Regulated	n/a	5.0	3.4 - 6.8	n/a	2021	Erosion of Natural Deposits

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

#### 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

SMCL = Secondary MCL \*\*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: 2021 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	18	ND – 27	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	4	ND – 5	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.72	0.16 - 3.26	No	Disinfectant Added for Treatment
Aesthetic Quality					
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 2021. **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NTU** = nephelometric turbidity units; **ND** = not detected; **MCL** = Maximum Contaminant Level; **ppb** = parts per million \*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
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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. In 2021, no schools submitted a request to be sampled for lead. AL = Action Level; **PHG** = California Public Health Goal

#### 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

 $MCLG = {\it federal MCL Goal; \ n/a} = {\it not applicable; \ NL} = {\it Notification Level}$ 

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. 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. 한 국어로 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، رقم الهتف: 1963.1201 Costa Mesa, CA 92627، رقم الهتف: 1949.631.1201

#### 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.



1965 Placentia Avenue, Costa Mesa, California 92627

Phone: 949.631.1200 · MesaWater.org

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### Be Mesa Water Wise Tips

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 and a recommended watering schedule, visit:

MesaWater.org/BeMesaWaterWise