

Marina Coast Water District

2019 Consumer Confidence Report

In Memory of Thomas Barkhurst

Marina Coast Water District is proud to present the 2019 Consumer Confidence Report. This annual water quality report includes information about where your water comes from, what it contains, and how it compares to drinking water standards. As in the past, the District gives you the assurance that your drinking water meets stringent California and Federal drinking water standards.

If you have any questions regarding the information in this report or about your water, please contact the Operations and Maintenance Manager, Derek Cray at (831)883-5903. You can also visit our website at www.mcwd.org.

Water Supply and Treatment

The District provides groundwater produced from eight wells delivered through a distribution system network of seven storage tanks and nearly 162 miles of water main pipeline. Three deep supply wells (10, 11, and 12) located in Central Marina draw groundwater from the 900-foot aquifer in the Salinas Valley Groundwater Basin. The groundwater is treated at each well site for disinfection to remove naturally-occurring hydrogen sulfide that can cause odor. Well 12 did not supply water to the distribution system in 2019 as it was inactive.

Five supply wells (29, 30, 31, 34, and Watkins Gate) located in the Ord Community draw groundwater from the Salinas Valley Groundwater Basin 900-foot, 400-foot, and lower 180-foot aquifers. Groundwater from these supply wells is disinfected in the Ord Community chlorination treatment plant.

In 2005, the Central Marina and Ord Community water

Source Water Assessment

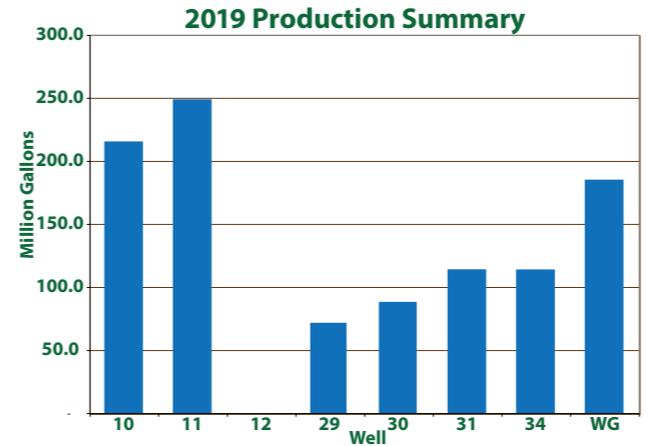
Several source water assessments have been completed. The source water assessment considers several factors: the presence of possible contaminating activity (PCA) such as current or historic human activities that are potential origins of contamination for a drinking water source, its proximity to the source, the risk associated with the PCA, and the construction and setting of the source. These factors are then ranked with the source considered most vulnerable to the PCAs at the top of the ranking.

In July 2001, the California Department of Public Health (CDPH) completed an assessment of each groundwater supply well in Central Marina which concluded that the wells are most vulnerable to historic waste dumps, landfill activities, and military installations.

In February 2002, an assessment was completed of each groundwater supply well in the Ord Community.

Báo cáo này chứa thông tin rất quan trọng về nước uống của bạn. Vui lòng truy cập trang web của chúng tôi cho một phiên bản dịch của báo cáo này, hoặc liên hệ với chúng tôi tại (831) 384-6131 để hỗ trợ thêm. www.mcwd.org

systems were connected to allow water to flow between the systems to meet peak demands and improve overall service.

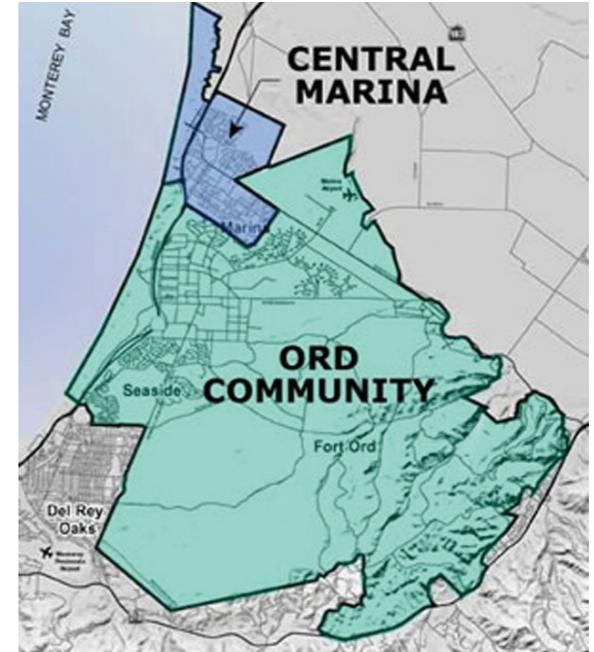


The assessment showed which of the wells are most vulnerable to known volatile organic contaminant plumes from the closed landfill on the former Fort Ord; some plumes include saltwater intrusion, sewer collection system, above-ground storage tanks, irrigated crops, transportation corridors, farm machinery repair sites, and septic systems. In November 2012, a completed source assessment for the Watkins Gate Well determined that the well was most vulnerable to Military Installations. In February 2014, a completed assessment for Well 34 determined that the well was most vulnerable to Military installations (former Fort Ord), agricultural drainage, saltwater intrusion, and sewer collection systems.

Full details of the assessments may be viewed at the following locations: MCWD, 11 Reservation Road, Marina, CA, or at SWRCB DDW, 1 Lower Ragsdale Drive, Building 1, Suite 120, Monterey, CA.

이 보고서에는 식수에 대한 매우 중요한 정보가 포함되어 있습니다. 이 보고서의 번역된 버전은 당사 웹사이트를 방문하거나 (831) 384-6131 로 연락하여 추가 지원을 받으십시오. www.mcwd.org

Current and Future Service Areas



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Mission Statement: We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.

Board meetings are open to the public and are normally held on the third Monday of every month at the City of Marina Council Chambers, 211 Hillcrest Avenue at 6:30 pm. Agendas are posted in the following places at least 72 hours before each meeting: Marina Coast Water District, Marina and Seaside City Halls, Marina and Seaside Libraries and the Marina Post Office.

Este informe contiene información muy importante sobre su agua potable. Visite nuestro sitio web para obtener una versión traducida de este informe, o póngase en contacto con nosotros al (831) 384-6131 para obtener más ayuda. www.mcwd.org

Ang ulat na ito ay naglalaman ng napakahalagang impormasyon tungkol sa iyong inuming tubig. Mangyaring bisitahin ang aming website para sa isang isinalin na bersyon ng ulat na ito, o makipag-ugnay sa amin sa (831) 384-6131 para sa karagdagang tulong. www.mcwd.org

Water Quality

The District diligently monitors drinking water quality and once again, is proud to report that your tap water meets California and Federal drinking water standards.

State Total Coliform Rule and Federal Groundwater Rule

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

Trichloroethylene (TCE)

TCE was a common solvent used by the US Army on the former Fort Ord. In 2019, TCE (below the MCL, or standard level) was detected in the District supply wells 29 and 31. With the interconnection of the two water systems, drinking water may be supplied to either Central Marina or the Ord Community distribution systems depending on water demand. The District also continues to regularly monitor for TCE in its water supply.

The Army operates a network of shallow groundwater monitoring wells to track progress in its ongoing cleanup of the TCE contamination plume from the now-closed landfill and fire drill area; Army groundwater monitoring wells do not supply drinking water to District customers. TCE has also been detected in many Army groundwater monitoring wells.

Nitrate

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. 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 include shortness of breath and blueness of the 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 health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall

or agricultural activity.

Arsenic

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. 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.

Lead

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. Marina Coast Water District 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 in the pipes 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 or at <http://www.epa.gov/lead>.

A Notice on Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your State radon program (1-800-745-7236), the U.S. EPA Safe Drinking Water Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1 800-767-7236).

What Are the Sources of Contaminants?

The sources of drinking water (both tap 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 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, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, that are by-products 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-occur-

ring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

A note to the Immuno-compromised: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/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 (1-800-426-4791).



The District's Customer Service staff is available to assist you Monday through Friday, 8 AM to 5:30 PM.

Educational Information and Special Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Other Water Information Sources

CA State Water Resources Control Board Division of Drinking Water Programs:

waterboards.ca.gov/drinking_water/programs

USEPA Division of Ground Water and Drinking Water:

water.epa.gov/drink

Centers for Disease Control: cdc.gov

Fort Ord Cleanup Project: fortordcleanup.com



Operator inspecting and monitoring the flow meter at one of the District's reservoirs

How to Read Water Quality Tables

The following tables list the results of detected contaminants in the District's distribution system and groundwater supply wells. While most monitoring was completed through December 2019, regulations allow the District to monitor certain chemicals less than once per year because the levels do not change frequently. The test results are divided into the following sections: *Primary Drinking Water Standards*, *Secondary*

Drinking Water Standards, *Other Constituents*, and *Unregulated Contaminants*. To help better understand the report, use the Definitions of Terms given below.

To read the table, start with the column titled *Detected Contaminant(s)* and read across the row. *Units* express the amount measured. *MCL* shows the highest amount of contaminant allowed. *PHG/MCLG* is the goal amount for that

contaminant (this may be lower than what is allowed). *Year Tested* is usually in 2019 or for some contaminants, the most recent sampling year. *Annual Average* is the average amount measured or detected. *Range* tells the lowest and highest amounts measured. A *No Violation* indicates that regulation requirements were met. *Major Sources in Drinking Water* tell where the contaminant usually originates.

Distribution System Water Quality

PRIMARY DRINKING WATER STANDARDS — Microbiology

Detected Contaminant	Units	MCL	(MCLG)	Year Tested	Total Samples Collected & Month Positive	Violation	Major Sources in Drinking Water
Total Coliform Bacteria	Positive Samples	5.0% Monthly Samples	(0)	2019	539 Samples 1 Positive (1.9%) in April 2 Positive (4.3%) in May	No	Naturally present in the environment.

PRIMARY DRINKING WATER STANDARDS — Disinfection Byproducts & Disinfectant Residual

Detected Contaminants	Units	MCL [MRDL]	PHG (MCLG) [MRDLG]	Year Tested	Annual Average	Range Low - High	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHM)	ppb	80	n/a	2019	8	3.0 - 9.2	No	Byproduct of drinking water disinfection.
Chlorine Residual [as Cl ₂]	ppm	[4.0]	[4]	2019	1.02	0.18 - 2.00	No	Drinking water disinfectant added for treatment.

PRIMARY DRINKING WATER STANDARDS — Lead & Copper Indoor Tap Samples

Detected Contaminant	Units	Action Level	PHG	Year Tested	* 90th Percentile Level	No. of Sites Above Action Level	Violation	Major Sources in Drinking Water
Copper	ppm	1.3	0.3	2019	0.29	0 of 35	No	Internal corrosion of household plumbing systems.
Lead	ppb	15	0.2	2019	ND (<5)	0 of 35	No	Internal corrosion of household plumbing systems.

PRIMARY DRINKING WATER STANDARDS — Lead In Schools Testing (All eleven Monterey Peninsula Unified School District schools in MCWD service areas requesting testing were tested — up to five samples were collected at each school.)

Detected Contaminant	Units	Action Level	PHG	Year Tested	* 90th Percentile Level	No. of Sites Above Action Level	Violation	Major Sources in Drinking Water
Lead	ppb	15	0.2	2017	4	0 of 40	No	Internal corrosion of household plumbing systems.

*** 90th Percentile:** For compliance, the sample result at the 90th percentile level must be less than the Action Level.

Definitions of Terms Used

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. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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

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.

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disin-

fectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

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

UCMR: Unregulated Chemicals Monitoring Rule that help EPA and CDPH to determine where certain contaminants occur and need to be regulated.

MRL: Method Reporting Limit or the lower-limit of quantitation

n/a: Not Applicable

ND: Non-Detected

Notification Level: DDW established health-based advisory levels for chemi-

cals in drinking water that lack maximum contaminant levels

NTU: Nephelometric Turbidity Units

pCi/L: Picocuries per liter

ppm: Parts per million or milligrams per liter

ppb: Parts per billion or micrograms per liter

ppt: Parts per trillion or nanograms per liter

TON: Threshold Odor Number

Units		Equivalence
mg/L – milligrams per liter	ppm – parts per million	1 second in 11.5 days
µg/L – micrograms per liter	ppb – parts per billion	1 second in nearly 32 years
ng/L – nanograms per liter	ppt – parts per trillion	1 second in nearly 32,000 years
pg/L – picograms per liter	ppq – parts per quadrillion	1 second in nearly 32,000,000 years

Groundwater Supply Wells Water Quality

Detected Contaminants	Units	MCL	PHG (MCLG)	Year Tested	Annual Average	Range Low - High	Violation	Major Sources in Drinking Water
PRIMARY DRINKING WATER STANDARDS								
Arsenic	ppb	10	0.004	2019	2.6	ND - 7.5	No	Erosion of natural deposits.
Fluoride (Natural)	ppm	2.0	1	2019	0.17	ND - 0.26	No	Erosion of natural deposits.
Gross Alpha particle activity	pCi/L	15	(Zero)	2019 / 2016 / 2014 / 2013 ^(d)	1.2	ND - 7.1	No	Erosion of natural deposits.
Nitrate (as N)	ppm	10	10	2019	2.0	ND - 5.5	No	Erosion of natural deposits.
Trichloroethylene [TCE]	ppb	5	1.7	2019	0.3	ND - 1.6	No	Discharge from metal degreasing sites.
Uranium	pCi/L	20	0.43	2013 / 2019 ^(c)	1.7	ND - 4.8	No	Erosion of natural deposits.
SECONDARY DRINKING WATER STANDARDS								
Chloride	ppm	500	n/a	2019	101	54 - 200	No	Leaching from natural deposits; seawater influence.
Odor Threshold	TON	3	n/a	2019	0.6	ND - 2.0	No	Naturally-occurring organic materials.
pH Units	Units	6.5 - 8.5	n/a	2019	7.8	7.5 - 8.2	No	Naturally-occurring minerals.
Specific Conductance	µS/cm	1600	n/a	2019	680	490 - 1100	No	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	n/a	2019	46	36 - 55	No	Leaching from natural deposits.
Total Dissolved Solids	ppm	1000	n/a	2019	390	290 - 570	No	Leaching from natural deposits.
Turbidity	NTU	5	n/a	2019	0.15	0.11 - 0.24	No	Soil run-off.
OTHER CONSTITUENTS — No Drinking Water Standards								
Alkalinity	ppm	n/a	n/a	2019	115	93 - 180	n/a	Naturally-occurring minerals.
Bicarbonate Alkalinity	ppm	n/a	n/a	2019	141	110 - 220	n/a	Naturally-occurring minerals.
Calcium	ppm	n/a	n/a	2019	45	24 - 60	n/a	Naturally-occurring mineral.
Magnesium	ppm	n/a	n/a	2019	14	2.1 - 24	n/a	Naturally-occurring mineral.
Potassium	ppm	n/a	n/a	2019	3.0	2.0 - 4.1	n/a	Naturally-occurring mineral.
Sodium	ppm	n/a	n/a	2019	68	38 - 130	n/a	Naturally-occurring mineral.
Hardness ^(a)	ppm	n/a	n/a	2019	169	85 - 240	n/a	Naturally-occurring minerals.
Radon 222	pCi/L	n/a	n/a	2000 ^(b)	1081.5	755 - 1408	n/a	Naturally-occurring gas.
UNREGULATED CONTAMINANTS — No Drinking Water Standards								
Boron	ppb	1000 (AL)	n/a	2019	45.7	ND - 120	n/a	Erosion of natural deposits.
Vanadium	ppb	50 (AL)	n/a	2019	6.6	ND - 15	n/a	Erosion of natural deposits.
Perfluorohexanoic acid (PFHxA)	ppt	n/a	n/a	2019-2020 ^(e)	0.8	ND - 5.2	n/a	Breakdown product of stain- and greaser-proof food coatings.

Footnotes:

(a) Water Hardness Unit Conversion: Total Hardness (Annual Average) = 9.9 grains/gallon (for 169 ppm). Total Hardness (Range) = 5.0 - 14 grains/gallon.

(b) Wells 10 and 11 were tested in 2000.

(c) Wells 10, 11, and Watkins Gate were sampled in 2013; Wells 31 and 34 were sampled in 2019.

(d) Watkins Gate Well sampled in 2013; Wells 10 and 11 were sampled in 2014; Wells 29 and 30 were sampled in 2016; Wells 31 and 34 were sampled in 2019.

(e) Year Tested — four consecutive quarters of testing began second Quarter 2019, as required, and ended first Quarter 2020 as required.

Unregulated Chemicals: Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated. The District performed Per-and-Poly-Fluoroalkyl Substances (PFAS) sampling in 2019 and low levels of Perfluorohexanoic Acid (PFHxA) were detected within Well 29. The District continues to closely monitor these levels within Well 29.