RAMONA
MUNICIPAL WATER DISTRICT

PWS ID# 3710019

Ramona Municipal Water District
105 Earlham Street
Ramona, CA 92065-1599

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Sarah Yorba, Water Quality Lab Analyst, at (760) 789 1330.

Public Meetings

You are invited to attend our district board meetings. We meet the second Tuesday of each month at 6 p.m. at the Ramona Community Center, 434 Aqua Lane, Ramona.
Board of Directors:
Jim Hickle, President, Division II
Jeff Lawler, Vice President, Division I
Jim Robinson, Secretary, Division IV
Gary Hurst, Treasurer, Division V
Jim Piva, Director, Division III
Craig Schmollinger, Acting General Manager

2020 Annual Drinking Water Quality Report

En Español Este informe contiene informacion muy importante. Traduscalo o prequntele a alguien que lo entienda bien.

2020 Annual Drinking Water Quality Report

Ramona Municipal Water District PWS ID# 3710019

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

The San Diego County Water Authority purchases water from the Metropolitan Water District of Southern California (MWD). This water is a blend of surface water from the Colorado River and runoff from the Northern California Sierra Nevada Mountains. It is treated at the Twin Oaks Valley Treatment Plant located in San Diego County and the MWD Lake Skinner Filtration Plant located in Riverside County. The Carlsbad Desalination Plant provides San Diego County with a locally controlled, drought-proof supply of high-quality water. The Ramona Municipal Water District purchases water from the City of Poway periodically.

Important Health Information

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 of infections. These people should seek advice from their health care providers about drinking water. U.S. EPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk in infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Ramona Municipal Water District's Water Quality

The Ramona Municipal Water District tests drinking water quality for all constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1- December 31, 2020. Regulations require us to monitor for certain contaminants less frequently because the concentrations of these contaminants do not vary significantly from year to year. 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.

Additional Information About Your Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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

Substances that May be Present in Source Water Include:

- Microbial Contaminants, such as viruses and bacteria, that may come from septic systems, agricultural livestock operations, wildlife, and wastewater treatment plants.
- Inorganic Contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining or farming.
- 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, agriculture application, and septic systems.
- Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking Water Source Assessment Information

The Colorado River Watershed Sanitary Survey 2015 Update was completed in December 2016.

The California State Water Project Watershed Sanitary Survey 2016 Update was completed in June 2017.

State Water Project supplies are considered to be most vulnerable to urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting the Metropolitan Water District at (213) 217-6000.

For more info about contaminants & potential health effects call the U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791

What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (back pressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (back siphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak

Regulated Substances				Ramona Municipal Water District		Metropolitan Water District Skinner Plant		San Diego County Water Authority		Carlsbad Desalination Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2020	10	0.004	NA	NA	ND	NA	ND	NA	ND	ND	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2020	1	2	NA	NA	ND	NA	ND	NA	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2020	10	0.1	NA	NA	2.5	ND-5.6	2.8	ND-7.4	NA	NA	No	By-product of drinking water disinfection
Total Chlorine Residual (ppm)	2020	[4.0 (as Cl2)]	[4 (as Cl2)]	1.9	0.2-3.0	NA	NA	NA	NA	NA	NA	No	Drinking water disinfectant added for treatment
E. coli Bacteria [Total Coliform Rule](# positive Samples)	2020	0	0	ND	ND	NA	NA	ND	ND	NA	NA	No	Human and animal fecal waste
Fluoride (ppm) [2]	2020	2	1	NA	NA	0.7	0.6-0.9	0.6	0.5-0.8	0.705	0.605-0.796	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2020	15	0	NA	NA	ND	ND-3	ND	ND	ND	ND	No	Erosion of natural deposits
Gross Beta Particle Activity4 (pCi/L) [3]	2020	50	0	NA	NA	ND	ND-5	ND	ND	ND	ND	No	Decay of natural and man-made deposits
Haloacetic Acids (ppb) [6]	2020	60	NA	5.5	ND-7.2	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Heterotrophic Plate Count Bacteria (Units)	2020	TT	HPC = NA; Others = (0)	ND	ND-41	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Hexavalent Chromium (ppb) [4]	2020	NS5	0.02	NA	NA	ND	NA	ND	ND	ND	ND	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate [as nitrogen] (ppm)	2020	10	10	NA	NA	ND	NA	ND	ND-0.4	ND	ND	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb) [6]	2020	80	NA	19.5	6.9-29	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria [Total Coliform Rule] (percent positive samples)	2020	5	0	ND	ND	NA	NA	ND	ND	NA	NA	No	Naturally present in the environment
Turbidity (NTU) [7]	2020	TT	NA	NA	NA	100%	0.09	100%	0.013	100%	0.08	No	Soil runoff
Uranium (pCi/L)	2020	20	0.43	NA	NA	2	ND-2	1	NA	ND	ND	No	Erosion of natural deposits

Secondary Substances				Ramona Municipal Water District		Metropolitan Water District Skinner Plant		San Diego County Water Authority		Carlsbad Desalination Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2020	500	NS	NA	NA	86	81-92	75	73-81	74.6	54.0-100.0	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2020	15	NS	NA	NA	2	1-2	ND	NA	ND	ND	No	Naturally occurring organic materials
Odor–Threshold (Units)	2020	3	NS	NA	NA	2	NA	ND	NA	ND	ND	No	Naturally occurring organic materials
Specific Conductance (µS/ cm)	2020	1,600	NS	NA	NA	876	796-956	660	NA	404	291.9-515.7	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2020	500	NS	NA	NA	180	152-208	82	63-100	13.68	12.0-16.7	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	1,000	NS	NA	NA	530	472-588	300	NA	205	140-276	No	Runoff/leaching from natural deposits

Other Unregulated Substances [5]		Ramona Municipal Water District		Metropolitan Water District Skinner Plant		San Diego County Water Authority		Carlsbad Desalination Plant	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2020	NA	NA	113	105-121	97	NA	64.43	46-104
Boron (ppb)	2020	NA	NA	130	NA	130	NA	0.55	0.36-0.78
Calcium (ppm)	2020	NA	NA	62	52-72	33	29-37	22.68	16.68-31.88
Chlorate (ppb)	2020	NA	NA	34	NA	255	180-290	NA	NA
Corrosivity [as aggressiveness] (Units)	2020	NA	NA	12.4	12.3-12.5	12	NA		
Corrosivity [as Saturation] (Units)	2020	NA	NA	0.56	0.39-0.73	0.41	NA	0.31	0.04-0.63
Hardness (ppm)	2020	NA	NA	242	211-273	135	120-150	56.71	41.7-79.7
Magnesium (ppm)	2020	NA	NA	23	20-26	14	13-15	0.93	0.89-0.98
N-Nitrosodimethylamine [NDMA] (ppt)	2020	NA	NA	4.2	NA	ND	NA	NA	NA
Potassium (ppm)	2020	NA	NA	4.4	4.0-4.8	3.3	3.1-3.5	14.729	0-54.467
Sodium (ppm)	2020	NA	NA	87	76-98	63	61-65	55.1	45.4-66.0
Total Organic Carbon (ppm)	2020	NA	NA	2.3	1.9-2.6	2.2	2-2.5	NA	NA

Nitrates in Drinking Water

Nitrates 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.

Lead in Home Plumbing

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a results of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline (1-800-426-4791).

Definitions:

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.
AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.
LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.
MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.
MCLG (Maximum Contaminant Level Goal): 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. EPA.
MRDL (Maximum Residual Disinfectant Level): 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.
MRDLG (Maximum Residual Disinfectant Level Goal): 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.
NA: Not applicable.
ND (Not detected): Indicates that the substance was not found by laboratory analysis.
NS: No standard.
NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
pCi/L (picocuries per liter): A measure of radioactivity.
PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.
PHG (Public Health Goal): 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 EPA.
ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).
ppm (parts per million): One part substance per million parts water (or milligrams per liter).
ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	0.3	0.16	0/33	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2019	15	0.2	ND	0/33	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

1 Single sample taken.
2 This water system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6 to 1.2 ppm, with an optimal dose of 0.7 ppm. Information about fluoridation, oral health, and current issues is available from http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.
3 The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles.
4 There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
5 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.
6 TTHMs and Halocetic Acid averages are reported as the highest locational running annual average (LRAA).
7 Turbidity is reported as the highest single measurement and the lowest monthly percentage meeting the turbidity limits.