

# 2020 WATER QUALITY REPORT



## METRO SOUTHWEST – E&T

MAY 2021



### Metro Water Delivers Safe Drinking Water

Metro Water District (District) is pleased to report that the water delivered to your faucet meets all safe drinking water standards. This annual Water Quality Report is required by the Federal Government under the Safe Drinking Water Act. We believe customers who are well informed about their water supply are our best allies in supporting improvements necessary to maintain safe and reliable water.

### Where does your water come from?

The District uses groundwater from the southwest portion of the Tucson Basin aquifer. The water in our aquifer was created primarily from mountain runoff and storm water infiltrating into the ground along the Lee Moore Wash, Flato Wash, and the Santa Cruz River.

The E&T service area is located near Nogales Highway and Old Vail Connection Road. It has two active wells that pump water from the local aquifer. Depth to water ranges from 73 to 77 feet. Water from wells is placed in reservoirs/storage tanks or pumped directly into the system and moved underground through pipes to reach your home by pressure.

While water is made up of hydrogen and oxygen, this life-giving liquid also contains many naturally occurring minerals that affect the taste and hardness of your water. Unfortunately, human-caused and naturally occurring contaminants can also be found in water. This is why the Safe Drinking Water Act exists.

### How do you know your water is safe?

The District routinely checks its water for contaminants. In 2020, 76 constituents were monitored to meet Federal and State regulations, and the District also tested for constituents that may or may not be regulated in the near future.

### How is your water tested?

In 2020, 99 water samples were collected and tested. Trained staff collects samples from wells, storage facilities, points in the distribution system, and residents' homes. The samples are analyzed by State licensed laboratories. The test results are reported to the District and the State of Arizona. The District works closely with the Arizona Department of Environmental Quality (ADEQ) to ensure all water quality standards are met.

### What happens if the water tested indicates contamination?

If the public water supply is found not to meet the safe drinking water standards, the District is required by Federal and State regulations to notify customers within

affected service areas. Notification may be made by mail and/or through the news media. If a serious situation occurs that may affect the health and well-being of our customers, the District would do whatever is necessary to notify you and provide an alternate source of safe drinking water.

### What contaminants might be detected?

The District sampled for 41 regulated contaminants as required by safe drinking water standards, as well as 35 unregulated contaminants in 2020. The table on page 2 shows the detected results. The levels of detected contaminants meet the Safe Drinking Water Act standards.

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 U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791. You can also visit the EPA's website regarding the Safe Drinking Water Act at <http://water.epa.gov/drink/>.

The source of our drinking water is from wells. As water travels through the ground, it dissolves naturally-occurring minerals, and in some cases radioactive material, and can pick up dissolved substances resulting from the presence of plants, animals or from human activity.

Contaminants that may be present in the public water supply include microbial such as viruses and bacteria; inorganics such as salts and metals; pesticides and herbicides; organic chemical contaminants, both synthetic and volatile; and radioactive contaminants.

### Where do contaminants come from?

Contaminants can be man-made or naturally-occurring. Microbial contaminants may come from sewage treatment plants, septic systems, residential uses, agricultural activity, livestock operations, and wildlife. Inorganic contaminants can result from urban storm water runoff, industrial or domestic wastewater discharges or mining. Pesticides and herbicides may come from many sources, such as agriculture, urban runoff, and residential use. Radioactive contaminants can be naturally-occurring or from mining activities. Organic chemical contaminants can come from landfills, gas stations, urban runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

### Is your water treated?

The District adds chlorine to its water to eliminate any type of bacterial contamination that could occur in the water pipes. If you notice a persistent chlorine taste or odor, please contact the District. ♦

# METRO SOUTHWEST – E&T SYSTEM DETECTED CONTAMINANTS IN 2020

Water Quality Parameter	Metro Southwest – E&T Maximum Level Detected	Metro Southwest – E&T Range of Detections	EPA* Maximum Contaminant Level (MCL)	EPA* Maximum Contaminant Level Goal (MCLG)	Units	Potential Sources of Contaminant	Sample Date
<b>Microbiological Monitoring</b>							
Total Coliform Bacteria	0	0	One positive Monthly Sample	Not Present	0	Naturally present in the environment.	2020
<b>Radiochemical Monitoring</b>							
Alpha Emitters (gross alpha)	5.4	4.4 to 5.4	15	0	pCi/L	Erosion and natural deposits.	2017
<b>Inorganic &amp; Metals Monitoring</b>							
Arsenic	1.9	1.6 to 1.9	10	0	ppb	Erosion of natural deposits; Runoff from agriculture.	2017 and 2020
Barium	69	50 to 69	2000	2000	ppb	Erosion of natural deposits; Discharge from drilling muds; Leaching from bricks and tiles containing barium.	2017 and 2020
Fluoride	0.58	0.34 to 0.58	4	4	ppm	Erosion of natural deposits; Discharge from fertilizer production.	2017 and 2020
Sodium	61	59 to 61	NA	NA	ppm	Erosion of natural deposits.	2018 and 2020
<b>Disinfection By-Product Monitoring</b>							
Total Trihalomethanes (TTHM)	4.5	1.6 to 4.5	80	0	ppb	By-Product of drinking water chlorination.	2020
Haloacetic Acids (HAA5)	<2.0	<2.0	60	0	ppb	By-Product of drinking water chlorination.	2020
Chlorine Residual	0.59 (Running Annual Average)	0.3 to 0.8	4.0 **	4.0 **	ppm	By-Product of drinking water chlorination.	2020
<b>Nitrate</b>							
Nitrate (as Nitrogen)	2.6	1.0 to 2.6	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits.	2020
Water Quality Parameter	90th Percentile Level and No. of Samples Over the Action Level	Range of All Samples	EPA* Contaminant Action Level (AL)	EPA* Maximum Contaminant Level Goal (MCGL)	Units	Potential Sources of Contaminant	
<b>Copper &amp; Lead Monitoring</b>							
Copper	0.081 No samples were above the Action Level.	0.0073 to 0.320	1.3	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	2018
Lead	1 No samples were above the Action Level.	<0.5 to 1.6	15	0	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.	2018

\* EPA is the acronym for the U.S. Environmental Protection Agency

\*\* The MCL and MCLG for Chlorine Residual is actually the Maximum Residual Disinfection Level (MRDL).

## DEFINITIONS:

- **MAXIMUM CONTAMINANT LEVEL (MCL)** - The highest level of a contaminant that is allowed in a drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
- **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 allow for a margin of safety.
- **ACTION LEVEL (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements.
- ppm - Part per million; ppb - Part per billion
- pCi/L - Picocuries per liter is a measure of the radioactivity in water. A picocurie is 10-12 curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

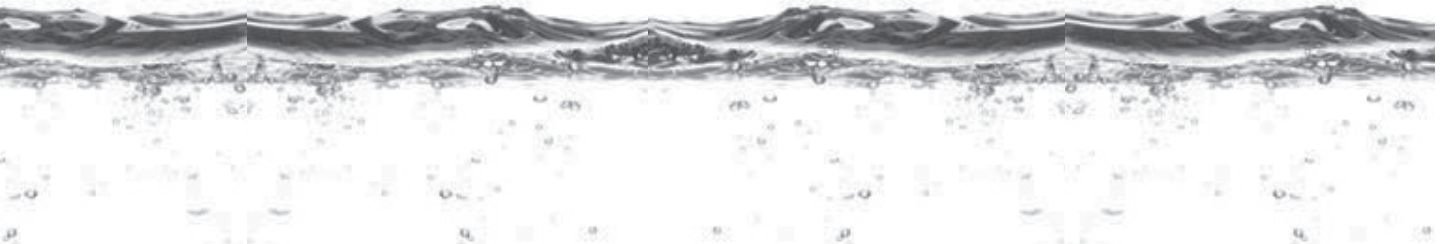
## ELECTIVE MONITORING IN 2020

**The District collects elective samples in order to ensure the delivery of safe, reliable water to its Customers. While elective samples are not required for compliance, they assist the District in evaluating water quality to ensure compliance with future drinking water standards.**

Water Quality Parameter	Metro Southwest – E&T Maximum Level Detected	Metro Southwest – E&T Range of Detections	EPA* Maximum Contaminant Level (MCL)	EPA* Maximum Contaminant Level Goal (MCLG)	Units	Potential Sources of Contaminant	Sample Date
Hexavalent Chromium	0.16	<100 to 0.16	NA	NA	ppb	Naturally occurring element; used in steel alloys; used for plating, dyes, and wood preservation.	2020
Sodium	63	58 to 63	NA	NA	ppm	Erosion of natural deposits.	2020

### 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. Metro 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 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>. ♦



*The District takes extra measures to ensure the delivery of safe, reliable water, such as auxiliary pumping units, and emergency interconnects from neighboring water utilities. The use of the emergency interconnects are infrequent; however, does occur in short durations. Although you may have received only a small amount of water from the interconnect, the District wants to ensure our customers are fully informed about water quality. Tucson Water's 2020 Consumer Confidence Report is available at <https://www.tucsonaz.gov/water/water-quality-reports-and-publications> ♦*

### Source Water Assessment

ADEQ completed a Source Water Assessment for the drinking water in the Metro Southwest E&T Service Area in January 2003. Based on the Hydrogeologic settings and adjacent land uses, the water was found to be of "low risk." This indicates that the water is either already protected or that any additional measures will have little impact on any further protection. ♦

## Board of Directors

**Judy Scrivener, Chair**  
**Richard Sarti, Vice Chair**  
**Jim Doyle, Member**  
**Bryan Foulk, Member**  
**Lee Jacobs, Member**

*Metro Water District's Board of Directors meets regularly, usually on the second Monday of the month, at 6:00 p.m. at Metro Water's Office, 6265 N. La Cañada Drive*

## Water... Use It Wisely!

Metro Water District strongly encourages you to use our precious water resource efficiently. Listed below are some water-wise ideas.

- Receive \$200 (and save water and money) for installing a gray water or rainwater harvesting system.
- Receive \$50 for replacing high water use toilets with a High Efficiency toilet that does not exceed 1.3 gallons of water per flush.
- Check regularly for leaks, both inside and outside. A little leak can drain your wallet.
- Change your watering schedule on your drip irrigation and sprinkler systems according to the season.
- Maintain your drip irrigation and sprinkler systems.
- Water with infrequent, deep soaks. ♣

## EPA Warns Nationally that...

*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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline at 1-800-426-4791. ♣*

## Help Protect Our Groundwater

The District and Arizona Department of Environmental Quality (ADEQ) collect water samples each year to ensure we all have safe drinking water.

For more information on the source water assessment, call Wally Wilson, Water Resources Manager, at 575-8100 or visit ADEQ's source water assessment and protection unit at <http://www.azdeq.gov/environ/water/dw/swap.html> ♣



### MISSION:

*To deliver save, reliable water to our customers.*

**For additional information regarding your drinking water including about hardness or fluoride please visit the Water Quality section at [www.metrowater.com](http://www.metrowater.com). For further questions, please call us at 575-8100**

Este informe contiene información muy importante sobre el agua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.