



2020 WATER QUALITY REPORT

METRO SOUTHWEST – DIABLO VILLAGE

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 Brawley Wash.

The Diablo Village service area is located in the vicinity of Ajo Highway and Valencia Road near Ryan Airfield. Diablo Village has two active wells that pump water from the local aquifer. Depth to water ranges from 416 to 466 feet. Water from wells is pumped into storage tanks and then 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, 70 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, 228 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 44 regulated contaminants as required by safe drinking water standards, as well as 26 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 – DIABLO VILLAGE DETECTED CONTAMINANTS IN 2020

| Water Quality Parameter | Metro Southwest – Diablo Village Maximum Level Detected | Metro Southwest – Diablo Village Range of Detections | EPA* Maximum Contaminant Level (MCL) | EPA* Maximum Contaminant Level Goal (MCLG) | Units | Potential Sources of Contaminant | Sample Date | Frequency |
|---|--|--|--------------------------------------|--|-------|--|---------------------|---|
| Microbiological Monitoring | | | | | | | | |
| Total Coliform Bacteria | 0 | 0 | One positive Monthly Sample | Not Present | 0 | Naturally present in the environment. | 2020 data. | ADEQ requires monitoring monthly. |
| Radiochemical Monitoring | | | | | | | | |
| Alpha Emitters (gross alpha) | 9.5 | <3 to 9.5 | 15 | 0 | pCi/L | Erosion and natural deposits. | 2019 data. | ADEQ requires monitoring once every three years. |
| Inorganic & Metals Monitoring | | | | | | | | |
| Arsenic | 0.9 (Running Annual Average) | <1.0 to 3.2 | 10 | 0 | ppb | Erosion of natural deposits; Runoff from agriculture. | 2019 and 2020 data. | ADEQ requires monitoring quarterly at EPDS 001 and Every three years at EPDS 002. |
| Barium | 250 | 29 to 250 | 2000 | 2000 | ppb | Erosion of natural deposits; Discharge from drilling muds; Leaching from bricks and tiles containing barium. | 2019 data. | ADEQ requires monitoring once every three years. |
| Fluoride | 3.40 | 0.53 to 3.40 | 4 | 4 | ppm | Erosion of natural deposits; Discharge from fertilizer production. | 2019 data. | ADEQ requires monitoring once every three years. |
| Selenium | 1.1 | <5.0 to 1.1 | 50 | 50 | ppb | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines. | 2019 data. | ADEQ requires monitoring once every three years. |
| Sodium | 170 | 58 to 170 | NA | NA | ppm | Erosion of Natural Deposits. | 2019 data. | ADEQ requires monitoring once every three years. |
| Disinfection By-Product Monitoring | | | | | | | | |
| Total Trihalomethanes (TTHM) | <0.5 (Running Annual Average) | <0.5 | 80 | 0 | ppb | By-Product of drinking water chlorination. | 2020 data. | ADEQ requires monitoring annually. |
| Haloacetic Acids (HAA5) | <2.0 (Running Annual Average) | <2.0 | 60 | 0 | ppb | By-Product of drinking water chlorination. | 2020 data. | ADEQ requires monitoring annually |
| Chlorine Residual | 0.50 (Running Annual Average) | 0.3 to 0.8 | 4.0 ** | 4.0 ** | ppm | By-Product of drinking water chlorination. | 2020 data. | ADEQ requires monitoring annually |
| Nitrate | | | | | | | | |
| Nitrate (as Nitrogen) | 1.7 | 1.2 to 1.7 | 10 | 10 | ppm | Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits. | 2020 data. | ADEQ requires monitoring annually |
| Water Quality Parameter | 90th Percentile Level and No. of Samples Over the Action Level | Range of Samples | EPA* Contaminant Action Level (AL) | EPA* Maximum Contaminant Level Goal (MCLG) | Units | Potential Sources of Contaminant | Sample Date | |
| Copper & Lead Monitoring | | | | | | | | |
| Copper | 0.117 No samples were over the Action Level. | 0.01 to 0.19 | 1.3 | 1.3 | ppm | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. | 2018 data. | ADEQ requires monitoring once every three years. |
| Lead | <0.50 No samples were over the Action Level. | <0.5 to 1.4 | 15 | 0 | ppb | Corrosion of household plumbing systems; Erosion of natural deposits. | 2018 data. | ADEQ requires monitoring once every three years. |

* 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).

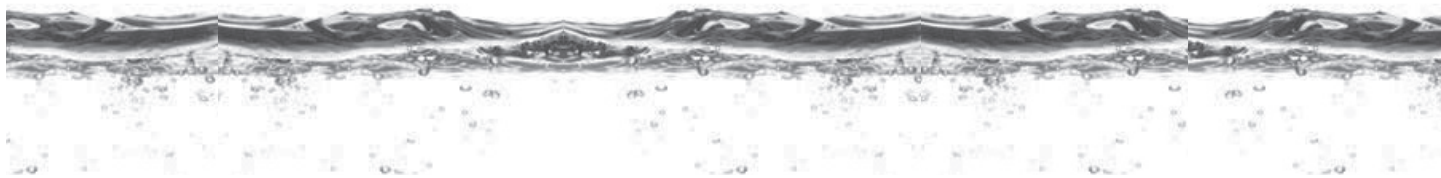
UCMR-4 2020 CONSTITUENTS MONITORING – ELECTIVE

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 | Maximum Level Detected | Average | Range of Samples | Method Reporting Limit (MRL) | Maximum Contaminant Level (MCL) | Units | Source of Contaminant | Sample Date |
|--------------------------------|------------------------|---------|------------------|------------------------------|---------------------------------|-------|--|-------------|
| Germanium | 0.39 | 0.39 | 0.39 | 0.30 | NA | ppb | Naturally occurring element; used in optics and fiber optics and some solar applications. | March 2020 |
| Total Manganese | 0.56 | 0.56 | 0.56 | 0.40 | NA | ppb | Naturally occurring element; used in fertilizers, batteries and fireworks; used in some wastewater treatment chemicals; and an essential nutrient. | March 2020 |
| alpha-HCH | <0.010 | <0.010 | <0.010 | 0.010 | NA | ppb | Component of benzene hexachloride; formerly used as an insecticide. | March 2020 |
| Chloropyrifos | <0.030 | <0.030 | <0.030 | 0.030 | NA | ppb | Organophosphate; used as an insecticide, acaricide and miticide. | March 2020 |
| Dimethipin | <0.20 | <0.20 | <0.20 | 0.20 | NA | ppb | Used as an herbicide and plant growth inhibitor. | March 2020 |
| Ethoprop | <0.030 | <0.030 | <0.030 | 0.030 | NA | ppb | Used as an insecticide. | March 2020 |
| Oxyfluorofen | <0.050 | <0.050 | <0.050 | 0.050 | NA | ppb | Used as an herbicide. | March 2020 |
| Profenofos | <0.30 | <0.30 | <0.30 | 0.30 | NA | ppb | Used as an insecticide and acaricide. | March 2020 |
| Tebuconazole | <0.20 | <0.20 | <0.20 | 0.20 | NA | ppb | Used as a fungicide. | March 2020 |
| Total Permethrin (trans & cis) | <0.040 | <0.040 | <0.040 | 0.040 | NA | ppb | Used as an insecticide. | March 2020 |
| Tribufos | <0.070 | <0.070 | <0.070 | 0.070 | NA | ppb | Used as an insecticide and as a water additive to control microbes. | March 2020 |
| 1-Butanol | <2.0 | <2.0 | <2.0 | 2.0 | NA | ppb | Used as a solvent; food additive; and in the production of other chemicals. | March 2020 |
| 2-Methoxyethanol | <0.40 | <0.40 | <0.40 | 0.40 | NA | ppb | Used in synthetic cosmetics, perfumes, fragrances, hair preparations and skin lotions. | March 2020 |
| 2-Propen-1-ol | <0.50 | <0.50 | <0.50 | 0.50 | NA | ppb | Used in flavorings, perfumes and other chemicals. | March 2020 |
| Butylated hydroxyanisole | <0.030 | <0.030 | <0.030 | 0.030 | NA | ppb | Used as a food additive (antioxidant). | March 2020 |
| O-Toluidine | <0.0070 | <0.0070 | <0.0070 | 0.0070 | NA | ppb | Used in the production of dyes, rubber, pharmaceuticals and pesticides. | March 2020 |
| Quinoline | <0.020 | <0.020 | <0.020 | 0.020 | NA | ppb | Used as an anti-malarial pharmaceutical; a flavoring agent; component of coal. | March 2020 |
| Total Organic Carbon | 340.0 | 340.0 | 340.0 | 300.0 | NA | ppb | Naturally present in the Environment. | March 2020 |
| Bromide | <5.0 | <5.0 | <5.0 | 5.0 | NA | ppb | A compound of Bromine; bromide salts are used in veterinary medicine. | March 2020 |

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.

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|-------------------------|---|--|--------------------------------------|--|-------|---|-------------|
| Hexavalent Chromium | 3.0 | 0.85 to 3.0 | NA | NA | ppb | Naturally occurring element; used in steel alloys; used for plating, dyes, and wood preservation. | 2020 |
| Chromium | 0.8 | <1.0 to 0.8 | 100 | 100 | ppb | Discharge from steel and pulp mills, and erosion of natural deposits. 2019 data. | 2019 |

Arsenic

EPA established a drinking water standard for arsenic in which water providers are to ensure that as of January 2006 no more than 10 parts per billion (ppb) of arsenic can be found in the drinking water delivered to customers.

While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a naturally-occurring mineral known to cause cancer in humans at high concentration and is linked to other health effects such as skin damage and circulatory problems.

In addition to the required quarterly testing, the District voluntarily tested Diablo Village Well No. 1 and the Tucson Water interconnect on a monthly basis and Diablo Village Well No. 2 semiannually in 2020. To ensure compliance, in 2011 the District installed an arsenic treatment system at Diablo Village Well No. 1. During the voluntary sampling to monitor the treatment system in 2020, the treated water ranged between <1.0 to 3.2 ppb at the Diablo Village Well No. 1 after treatment. ♦

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>. ♦

Elevated Fluoride Levels Detected

The District is required to test every three years for fluoride. The last compliance sample was collected by ADEQ in 2019 with a result of 3.4 milligrams per liter (mg/l) at Diablo Village No. 1 and 0.53 mg/l at Diablo Village No. 2. Non-compliance samples collected in 2020, from Diablo Village Well No. 1 had a fluoride concentration of 0.33 to 3.1 mg/l. Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but does exceed EPA’s secondary standard of 2.0 mg/l. We are required to notify you when we discover that the fluoride levels in your drinking water exceed 2.0 mg/l because of a cosmetic dental problem that might affect children under nine years of age.

Fluoride occurs naturally in some areas and is found in high concentrations in the aquifer in our source water. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 mg/l of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Dental fluorosis in its moderate or severe forms, may result in a brown staining and pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water without risk of dental fluorosis.

Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call the National Sanitation Foundation (NSF) International at 1-877-8-NSF-HELP.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please call Metro Water District at 575-8100 or visit our website at www.metrowater.com. ♦

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 the 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> ♠

The District takes extra measures to ensure the delivery of safe, reliable water, such as auxiliary pumping units, generators, 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> ♠



MISSION:
To deliver safe, 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. 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.

