June 28, 2021

VIA EMAIL

To: Community Water Systems Connected the Tucson Water Public Water System AZ0410112

Re: Tucson Water Notification of Corrections to the 2020 Consumer Confidence Report

Dear Community Water System:

Tucson Water is providing this letter as notification of corrections made to the Consumer Confidence Report (CCR). The following corrections have been made:

- Page 4: Cyanide paragraph last sentence, 'antimony' has been replaced with 'cyanide' so the sentence reads as follows: The highest cyanide concentration detected during 2019 – 2020 was 9.1 ppb (the MCL is 200 ppb).
- Page 3, Detected Contaminants Table: the Total Trihalomethane (TTHM) Locational Running Annual Average (LRAA) value and Range were corrected to 19.8 and 2.1 – 23.7 ppb, respectively. The LRAA value referenced in the respective paragraph on page 4 was updated as well.
- Page 3, Detected Contaminants Table LRAA values for Haloacetic Acids (HAA5) and TTHM were annotated with an asterisk '*', and the following footnote was added to the bottom of the table: * = Highest locational running annual average.

The updated CCR is provided electronically with this letter and is also available at the Tucson Water Annual Water Quality Reports 2020 webpage, https://www.tucsonaz.gov/water/annual-water-quality-reports-2020 .

Please feel free to contact me at (520) 837-2445 or at Lori.Ehman@tucsonaz.gov for any additional information.

Sincerely,

Lori Ehman

Lori Ehman
Environmental and Regulatory Support
Water Quality and Operations Division

C:
A. Avila, C. Lapora, C. Leo; TW
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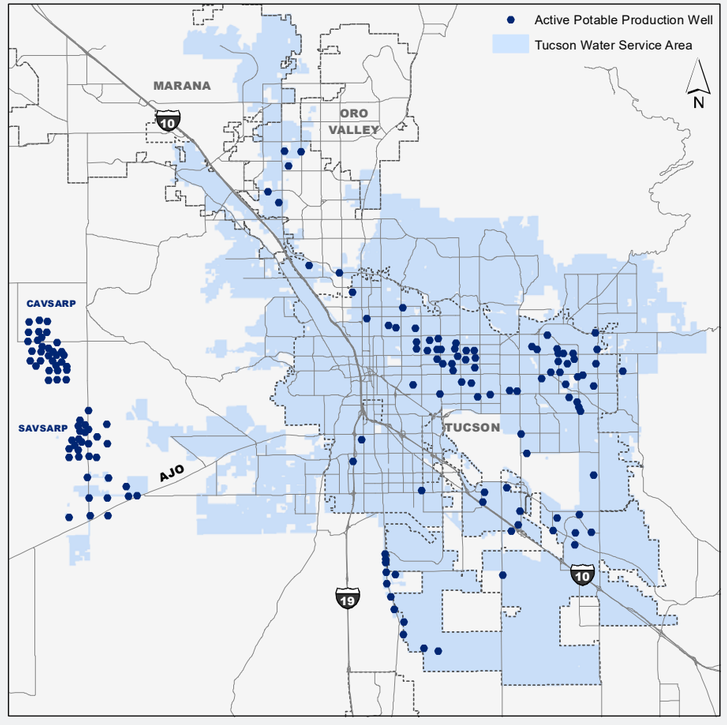
2020 Annual
Water Quality Report

Water Quality & Operations Division
Main System
PWS AZ0410112

TUCSON WATER
A proud part of the City of Tucson

CITY OF TUCSON FOUNDED 1775

This Annual Water Quality Report provides information on your drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis. This report also contains important information on the quality of your water and contact information you may wish to use.



If you are a non-English speaking resident, we recommend that you obtain a copy in Spanish by calling (520) 791-4331 or speak with someone about this report. Para nuestros clients de habla Español: Este informe contiene información muy importante sobre la calidad de su agua. Traduscalo o hable con alguien que lo entienda bien. Para obtener una copia de este reporte en Español, llame al (520) 791-4331.

WHERE DOES MY WATER COME FROM?

Tucson Water serves about 722,000 people in the Tucson area. The water supply comes from approximately 200 groundwater wells located in and around the Tucson metropolitan area (see map). A number of these wells are within the area of the Avra Valley facilities designated as the Clearwater Recharge & Recovery Facilities. At the Clearwater facilities, Tucson Water is recharging Colorado River water into the aquifer, where it blends with local groundwater. As water is recovered from the aquifer through well pumpage, the blend that gets delivered to customers will contain a higher signature of Colorado River water than native groundwater.

Tucson Water's system contains approximately 398 square miles of water service areas that are located in and around the Tucson metropolitan area, 4,619 miles of pipes, and 145 booster stations that are dedicated to pumping drinking water.

WERE THERE ANY CONTAMINANTS DETECTED IN MY DRINKING WATER?

Tucson Water continuously monitors the drinking water that is delivered to you to comply with regulations set by the EPA. In addition to this required monitoring, Tucson Water performs a great deal of discretionary monitoring to provide both staff and customers with additional water quality information. We are pleased to report that the results from the monitoring conducted in 2020 met all standards for safe drinking water.

In most cases, the minimum detection level of a contaminant is well below the EPA regulatory limit for that contaminant. Tables list the contaminants that were detected in the required drinking water monitoring period. To compare the detected amount with the highest level allowed by the EPA, refer to the Maximum Contaminant Level (MCL) column in the table. Most regulated contaminants were not detected in the drinking water delivered by Tucson Water and those non- detected results are not included in the tables. For a complete list of all EPA regulated contaminants, contact the EPA at 1-800- 426-4791 or visit the EPA website at
www.epa.gov/sites/ production/files/2016-06/documents/npwdr_complete_table.pdf.

For accommodations, materials in accessible formats, foreign language interpreters, and/or materials in a language other than English, please contact Tucson Water at (520) 791-4331 or (520) 791-2639 for TDD.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

All drinking water, including bottled water, may reasonably be expected to contain small traces of some contaminants. Tucson's groundwater contains dissolved minerals and organic compounds, which have been leached from the soil, rock, sediments, and plant materials through which the water travels. One would expect to find beneficial minerals such as calcium and magnesium; harmless minerals such as chloride, bicarbonate, and sulfate; and metals such as iron, copper, arsenic, and lead, which may be either beneficial or harmless at low concentrations, but harmful at high concentrations. In addition to these naturally occurring contaminants, our groundwater may contain contaminants resulting from industrial or domestic activities. For this reason, water utilities must currently monitor for approximately 90 regulated and 31 unregulated contaminants.

The following language is required by the EPA to appear in this report, some of which may not be applicable to deep groundwater wells, the primary source of the Tucson Water supply:

Contaminants that may be present in source water can include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage, septic systems, agricultural livestock, and wildlife.
- 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 production, 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, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA regulations limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Bottled water may come from either a surface water source or groundwater source and may be treated minimally or extensively. For information on the quality of your bottled water, contact the water bottling company.

EXPLANATION OF THE DATA PRESENTED IN THE DETECTED CONTAMINANTS TABLE:

Tucson Water routinely monitors for contaminants in your drinking water as specified in the National Primary Drinking Water Standards. Monitoring results for the period of January 1 to December 31, 2020, or from the most recent period, are included in the table. Certain contaminants are monitored less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination.

Detected Contaminants Table

Contaminant	Sample Year	Maximum Result	Range	MCL	MCLG	Units	Major Sources of Contaminat
Disinfection Byproducts							
Haloacetic Acids (HAA5), HAA5 Locational Running, Annual Average (LRAA)							
	2020	2*	<2.0 - 2.0	60	None	ppb	Byproduct of chlorination
Total Trihalomethane (TTHM), TTHM Locational, Running Annual Average (LRAA)							
	2020	19.8*	2.1-23.7	80	None	ppb	Byproduct of chlorination
Inorganics							
Antimony	2019 - 2020	1.8	< 1 - 1.8	6	6	ppb	Discharges from petroleum refineries, fire-retardants, ceramics, electronics, solder
Arsenic	2019 - 2020	7.6	< 1.0 - 7.6	10	0	ppb	Natural deposits, runoffs
Barium	2019 - 2020	0.15	< 0.02 - 0.15	2	2	ppm	Natural deposits, industrial
Cyanide	2019 - 2020	9.1	< 5 - 9.1	200	200	ppb	Discharges from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	2019 - 2020	1.11	0.1 - 1.11	4	4	ppm	Natural deposits
Nitrate (as N)	2020	6.54	< 0.25 - 6.54	10	10	ppm	Natural deposits, septic tanks, agriculture, sewage
Selenium	2019 - 2020	5.2	< 1.0 - 5.2	50	50	ppb	Discharge from petroleum, metal refineries, mines, erosion of natural deposits
Sodium	2019 - 2020	72	15.3 - 72	None	None	ppm	Natural deposits
Synthetic Organics							
Atrazine	2019 - 2020	0.11	< 0.05 - 0.11	3	3	ppb	Herbicide runoffs
Bis(2-ethyl)phthalate (DEHP)	2019 - 2020	1	< 0.6 - 1.0	6	0	ppb	Discharge from rubber & chemical factories
Pentachlorophenol	2019 - 2020	0.12	< 0.04 -0.12	1	0	ppb	Discharge from wood preserving factories
Volatile Organics							
Trichloroethene (TCE)	2019 - 2020	0.9	< 0.5 - 0.9	5	0	ppb	Metal degreasing sites
Radioactive Chemicals							
Alpha Emitters	2019 - 2020	1.3	0 - 1.3	15	0	pCi/L	Natural deposits
Uranium	2020	8.6	< 0.8 - 8.6	30	0	ppb	Natural deposits

Contaminant	Sample Year	No. of Samples Above Action Level	90th Percentile Value	Action Level	Action Level Goal	Units	Major Sources of Contaminat
Lead	2020	None	0.9	15	0	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Copper	2020	None	0.108	1.3	1.3	ppm	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectant	Year Sampled	Annual Average	Monthly Average Range	MRDL	MRDLG	Units	Major Sources of Contaminat
Chlorine	2020	0.89	0.79 - 1.01	4	4	ppm	Disinfection additive used to control microbes

Footnotes: < or ND = Not detectable at reporting limit. *= Highest locational running annual average.

DETAILED INFORMATION ON DETECTED CONTAMINANTS

Haloacetic Acids (HAA5) are a group of chemicals that are formed along with other disinfection byproducts when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The regulated haloacetic acid compounds, known as HAA5, are: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid. Compliance with the HAA5 standard is based on the Locational Running Annual Average (LRAA) concentration. The maximum LRAA for HAA5 in 2020 was 2 ppb (the MCL is 60 ppb).

Total Trihalomethanes (TTHMs) are formed when chlorine combines with naturally occurring organic material in water. Since the level of organic matter in our groundwater is extremely low, these compounds are found at very low concentrations. The compounds which make up the TTHMs include: bromodichloromethane, bromoform, chlorodibromomethane, and chloroform. Some people who drink TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Compliance with the TTHM standard is based on the Locational Running Annual Average (LRAA) concentration. The maximum LRAA for TTHMs in 2020 was 19.8 ppb (the MCL is 80 ppb).

Antimony in drinking water can result from discharge from petroleum refineries, fire retardants, ceramics, electronics, and solder. The highest antimony concentration detected during 2019-2020 was 1.8 ppb (the MCL is 6 ppb).

Arsenic is a naturally occurring substance commonly found in groundwater in the southwestern United States. 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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. The highest arsenic concentration detected during 2019-2020 was 7.6 ppb (the MCL is 10 ppb).

Barium occurs naturally at very low concentrations in our groundwater. The highest barium value during 2019-2020 was 0.15 parts per million (ppm) (the MCL is 2 ppm).

Cyanide in drinking water can result from discharge from steel/metal, plastic, and fertilizer factories. The highest cyanide concentration detected during 2019-2020 was 9.1 ppb (the MCL is 200 ppb).

Fluoride is an important naturally occurring mineral that helps form healthy teeth and bones. A concentration of 1 ppm is considered optimum. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums. The highest concentration of fluoride detected during 2019-2020 was 1.11 ppm (the MCL is 4 ppm).

Nitrate is a form of nitrogen and an important plant nutrient. Tucson Water performs more frequent monitoring of wells high in nitrate for extra assurance that action can be taken when approaching the MCL. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. If you are caring for an infant, ask advice from your healthcare provider. The highest concentration for nitrate during 2020 was 6.54 ppm (the MCL is 10 ppm).

Selenium is an essential nutrient and a naturally occurring mineral. The highest selenium concentration during 2019-2020 was 5.2 ppb (the MCL is 50 ppb).

Sodium is the sixth most abundant element on Earth and is widely distributed in soils, plants, water, and food. A goal of 2,300 mg/day dietary sodium has been proposed by several government and health agencies. Drinking water containing between 30 and 60 ppm would contribute only 2.5% to 5% of the dietary goal if tap water consumption is 2 liters per day. Currently, there is no MCL for sodium in drinking water. The recommended EPA guidance level for individuals on a very low sodium diet (500 mg/day) is 20 ppm in drinking water. The highest sodium concentration in Tucson water during 2019-2020 was 72 ppm.

Drinking water does not play a significant role in sodium exposure for most individuals. Those who are under treatment for sodium-sensitive hypertension should consult with their healthcare provider regarding sodium levels in their drinking water supply and the advisability of using an alternative water source or point-of-use treatment to reduce the sodium.

Synthetic Organic Chemicals (SOCs) are man-made organic chemicals. Some SOCs are volatile; others tend to stay dissolved in water instead of evaporating. Atrazine, a herbicide, was detected at concentration of 0.11 ppb in 2019-2020 (the MCL is 3 ppb). Di(2-ethylhexyl)phthalate (DEHP), used in plastic & rubber industries, was detected at a concentration of 1 ppb in 2019-2020 (the MCL is 6 ppb). Pentachlorophenol, used in wood preserving factories, was detected in one sample at a concentration of 0.12 ppb in 2019-2020 (the MCL is 1 ppb

Volatile Organic Compounds (VOCs) are chemicals that both vaporize into air and dissolve in water. VOCs are pervasive in daily life, because they're used in industry, agriculture, transportation, and day-to-day activities around the home. Trichloroethene (TCE) is commonly used as an industrial solvent and can migrate through soils readily. The maximum TCE concentration was 0.9 ppb in 2019-2020 (the MCL is 5 ppb).

Gross Alpha Emitters is a measure of radioactivity due to naturally occurring minerals in groundwater. This excludes the radioactivity contributed by either radon or uranium. The highest concentration for gross alpha emitters during 2019-2020 was 1.3 picocuries per liter or pCi/L (the MCL is 15 pCi/L).

Uranium is a metallic, naturally occurring element which is highly toxic and radioactive. The highest concentration for uranium during 2020 was 8.6 ppb (the MCL is 30 ppb).

Lead and Copper are naturally occurring metals which are generally found at very low levels in source waters. 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. Tucson Water is responsible for providing high-quality drinking water but cannot control the variety of materials used in private 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 at **www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water**. The required lead and copper monitoring was performed during 2020. The 90th percentile value was 0.9 ppb for lead (Lead Action Level is 15 ppb) and 0.108 ppm for copper (Copper Action Level is 1.3 ppm). Both lead and copper 90th percentiles were below their respective Action Level.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Chlorine Residual Disinfection is maintained throughout the distribution system. Approximately 1 ppm of chlorine is added to the drinking water supply at well sites, reservoirs, and other facilities to provide assurance that water delivered to customers will remain free of microbiological contamination. This also ensures that the water meets microbiological drinking water standards from the time it is pumped from the ground until it reaches the customer's tap. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the Maximum Residual Disinfectant Limit (MRDL) could experience stomach discomfort or anemia. Chlorine Residual Disinfectant is measured from 247 sample stations where the bacteriological samples are collected monthly. The annual chlorine residual disinfectant is calculated using the monthly chlorine averages for the past 12 months. The annual average for twelve months of 2020 was 0.89 ppm. The maximum monthly average was 1.01 ppm (the MRDL is 4 ppm).

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard or warrant future regulation. The presence of a compound does not necessarily equate to a health risk; the concentration of a compound is a far more important factor in determining whether there are health implications. We will closely monitor both the concentrations of these compounds and the EPA's health studies and will keep you informed of any development. UCMR4 sampling was conducted by Tucson Water during 2019-2020. Reference below table for UCMR4 contaminants that were detected.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

While the Safe Drinking Water Act regulations are intended to protect consumers throughout their lifetime, some people may be more vulnerable to infections from drinking water than the general population. These "at-risk" populations include immunocompromised persons such as persons with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and in some cases, elderly people, and infants. These people should seek advice about drinking water from the healthcare providers, EPA/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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

As a Tucson Water customer, you have the right to know that this data is available. If you are interested in examining the results, please contact the Water Quality and Operations Division at (520) 791-2544.

UCMR Contaminant	Sample Year	Average	Range	Units	Explanation
Germanium	2019 - 2020	436	300 - 930	ppt	Naturally occurring, byproduct of zinc ore processing, used in infrared & fiber optic
Manganese	2019 - 2020	3.9	0.4 - 120	ppb	Naturally occurring, in steel production, fertilizers
O-Toluidine	2019 - 2020	31	31	ppt	Used in production of dyes, rubber, pharmaceuticals and pesticides
HAA5	2019	1.8	0.52 - 7.7	ppb	Byproduct of drinking water disinfection
HAA6Br	2019	3.3	0.52 - 9.1	ppb	Byproduct of drinking water disinfection
HAA9	2019	3.9	0.52 - 15.7	ppb	Byproduct of drinking water disinfection
Bromide	2019 - 2020	109	27 - 720	ppb	Recovered from naturally occurring low grade deposits, mined either from a primary deposit or by-product of copper processing
Total Organic Carbon	2019 - 2020	1250	1000 - 1500	ppb	Used as a non-specific indicator of water quality or cleanliness of pharmaceutical equipment

HAA5: (dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloro acetic acid, trichloroacetic acid)

HAA6Br: (bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, chlorodibromoacetic acid, monobromoacetic acid, tribromoacetic acid)

HAA9: (bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, trichloroacetic acid)

DRINKING WATER TERMS AND DEFINITIONS:

Action Level
The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirement which a water system must follow.

Entry Point to the Distribution System (EPDS)
All water sources are monitored at the entry point to the distribution system before the first customer but after any required treatment.

Maximum Contaminant Level (MCL)
The highest level of a contaminant that is established by the EPA allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. If a contaminant is believed to cause health concerns in humans, then the MCL is set as close as practical to zero and at an acceptable level of risk. Generally, the maximum acceptable risk of cancer is 1 in 10,000 with 70 years of exposure.

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.

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.

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.

Parts Per Billion (ppb)
Some constituents in water are measured in very small units. One ppb equals one microgram per liter. For example, one part per billion equals: 2 drops of water in a 15,000-gallon backyard swimming pool, one second of time in 31.7 years, or the first 16 inches of a trip to the moon.

Parts Per Million (ppm)
One ppm equals one milligram per liter or 1,000 times more than a ppb. One part per million equals: 1/4 cup of water in a typical 15,000-gallon backyard swimming pool; or one second of time in 11.6 days.

Picocurie Per Liter (pCi/L)
It is defined as the quantity of radioactive material in one liter which produces 2.22 nuclear disintegrations per minute.

More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline 1-800-426-4791.

SOURCE WATER ASSESSMENT PROGRAM (SWAP)

The Arizona Department of Environmental Quality (ADEQ) completed a source water assessment for Tucson Water drinking water wells. This assessment reviewed the adjacent land uses that may pose a potential risk to the water sources. These risks include, but are not limited to, gas stations, landfills, dry cleaning, agricultural fields, wastewater treatment plants, and mining activities. The assessment has classified approximately 1/3 of our wells as high risk.

High Risk: Based on the information currently available on the hydrogeological settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water systems, the Arizona Department of Environmental Quality has given us a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated, nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeological conditions exist that make the source water susceptible to possible future contamination.

Tucson Water ensures the safety of our drinking water by conducting regular monitoring of all sources. If any contamination approaches the drinking water MCL, the source is removed from service. Residents can help protect our water sources by practicing good septic system maintenance, limiting pesticide and fertilizer use, and by taking hazardous household chemicals to the House-hold Hazardous Waste Program locations (visit **www.tuc- sonaz.gov/es/household-hazardous-waste** or call (520) 791-3171.

Source Water Assessments on file with the ADEQ are available for public review. You may obtain a copy by contacting the Arizona Source Water Coordinators at (602) 771-4597 or (602)771-4298.

PERFLUORINATED COMPOUNDS (PFOA & PFOS)

In May 2016, the EPA issued a revised Health Advisory for the perfluorinated compounds perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). The lifetime health advisory for each compound is 70 parts per trillion or ppt, which is applicable to each compound individually or in combination.

In December, 2019, Tucson Water enhanced its voluntary, proactive operational policy, which protects public health, by removing wells from service that exceed 18 ppt for the PFAS compounds PFOA, PFOS, Perfluorohexanesulfonic acid (PFHxS) and Perfluoroheptanoic acid (PFHpA). In addition, PFHxA not to exceed 200,000 ppt and PFBS not to exceed 420 ppt. Wells with PFOA, PFOS, PFHxS, and PFHpA detections less than 18 ppt are placed in a standby mode on a last-on, first-off basis. In 2020, Tucson Water continued to investigate and assess its system for PFAS detections by collecting and analyzing over 1,555 samples. More information can be found at **www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos**

MONITORING WAIVERS

The Arizona Department of Environmental Quality (ADEQ), the regulatory agency for all public water suppliers in Arizona, grants waivers for certain monitoring requirements. Tucson Water participates in a Synthetic Organic Chemicals (SOC) waiver program offered to public water systems by ADEQ. Waivers save money by reducing the monitoring frequencies for these contaminants without affecting public safety. To determine a system's eligibility for an SOC susceptibility waiver, ADEQ's evaluation includes the following:

- Previous analytical results
- Previous vulnerability assessments
- Proximity of the system to adjacent land uses
- Mobility of the compound
- Methods in place to control contaminant sources
- Releases of worst-case contaminant in the study area
- Source construction including depth to groundwater, soil type, and hydrogeological setting
- Source Water Assessment Plan
- Historical information related to current waivers and historical full and partial waivers

In 2020, Tucson Water utilized SOC waivers in its main system. Most of Tucson Water's sources (wells) were eligible for SOC waivers.

WERE THERE ANY MONITORING FAILURES OR VIOLATIONS?

At the end of each quarter, Tucson Water conducts an internal audit of compliance monitoring records to verify that all required monitoring has been completed and reported to the State. During 2020, there were no reporting violations, health-based violations, or monitoring violations.

WHAT ABOUT COLORADO RIVER WATER?

The City of Tucson has rights to approximately 144,000 acre-feet of Colorado River water per year, delivered through the Central Arizona Project (CAP). At the Clearwater Renewable Resource Facility located in Avra Valley, Tucson Water is recharging the City's available CAP supply by delivering the river water to shallow basins and allowing the water to percolate (or recharge) naturally through the earth to reach and blend with the groundwater below. Tucson Water began delivery of this blend of recharged Colorado River water and groundwater in 2001. Over time, it will contain an increasing percentage of recharged Colorado River water; the percentage will also vary according to which Clearwater production wells are pumped.

HOW IS OUR DRINKING WATER TREATED?

The groundwater delivered by Tucson Water meets all drinking water standards without treatment, with the exception of the water supplied from the Tucson Airport Area Remediation Project or TARP (see below). However, approximately 1 ppm of chlorine is added to the drinking water supply at well sites, reservoirs, and other facilities to provide assurance that water delivered to customers will remain free of microbiological contamination. This also ensures that the water meets microbiological drinking water standards from the time it is pumped from the ground until it reaches the customer's tap.

MORE ABOUT TARP

TARP was developed to clean and make beneficial use of water contaminated with the industrial solvent trichloroethylene (TCE). Tucson Water operates TARP under an agreement with the EPA and other industrial and governmental agencies. All costs associated with operating and maintaining the TARP facility is fully reimbursed to Tucson Water.

Nine wells designed to extract contaminated water and deliver it through a pipeline to the Advanced Oxidation Process (AOP) facility at TARP, where both TCE and 1,4-dioxane are removed from the water to below detection limits. Additionally, Tucson Water continues to manage PFAS to below our conservative operational goals. In 2020, the EPA approved Tucson Water's request to implement the Packed Column Aeration (PCA) Retirement Demonstration Project which removes the redundancy of the air stripping towers and relies solely on the AOP facility for contaminant removal. The AOP facility at TARP is designed to treat approximately 8.4 million gallons of water per day or 5,800 gallons per minute. During 2020, the plant treated approximately 2 billion gallons of water and removed 158 pounds of TCE and 17 pounds of 1,4-dioxane from the groundwater.

WHOM DO I CONTACT FOR MORE INFORMATION?

For more information, questions, comments on this Tucson Annual Water Quality report or on water quality topics in your neighborhood, please contact our water quality concerns team at (520) 791-5945 or email **CustomerSupportUnit@tucsonaz.gov.**

Tucson Water's Water Quality Information Net program provides timely information about the quality of tap water in your neighborhood at **https://tucsonaz.gov/water/water-quality**. Use this link to see water quality tests closest to your home or business using our Online Water Quality Map.

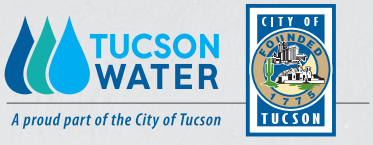
Tucson's Mayor and Council set policy and direction for Tucson Water, including those policies that may impact water quality. Mayor and Council meetings are normally held every other Tuesday and are open to the public. Mayor and Council meeting schedule, agendas, and other opportunities for public comments are published at **www.tucsonaz.gov/gov/meeting-schedules-and-agendas**.

To schedule a tour of Tucson Water's Water Quality Laboratory or a speaker for your organization, contact the Public Information Office at (520) 791-4331 or email **pico@tucsonaz.gov**. Tucson Water customers may leave a message for the Mayor and Council at (520) 791-4201.

Tucson Water is committed to ensuring that our customers receive high quality water and excellent service in a safe, reliable, efficient, and environmentally responsible manner.

CONTACT INFORMATION:

Tucson Water Public Information Office	(520) 791-4331
Tucson Water Quality & Operations Division	(520) 791-2544
Tucson Water Customer Support Unit	(520) 791-5945
Tucson Water Customer Service/Billing	(520) 791-3242
Tucson Water 24-hour Emergency	(520) 791-4133
EPA Safe Drinking Water Hotline	1-800-426-4791
EPA Website	epa.gov/ground-water-and-drinking-water
Si usted desea este documento scrit en Español, por favor, llame al	(520) 791-4331
City of Tucson TTY#	(520) 791-2639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WATER
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