## **Consumer Confidence Report for Calendar Year 2023**

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

Public Water System ID Number	Public Water System Name			
AZ0410051	Flowing Wells Irrigation District			
Contact Name and Title		Phone Number	E-mail Address	
Richard Rubal		520-887-4192	customerservice@fwid.org	

We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact Richard Rubal at 520-887-4192 for additional opportunity and meeting dates and times.

## **Drinking Water Sources**

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 pickup substances resulting from the presence of animals or from human activity.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source(s):

Our water system has 9 wells that draw water from the Upper Santa Cruz sub-basin of the Tucson Active Management Area basin.

## **Drinking Water Contaminants**

**Microbial Contaminants**: Viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

**Disinfectants and Disinfection By-products**: Water additives used to control microbes, and the by-products of interactions between disinfectants and natural organic materials in water

Inorganic Contaminants: Salts, metals, and other inorganic contaminants that can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

**Pesticides and Herbicides**: Synthetic organic compounds that come from agriculture, urban storm water runoff, and a wide variety of residential uses

**Organic Chemical Contaminants**: Synthetic and volatile organic chemical by-products that come from industrial processes, petroleum production, gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants: Can be naturally occurring or be the result of oil and gas production and mining activities.

### **Vulnerable Population**

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. 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.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

#### Source Water Assessment

This PWS did not receive a SWAP because the PWS was either inactive at the time or the PWS did not exist.

Further source water assessment documentation can be obtained by contacting ADEQ.

#### **Definitions**

**Treatment Technique (TT)**: A required process intended to reduce the level of a contaminant in drinking water

**Level 1 Assessment**: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

**Level 2 Assessment**: A very detailed study of the water system to identify potential problems contributing to an *E. coli* MCL violation, and/or why total coliform bacteria was present

**Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements

**Maximum Contaminant Level (MCL)**: The highest level of a contaminant that is allowed in 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

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

**Minimum Reporting Limit (MRL)**: The smallest measured concentration of a substance that can be reliably measured by a given analytical method

**Millirems per year (MREM)**: A measure of radiation absorbed by the body

**Not Applicable (NA)**: Sampling was not completed by regulation or was not required

**Not Detected (ND or <)**: Not detected by the sampling laboratory above a minimum level of detection

**Nephelometric Turbidity Units (NTU)**: Measure of water clarity for drinking water systems using surface water as source water

Million fibers per liter (MFL): Measure of asbestos contamination

**Picocuries per liter (pCi/L)**: Measure of the radioactivity in water

#### **Unit Coversions:**

**ppm**: Parts per million or Milligrams per liter (mg/L) ppm x 1000 = ppb

**ppb**: Parts per billion or Micrograms per liter (μg/L) ppb x 1000 = ppt

ppt: Parts per trillion or Nanograms per liter (ng/L)
ppt x 1000 = ppq

ppq: Parts per quadrillion or Picograms per liter (pg/L)

### **Lead Informational Statement:**

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Flowing Wells Irrigation 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. 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 www.epa.gov/safewater/lead.

# Water Quality Data - Regulated Contaminants

As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

Disinfectants	MCL Violation Y or N	Average	Range	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine/Chloramine (ppm)	N	0.55	0.45 to 0.67	4	4	2023	Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Highest Location Average or Highest Level Detected	Range Low-High	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	N	7.2	2 to 10.6	80	N/A	2023	Byproduct of drinking water disinfection
Lead & Copper	AL Violation?	90 <sup>th</sup> Percentile	Number of Samples Exceeding the AL	AL	ALG	Sample Month / Year	Likely Source of Contamination
Copper (ppm)	N	0.10	1	1.3	1.3	7 / 2022	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Average or Highest Level Detected	Range	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha Emitters including uranium (pCi/L)	N	3	0 to 3	15	0	2 / 2022	
Inorganic Chemicals (IOC)	MCL Violation Y or N	Average or Highest Level Detected	Range	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Arsenic <sup>1</sup> (ppb)	N	5.6	1.2 to 5.6	10	0	2019 - 2023	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.12	0 to 0.12	2	2	2019 - 2021	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	N	4.3	0 to 4.3	100	100	2019 - 2021	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	N	0.53	0 to 0.53	4	4	2019 - 2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate <sup>2</sup> (ppm)	N	3.8	0.95 to 3.77	10	10	2 / 2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	N	7.3	0 to 7.3	50	50	2019 - 2021	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N	310	25 to 310	N/A	N/A	2021	Erosion of natural deposits

## Water Quality Table - Unregulated Contaminant Monitoring Rule 5 (2023-2025)

Your drinking water was sampled for the presence and concentration of 29 different per- and polyfluoroalkyl substances, some known by the acronyms PFAS, PFOA, PFNA, PFHXS, PFBS, and GenX, a group of contaminants in the final stages of becoming regulated by the EPA. PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting foam and stain resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals, depending on the level and duration of exposure.

To learn more about this group of chemicals, we encourage you to read the ADEQ-provided "PFAS 101 Fact Sheet" and to visit the ADEQ website at https://www.azdeq.gov/pfas-resources

Metals	Average	Range of All Samples (Low-High)	Sampling Date	MRL	Likely Source of Contamination
Lithium (ppb)	72	0 to 228	2023	9	Naturally occurring metal that may concentrate in brine waters; lithium salts are used as pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses.
Per- and Polyfluoroalkyl Substances (PFAS)	Average	Range of All Samples (Low-High)	Sampling Date	MRL	Likely Source of Contamination
Perfluorobutanesulfonic acid (PFBS)* (ppt)	0.67	0 to 4	2023	3	See above
Perfluorooctanesulfonic acid (PFOS) (ppt)	0.83	0 to 6	2023	4	See above
Perfluorooctanoic acid (PFOA) (ppt)	0.83	0 to 5	2023	4	See above
Perfluorohexanesulfonic acid (PFHxS)* (ppt)	2.50	0 to 9	2023	3	See above
Perfluorohexanoic acid (PFHxA) (ppt)	0.50	0 to 3	2023	3	See above
Perfluoropentanoic acid (PFPeA) (ppt)	0.58	0 to 4	2023	3	See above

<sup>\*</sup> EPA is proposing a Hazard Index MCL to limit any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. The Hazard Index considers the different toxicities of PFNA, GenX Chemicals, PFHxS, and PFBS. For these PFAS, water systems would use a hazard index calculation to determine if the combined levels of these PFAS in the drinking water at that system pose a potential risk and require action (Source: EPA Fact Sheet: Understanding the PFAS National Primary Drinking Water Proposal Hazard Index).

## Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
Late Reporting	Arsenic, no health effects	2nd quarter 2023	Submitted results
Missed monitoring	Total Coliform, no health effects	November 2023	Returned to compliance with December sampling - no coliform detected
Missed monitoring	Disinfection Byproducts, no health effects	4th quarter 2023	Took samples in November instead of October, as scheduled - results well below the MCL

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.