

# Annual Water Quality Report

## PWSID AZ0410501 — Silverbell Gateway

### TOWN OF MARANA WATER SYSTEM

For more information about the Town of Marana Water Department, visit us at [www.MaranaWater.com](http://www.MaranaWater.com)

**February 2024**

*Este informe contiene información muy importante sobre su agua de beber.  
Tradúzcalo ó hable con alguien que lo entienda bien.*

#### MARANA WATER SYSTEM MEETS SAFE DRINKING STANDARDS

This year's Annual Water Quality Report covers the monitoring period between January 1, 2023 and December 31, 2023. This report is a snapshot of the year's water quality and the services Town of Marana Water Department provides. Our goal is and always has been to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. The water we provide meets and/or exceeds the Safe Drinking Water Standards established by the U.S. Environmental Protection Agency (EPA) and the State of Arizona's Department of Environmental Quality (ADEQ). Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. For information on the quality of your bottled water, contact the water bottling company.

#### WHERE DOES OUR WATER COME FROM?

The sources of drinking water (tap and bottled) 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. Water can also pick up substances resulting from the presence of animals or from human activity.

Town of Marana Water System (Silverbell Gateway) is a consecutive groundwater system off of Tucson Water's Main system (AZ0410112). Marana Water is responsible for the infrastructure and the testing of certain constituents such as coliforms, disinfection by-products, chlorine residual, lead and copper.

For more information on Tucson Water's sources please refer to the link below.

<https://www.tucsonaz.gov/files/sharedassets/public/v/1/water/documents/wq/mainsystem.pdf>

#### WHAT TYPE OF CONTAMINANTS MIGHT BE PRESENT IN MY WATER?

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations 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** that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants** that can be naturally occurring or the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

#### 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. Immunocompromised persons, such as people 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 care providers. Call the Safe Drinking Water Hotline at (800) 426-4791 to learn more about EPA and Center for Disease Control (CDC) guidelines on appropriate means to reduce the risk of infection by cryptosporidium and other microbiological contaminants, as well as other potential health effects.

#### SOURCE WATER ASSESSMENT PROGRAM (SWAP)

Residents can help protect water sources by practicing good septic system maintenance, limiting pesticide and fertilizer use, and taking hazardous household chemicals to appropriate collection sites. Source Water Assessments on file with ADEQ are available for public review.

For more information on Tucson Water's Source Water Assessment program refer to the link below.

<https://www.tucsonaz.gov/files/sharedassets/public/v/1/water/documents/wq/mainsystem.pdf>

#### TERMS & ABBREVIATIONS

To help you better understand the terms and abbreviations used in this report please use the following 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 and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria was present

**Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

The Department of Environmental Quality (DEQ) ID is assigned by DEQ to each Public Water System (PWS). Certain contaminants are monitored less than once per 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.

DEQ ID	Water System Name (PWS)	General Area
10501	Silverbell Gateway	Silverbell Rd & Ina Rd

### DETECTED CONTAMINANTS

For additional water quality information refer to link

<https://www.tucsonaz.gov/files/sharedassets/public/v/1/water/documents/wq/mainsystem.pdf>

Disinfectants										
DEQ ID	Contaminant	MRDL	MRDLG	Units	Range	Level Average	Violation (Yes/No)	Year Tested	Likely Source of Contamination	
10501	Chlorine Residual	4	4	ppm	0.70 – 0.84	0.76	No	2023	Disinfection additive used to control microbe	
Lead and Copper										
DEQ ID	Contaminant	AL	ALG	Units	90th Percentile	Number of Sites over AL	Violation (Yes/No)	Sample Month/Year	Likely Source of Contamination	
10501	Copper	1.3	1.3	ppm	0.047	0	No	11/23	Corrosion of household plumbing systems; erosion of natural deposits	
Disinfection Byproducts										
DEQ ID	Contaminant	MCL	MCLG	Units	Average	Range	Highest RAA	Violation (Yes/No)	Sample Month/Year	Likely Source of Contamination
10501	Total Trihalomethanes (TTM)	80	N/A	ppb	18.3	18.3	18.3	No	09/23	By-product of drinking water disinfection
10501	Haloacetic Acids (HAA5)	60	N/A	ppb	<2.0	<2.0	<2.0	No	09/23	By-product of drinking water disinfection

**Maximum Contaminant Level (MCL)** – The “maximum allowed” is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs are set at stringent levels.

**Maximum Contaminant Level Goal (MCLG)** – The “goal” is 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.

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

**Nephelometric Turbidity Units (NTU)** – A measure of water clarity

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

**Parts per billion (ppb) or Micrograms per liter (µg/L)** – One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000. ppb x 1,000 = ppt.

**Parts per quadrillion (ppt)** – Also known as Picograms per liter.

**Running Annual Average (RAA)** – An average of monitoring results for the previous 12 calendar months.

**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 health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**Non-Detect (ND)** – The contaminant is below the detection level.

**Parts per million (ppm) or Milligrams per liter (mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000. ppm x 1,000 = ppb.

**Parts per trillion (ppt) or Nanograms per liter** – ppt x 1,000 = ppq. One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

**Picocuries per liter (PCi/L)** – A measure of the radioactivity in water.

## ADDITIONAL INFORMATION

### Arsenic

While your drinking water meets EPA standards, it contains low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic (a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory problems).

### Lead

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. Marana Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, potential for lead exposure can be minimized by flushing 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](http://www.epa.gov/safewater/lead).

### Nitrates

Nitrates in drinking water at levels above 10 ppm are a health risk for infants younger than six months of age and elderly people on oxygen continually. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant and detected nitrate levels are above 5 ppm you should seek advice from your healthcare provider.

### Unregulated Compounds

Unregulated compounds are classified as compounds not part of mandatory water quality testing required by the EPA. However, the EPA is continually examining compounds for their effects on humans and has established Health Advisories (HA) while they continue these studies. Marana has conducted voluntary sampling for the group of compounds called Perfluoroalkyl Substances (PFAS) and 1,4-Dioxane. In 2023, the PFAS HA was dramatically reduced to levels that even approved laboratories are not able to achieve (link provided <https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos>). There are currently no detectable levels of PFAS or 1,4 dioxane in the Silverbell Gateway system. For more information, please visit our website at [www.MaranaAZ.gov/water-quality](http://www.MaranaAZ.gov/water-quality) or call (520) 382-2523.

### HOW DO I KNOW IF MY WATER IS SAFE?

Under the ADEQ Monitoring Assistance Program (MAP), Marana Water System, in collaboration with MAP, routinely monitors for more than 80 contaminants as required by federal and state regulations. Testing is required for synthetic organic chemicals (SOCs), inorganic chemicals (IOCs), volatile organic chemicals (VOCs), radio chemicals, lead and copper and disinfection byproducts. Bacteriological tests are required monthly.

### WHAT HAPPENS IF THE WATER TESTED INDICATES CONTAMINATION?

If a constituent is found to be out of compliance with the Safe Drinking Water Standards, we are required by federal and state law to notify our customers. Notifications can be made by letter, the media or through this report. If a serious situation occurs that may affect the health, safety and well-being of our residents, we will do whatever is necessary to advise our customers and find an alternate source of safe drinking water.

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

### REPORT PERIOD

All systems were tested monthly, quarterly or annually for contaminants, depending on the guidelines for each established by the EPA.

### SYSTEM VIOLATIONS

In 2023, Marana Water Silverbell Gateway System (PWSID AZ0410501), had no system violations.

### CHLORINATION

Chlorine is the most commonly used disinfectant for water and saves lives by controlling waterborne diseases.

### WATER HARDNESS

Arizona water passes through soils that are rich in calcium and magnesium. These harmless, tasteless minerals become completely dissolved, creating what is known as hard water. Water hardness poses no health risk to consumers; however, it can create challenges around the house, such as a reduction in the cleansing ability of laundry soap and deposits left behind on bath fixtures, dishes and glassware.

### WHOM DO I CONTACT FOR ADDITIONAL INFORMATION ABOUT MY WATER QUALITY?

Questions or comments regarding this report should be directed to Louis Valencia, Water Quality Supervisor, at (520) 382-2523. You may also reach him via e-mail at [lvalencia@MaranaAZ.gov](mailto:lvalencia@MaranaAZ.gov).



**TOWN OF MARANA  
WATER DEPARTMENT**

11555 W. Civic Center  
Marana, AZ 85653

Phone: (520) 382-2570

Fax: (520) 382-2590

Web: [www.MaranaWater.com](http://www.MaranaWater.com)

# Water Quality Report

PWSID AZ0410501 — Silverbell Gateway

