



GUAM WATERWORKS AUTHORITY

2025 Water Quality Consumer Confidence Report

This report displays ONLY contaminants that have been detected at levels of interest. To view a complete listing of contaminants monitored by GWA, or to make inquiries about this report, please call Jennifer O. Cruz at our certified Utility Compliance Monitoring Laboratory Services Division at (671) 300-6360 during normal business hours.

The Guam Waterworks Authority mission is “To provide outstanding customer service by delivering excellent water and wastewater services in a safe, reliable, responsible and cost-effective manner.” As part of that effort, we publish this annual Water Quality Report, which provides information about where your water comes from, what it contains, and how it compares to our Guam and Federal standards. Most importantly, it confirms that in 2025, our water met or surpassed all standards set by the U.S. Environmental Protection Agency (EPA) and the Guam Environmental Protection Agency (GEPA) to protect public health. Keeping consumers informed about the quality of its drinking water is an important part of our job. Because the health of all Guam's people depends on safe drinking water, it is truly our most precious resource and therefore, every water user needs to actively participate in the conservation and protection of our drinking water sources.

GWA's drinking water sources contain low levels of a variety of chemicals. Some are of natural origin and some are man-made. Lots of chemicals occur naturally in water and while many are beneficial to human health, some of these can be undesirable if found at levels that may have impacts on your health. Levels of these naturally occurring chemicals are normally so low that they pose no health concern or known risk. Fluoride is one of those naturally occurring chemicals and it is only found at very low levels that poses no known health risks. However, fluoride is also used as an additive which is believed by some officials to promote cavity resistance in a young person's growing teeth but has been found to negatively impact learning ability in young people (Fluoride In Water Linked To Lower IQ In Children (wateronline.com)). GWA does not add fluoride to our water systems but the US Navy Water System (FENA) does so by federal regulation.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human health. It's not always the presence of a chemical that is as important as the amount of a chemical that is present in the water. For example, some of the heavy metals like cadmium and mercury occur naturally in water, but are present at such a low level that they do not pose a health risk. Treatment becomes necessary when the amount of any contaminant approaches or exceeds the “Maximum Contaminant Level” (MCL), a level of concentration that the EPA has determined may put some persons at risk of adverse health effects. When this occurs, GWA has chosen to discontinue the use of such a source or install and operate treatment facilities to remove the contaminants.

We continue to look more closely at drinking water quality as our capabilities improve and as new chemicals of concern come to light as the body of scientific knowledge grows. One of the ways that is used is the “Unregulated Contaminant Monitoring Rule” (UCMR) under the “Safe Drinking Water Act” (SDWA). An example of this is the emerging concern of man-made “Per/PolyFluoro-Alkyl Substances” (PFAS) which came to light during the third round of the Unregulated Contaminant Monitoring Rule in 2015 and is now the focus of UCMR-5, which GWA is currently conducting.

Nature has given us an abundant drinking water supply. However, nature needs our active participation in order to maintain its clarity and purity. Use water wisely. Illegal dumping, soil erosion resulting from grassland fires/poachers, and poorly maintained septic systems all pose threats to our drinking water. Dispose of waste properly, protect our watersheds from arson and poachers, and support recycling. Protecting our water resources begins with protecting our environment.

Sources of Our Drinking Water

Our water is derived from several sources including ground, surface and spring water. The island's principal source of potable water is our abundant rainfall, most of which becomes groundwater contained in the aquifer beneath the northern half of the island. Groundwater is pumped from 120 wells in this deep underground aquifer into the water distribution system. Surface sources used by GWA include an intake from the Ugum River and water purchased from the Navy's Fena System. Spring water from Santa Rita Spring is used to supplement the water supply from Fena for the villages of Asan, Piti, Anigua, Agat, Santa Rita and sometimes as far as Mongmong-Toto-Maite.

It has long been recognized that our water sources need protection, and GWA is determined to protect our very high-quality water against contamination, not only from percolation and runoff of surface pollution, septic system discharges, water softener and reverse osmosis waste streams but also from salt-water intrusion due to over-pumping of the aquifer. We are working with the Guam Environmental Protection Agency (GEPA) and the Water and Environmental Research Institute of the Western Pacific, University of Guam (WERI) to determine the vulnerability of our water sources to contamination. More information on the water quality of our island is available on the GEPA and WERI web sites.

Why are there Contaminants in the Water?

All drinking water, including bottled water, may reasonably be expected to contain at least trace amounts of some contaminants of natural origin. The presence of substances dissolved in drinking water does not usually indicate that the drinking water poses a health risk, and many naturally occurring ingredients are beneficial to human health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791 or GEPA's Safe Drinking Water Program at (671) 588-4779/9026. In compliance with the Guam Primary Safe Drinking Water Regulations (GPSDWR), our drinking water is monitored for all regulated contaminants and unregulated constituents as it leaves our drinking water sources and enters the distribution system. The contaminants measured include:

- **Microbial contaminants**, like viruses and bacteria, native to tropical soils, or may come from sewage spills, septic systems, agricultural livestock operations or wildlife or from illegal dumping.
- **Inorganic contaminants**, such as salts and metals, which are naturally occurring, or may result from stormwater runoff, commercial wastewater discharges, RO and water softener waste streams, farming or from illegal dumping.
- **Pesticide and herbicide contaminants**, which may come from a variety of sources such as home and garden use, agriculture or urban stormwater runoff.
- **Organic chemical contaminants**, both synthetic and volatile organic chemicals, which are by-products of industrial processes, (e. g. PFAS) and petroleum production or use, and can also come from gas stations, commercial spills, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of improper disposal of radioactive waste.

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 people, and infants can be particularly at risk from infections. These people should seek advice, about drinking water, from their primary health care providers. EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water hotline at 1-800-426-4791.

Dieldrin

Dieldrin is a pesticide that was used on agricultural crops from the 1950's until 1970. It was also used in homes to control termites until 1989. The USEPA has decided not to set an enforceable drinking water standard for dieldrin because USEPA has concluded that most people are not likely to be exposed to levels of concern nationwide. This decision is based on USEPA's monitoring data in the entire area of its jurisdiction and the fact that dieldrin is no longer manufactured or used in the U.S. However, because it has been found in Guam's drinking water, persisting from former use here, the Guam EPA has developed an interim action level (IAL) that will require GWA to notify its customers and provide proper water treatment to remove it, when the IAL is reached or exceeded, in an effort to protect consumers. GWA does support these requirements. Work is ongoing to provide approved treatment at production sources where this compound is found at levels of concern.

An interim granular activated carbon (GAC) treatment system was commissioned for well Y-15 in Yigo on October 12, 2025, and has been producing water without any detections of dieldrin since then. As a proactive effort, GAC system is expected to be installed on M-3, M-4 and D-17 in 2026. GWA will continue to provide timely and pertinent updates to the community as they become available. Visit guamwatersafety.com for more information about dieldrin mitigation.

Dieldrin Sampling Results - Running Annual Average (RAA) – 124 SAMPLE LOCATIONS		
Wells	RAA	Remarks
33	Non-Detect (ND)	• No detections for dieldrin • "Do Not Drink Without Treatment" advisory for Y-15 was rescinded on 11/13/25.
83	0.01 ppb to 0.09 ppb	• 83 locations are less than 0.1 ppb or 50% of the IAL
4	0.10 ppb to 0.14 ppb	• A-23 & A-25 offline for PFAS since 2016; treatment under construction • M-2 & D-18 remain online; neither has had RAA over the IAL.
4	0.15 ppb to 0.19 ppb	• M-4 offline since 10/3/25; RAA is 0.17 ppb; treatment under construction • M-3 is being placed on-line intermittently if needed operationally to meet customer demand; RAA is 0.18 ppb. • EX-11 remains online and has not had a RAA over the IAL; RAA is 0.16 ppb. • D-17 offline since 7/31/25; treatment under construction. Result for samples taken on 12/18/25 is 0.08 ppb. RAA is 0.16 ppb.

Lead

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Contact your health care provider for more information about your risks. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. GWA is responsible for providing high quality drinking water but cannot control the variety of materials used in customer 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 www.epa.gov/safewater/lead.

The EPA has finalized the Lead and Copper Rule Improvements (LCRI), which included requiring public water systems to take the inventory of its service line materials and notify customers of the material types. Additionally, the LCRI strengthens the lead and copper monitoring of taps to include sampling of schools and childcare facilities. You can view our Lead Service Line Inventory Report online by clicking the link below or you are welcome to visit any of our GWA Customer Service Centers during regular business hours to view the report in person. Visit guamwaterworks.org to view the Lead Service Line Inventory Report

Nitrate

The EPA requires the following information to be included in this report as the level of nitrates in three wells (EX-11, F-12, M-01) have reached 5 ppm. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. 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, you should ask for advice from your health care provider.

Fifth Unregulated Contaminant Monitoring Rule (UCMR5)

The UCMR5 monitoring of 29 Per/Polyfluoro-Alkyl Substances (PFAS) and lithium is now complete. Detected levels of PFAS are reported in Table 6.

PFAS are chemical compounds which contain fluorine to make them water, fire and/or stain resistant. The most familiar forms are Teflon which is used as a lining of cookware, or the coating on the inside of some food packaging, most commonly in microwave popcorn bags. Recent studies of this class of compounds have brought to light potentially adverse health effects of some chemicals in this group for a lifetime of exposure to us. In April 10, 2024, EPA announced the final standards for six PFAS compounds: PFOA (4 ppt), PFOS (4 ppt), PFHxS (10 ppt), PFNA (10 ppt) and GenX (10 ppt). While GWA has treatment systems in place at several production facilities, work is underway to design and construct additional treatment systems to address these contaminants in line with EPA's compliance schedule.

If you remain concerned about PFAS in your drinking water, the EPA recommends that you consider installing an in-home water treatment (e.g., filters) that are certified to lower the levels of PFAS in your water. Visit www.epa.gov/pfas/meaningful-and-achievable-steps-you-can-take-reduce-your-risk for more information.

USEPA Oversight.

In December 2002, a civil suit was filed against GWA and the Government of Guam by the United States Department of Justice (DOJ) seeking to address Public Health compliance issues in GWA's wastewater and drinking water systems. In June 2003, Federal DOJ, USEPA, GWA and the Government of Guam negotiated the terms of the Stipulated Order for Preliminary Relief; Civil Case No. 02-0035 (SO). With it, GWA, under CCU and EPA oversight, undertook a broad initiative to restore its facilities and to provide safe, reliable service to the island while meeting all regulations. The compliance issues to be addressed under the SO included drinking water focused construction and rehabilitation projects, and training of GWA personnel. There were reporting requirements and notice provisions incorporated in the SO that were more stringent than normal regulatory reporting. A full-scale Water Resources Master Plan was also produced.

USEPA has been satisfied with GWA's progress with the SO mandates and USEPA & Guam EPA concur that GWA's drinking water now meets or exceeds the SDWA and GPDWR requirements.

On October 10, 2011, the SO was replaced by a District Court Order (CO) which recognizes GWA's progress in providing reliable and safe drinking water and which is focused more on environmental issues and the need to work through the projects identified in the Water Resources Master Plan. GWA is working closely with both USEPA and Guam EPA in order to achieve or exceed the goals of the CO, and has completed over 98% of the required projects under the CO as of 2024.

The updated "Water Resources Master Plan" and the "Order for Preliminary Relief RE: Deadlines for Projects Under the Amended Stipulated Order, Civil Case No. 02-0035" is available at guamwaterworks.org/compliance-and-safety/. For more information on the CO, please call Paul Kemp, GWA Assistant General Manager--Compliance and Safety at (671) 300-6885.

On January 31, 2024, the USEPA and USDOJ filed the "PARTIAL CONSENT DECREE Civil Case No, 24-00004 which is primarily focused on wastewater collection system and treatment improvements. GWA continues its efforts to meet or exceed the requirements set forth by USDOJ/USEPA and to provide the best possible service to the people of our island.

Sanitary Survey

As part of the SDWA, Guam EPA conducted a review of GWA's water systems to assess our ability to supply safe drinking water. There were eight areas surveyed: source, treatment, distribution system, finished water storage, pumps, monitoring and reporting, management and operation, and operator compliance. Any deficiencies found are addressed and those pending corrections are identified in this report. GWA diligently aims to complete all necessary corrections.

NORTHERN SYSTEMS SANITARY SURVEY

CATEGORY	SIGNIFICANT DEFICIENCY	LOCATION	CORRECTIVE ACTION
Booster Pumps/Pumps Pump Facilities	Metal base is corroded. The pump is sitting on a metal base that is corroding and rusted. The structure of the base for the pumps needs to be stable. Pump #2 is not bolted down on a permanent structure.	Mataguac BPS-N03	Part of GWA's CIP Booster Pump Renovation. GWA Project No. 12104. Anticipated completion date is November 2027.
Booster Pumps/Pumps Pump Facilities	Inlet/Outlet meters are not working.	Agana Heights BPS-N08	Procurement for replacement meters is in process. Anticipated completion date is May 2026.
Booster Pumps/Pumps Pump Facilities	Pump #2 is not bolted down on a permanent structure.	Mataguac BPS-N03	Part of GWA's CIP Booster Pump Renovation. GWA Project No. 12104. Anticipated completion is Nov. 2027.
Booster Pumps/Pumps Pump Facilities	SCADA readings are inconsistent. The SCADA readings are different from the actual pressure readings from inside the booster pump house.	Tumon Maui Well BPS-N19	Work with NavFac is ongoing for upgrade and replacement of the SCADA system. Anticipated completion is Dec. 2027.
Booster Pumps/Pumps Pump Facilities	No redundancy provided for the pumps. Only one pump is working. Redundancy is needed to eliminate single points of failure in the system.	Camacho BPS-N16; Tenorio BPS-N17	This project is part of the CIP Booster Pump Renovation. Anticipated completion date is Nov. 2027.
Production Wells	Data recorded are inconsistent with flow meter.	A-10; D-22; M-23	Water meters will be replaced via the CIP Defective Meter Replacement Project. Anticipated completion is Dec. 2026.
Production Wells	Electrical wiring is not in conduit.	Y-15	Repair in progress.
Production Wells	Insufficient sanitary seal around the sounding tube. There is a hole in the wellhead plate around the sounding tube.	F-1	Repair in progress.
Production Wells	Opening around the sounding tube. There is a hole in the wellhead plate around the sounding tube.	F-8	Repair in progress.
Production Wells	The well is not protected against trespassing/vandalism. Security conditions show that the facility is potentially vulnerable to tampering and vandalism that may affect the quality of water and disturbance to water supply operations. The barbed wire at the facility is not adequate.	A-30	Repairs require Capital Improvement Project. Anticipated completion is Dec. 2026.
Production Wells	The well is not protected against trespassing/vandalism. The security conditions show that the facility is potentially vulnerable to tampering and vandalism that may affect the quality of water and disturbance to water supply operations. There is graffiti present inside the generator room.	F-7; Y-7; Y-9	Repairs require Capital Improvement Project. Anticipated completion is Dec. 2026.
Production Wells	Wellhead concrete casing is not at least 12 inches above the well slab or 18 inches above the ground. The casing is currently only 10 inches from the ground and needs to be at least 18 inches from the ground to protect the well from flooding.	D-16; D-20; D-21; EX-5A; EX-11; F-10; F-11; GH-501; NAS-1; Y-5; Y-6	Requirement for 18 in above ground is met. Photos to be provided to Guam EPA.
Reservoirs/Storage Tanks	No cathodic protection. Steel tanks must have cathodic protection to control corrosion.	ST07 Tumon Airport Reservoir; ST19 Manenggon Reservoir	Part of the existing 2011 Court Order. Repairs are expected to be completed by Dec. 2026.
Reservoirs/Storage Tanks	Overflow pipe is susceptible to cross-contamination. The overflow pipe is below the surface inside a cylindrical concrete containment without drainage. The overflow pipe containment can flood itself which is a cross-connection.	ST21 Windward Hills Reservoir	
Reservoirs/Storage Tanks	Access hatch is not locked.	ST24 Tumon Maui Reservoir	
Reservoirs/Storage Tanks	Site is not protected against trespassing/vandalism. There is a large hole in the fencing where a dog enters the facility.	ST19 Manenggon Reservoir	Repair is part of the existing 2011 Court Order and expected to be completed by Dec. 2026.
Treatment	No fan for vent suction.	M-17A	To be addressed through CIP. Anticipated completion is Dec. 2026.
Treatment	Defective LED for power backup battery.	F-6	
Treatment	Multiple chlorine cylinders stored outside the facility with no proper security. Approximately 20+ gas chlorine cylinders are stored on the property between production wells A-29 and A-30 and are not secured.	A-30	GWA will undertake a CIP to provide site security. Anticipated completion date is December 2026.
Treatment	The treatment plant is not protected from trespassing/vandalism. Graffiti found on the walls inside of the chlorination room.	F-6; F-15; F-18; Y-14	This will be listed as part of the GWA's CIP project; anticipated completion by Nov. 2026.

SOUTHERN SYSTEMS SANITARY SURVEY

CATEGORY	SIGNIFICANT DEFICIENCY	LOCATION	CORRECTIVE ACTION
Treatment	SCADA does not function properly – acid washes have to be done manually. In order for the treatment process to function correctly, operators have to work around the SCADA to perform chemical washes.	Ugum WTP - Membranes	SCADA replacement included in CIP to upgrade GWA's systems. In the interim, GWA is seeking technical support to restore functionality and continues the manual process. Anticipated completion 4QFY26.
Treatment	The air compressor and air receiver should not be next to chemicals. Without regular servicing and inspections, there are serious risks due to the pressure built up as stored energy within the vessel.	Ugum WTP Chemical Storage Room	This project is being addressed as part of GWA's CIP. In the interim, chemicals are moved in temporary storage. Anticipated completion date is February 2026.
Treatment	Unknown chemicals in the sludge feed room. There are 9 drums of chemicals with unknown contents inside.	Ugum WTP Sludge Feed Room	Work to correct this deficiency is on-going. Anticipated completion date is February 2026.
Treatment	Drums of chemicals that are expired/old. Drums of expired/old chemicals were found in the Chemical Storage Room.	Ugum WTP Chemical Storage Room	Work to correct this deficiency is on-going. Anticipated completion date is February 2026.
Treatment	Incompatible chemicals stored together in the chemical storage room. Citric acid ignites in the presence of sulfuric acid and therefore should not be stored in the chemical storage room.	Ugum WTP Chemical Storage Room	This project is being addressed as part of GWA's CIP. In the interim, chemicals are moved in temporary storage. Anticipated completion date is February 2026.
Treatment	No secondary containment for the chemicals in drums. Caustic soda, citric acid, sulfuric acid lack secondary containments for spills or leaks.	Ugum WTP Chemical Storage Room	Being addressed as part of GWA's CIP. In the interim, spill response kits provided for potential spills. Anticipated completion is Feb. 2026.
Treatment	No secondary containment for ACH in day tanks.	Ugum WTP Chemical Storage Room	Being addressed as part of GWA's CIP. In the interim, chemicals are moved in temporary storage. Anticipated completion is Feb. 2026.
Treatment	No secondary containment for the chemicals in drums. Various chemicals are being stored in the sludge feed room without secondary containments and should be removed if they are not-in-use.	Ugum WTP Sludge Feed Room	Being addressed as part of GWA's CIP. In the interim, secondary containment are provided for chemicals in use and chemicals not in use will be disposed. Anticipated completion date is February 2026.
Treatment	Chemicals not-in-use at the Ugum WTP should be removed. Various chemicals are being stored in the sludge feed room without secondary containments and should be removed if they are not in use.	Ugum WTP Sludge Feed Room	Being addressed as part of GWA's CIPs. In the interim, secondary containment are provided for chemicals in use and chemicals not in use will be disposed. Anticipated completion date is February 2026.
Treatment	Sodium Hypochlorite tank and equipment are offline and no plans for reuse. No other chemicals can be stored in the same room as chlorine gas.	Ugum WTP Sludge Feed Room	This project is being addressed as part of GWA's CIPs. Anticipated completion date is February 2026.
Production Wells	Fencing around the wellhead is not secured with graffiti present. The well is not protected against trespassing/vandalism. The security conditions show that the facilities are potentially vulnerable to tampering/vandalism that may affect the quality of water and disturbance to water supply operations.	MJ-5	Existing gate at the facility has been secured with new lock. Replacement of gate, chain and lock will be undertaken as an added measure. Anticipated completion date is December 2026.
Booster Pumps/Pumps Pump Facilities	No security fence around booster pump. Not secured from unauthorized entry or vandalism. Pumps/controls vulnerable to access resulting in unauthorized entry or vandalism that may impact the quality of water.	Pigua BPS-S03	This project is being addressed as part of GWA's CIPs.
Finished Water Storage	No bypass around the tank for maintenance. A bypass is needed to ensure that maintenance to the tank can be accomplished if needed.	Ugum Reservoir	Repairs including fencing of the Ugum Reservoir is being addressed as part of the 2011 Court Order via the CIP project W14-007-BND.
Finished Water Storage	Fencing is not complete and existing fencing is damaged. The back half of the fencing is incomplete with some parts of the existing fencing damaged.	Ugum Reservoir	Repairs including fencing of the Ugum Reservoir is being addressed as part of the 2011 Court Order via the CIP project W14-007-BND.
Finished Water Storage	No cathodic protection. Steel tanks must have cathodic protection to control corrosion.	Maloljoj Reservoir	Cathodic Protection will be addressed as part of GWA's 2011 Court Order funding under CIP W19-003-BND.

Definitions and Abbreviations:

MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a significant margin of safety.

MCL: Maximum Contaminant Level, or the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technique or measurement ability.

MRDL: Maximum Residual Disinfectant Level, or the level of a disinfectant that may not be exceeded at the consumer’s tap without an unacceptable possibility of health effects.

MRDLG: Maximum Residual Disinfectant Level Goal, or the maximum level of a disinfectant added to the water treatment at which no known or anticipated adverse health effect would occur. MRDLGs allow for a significant margin of safety.

AL: Action Level, or the concentration of a contaminant which, when exceeded triggers treatment or other requirements that a water system must follow. Examples are Copper AL = 1300 ppb; Lead AL = 15 ppb.

LHAL: Lifetime Health Advisory Level. A concentration level of a contaminant in drinking water at which adverse health effects are not anticipated to occur over a lifetime of exposure.

TT: Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water.

RV: Reporting Value, is the level used for determining compliance with an MCL, and is the highest average value for any single source tested. For IOCs, SOCs, VOCs and radionuclides, RV= the highest value detected. If the RV is below the MCL, the water is meeting the health and safety-based standards.

Range: range of values actually detected in samples from all the water tested

VOC: Volatile Organic Chemical

SOC: Synthetic Organic Chemical

IOC: Inorganic Chemical

NTU: nephelometric turbidity units

ppm: parts per million, or milligrams per liter

ppb: parts per billion, or micrograms per liter

ppt: parts per trillion, or nanograms per liter

pCi/l: picocuries per liter, a measure of radioactivity

mrem/yr: millirems per year, a measure of radioactivity

nd: not detectable at testing limits

n/a: not applicable

ns: no standard

8:2 FTS: 1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid

6:2 FTS: 1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid

PFBS: Perfluorobutane sulfonic acid

PFBA: Perfluorobutanoic acid

PFHpA: Perfluoroheptanoic acid

PFHxS: Perfluorohexanesulfonic acid

PFHxA: Perfluorohexanoic acid

PFOS: Perfluorooctane sulfonic acid

PFOA: Perfluorooctanoic acid

PFPeS: Perfluoropentanesulfonic acid

PFPeA: Perfluoropentanoic acid

2025 Water Quality Data¹

Table 1. Primary Standards - Mandatory Health-Related Standards

CONTAMINANT (units)	MCLG	MCL	NORTHERN GROUND WATER				CENTRAL GROUND AND FENA WATER				SOUTHERN UGUM WATER				Major Sources of Contaminant
			Range	RV	Year sampled	Violation	Range	RV	Year sampled	Violation	Range	RV	Year sampled	Violation	
<i>Inorganic Contaminants</i>															
Antimony (ppb)	6	6	nd - 1.9	1.9	2024	No	nd	nd	2024	No	nd	nd	2024	No	Erosion of natural deposits
Arsenic (ppb)	N/A	10	nd - 2.3	2.3	2024	No	nd	nd	2024	No	nd	nd	2024	No	Erosion of natural deposits
Barium (ppb)	2000	2000	nd - 8.0	8.0	2024	No	nd	nd	2024	No	4.3	4.3	2024	No	Erosion of natural deposits
Chromium (ppb)	100	100	nd - 12	12	2024	No	nd	nd	2024	No	nd	nd	2024	No	Erosion of natural deposits
Copper (ppb)	1300	AL=1300	nd - 77	77	2024	No	2.9 -4.2	4.2	2024	No	26	26	2024	No	Erosion of natural deposits
Cyanide (ppb)	200	200	nd	nd	2024	No	nd - 6.0	6.0	2025	No	nd	nd	2024	No	Discharge from steel/metal, plastics, fertilizer factories
Fluoride (ppm)	n/a	4	nd - 0.17	0.17	2024	No	nd - 0.95	0.95	2025	No	0.08	0	2024	No	Erosion of natural deposits
Lead (ppb)	0	AL=15	nd - 6.9	6.9	2024	No	nd	nd	2024	No	nd	nd	2024	No	Erosion of natural deposits
Nitrate-N (ppm)	10	10	0.70 - 5.1	5.1	2025	No	0.11 - 2.3	2.3	2025	No	nd	nd	2025	No	Runoff from fertilizer use; leaching from septic tanks
Nitrite-N (ppm)	1	1	<0.005	<0.005	2025	No	<0.005	<0.005	2025	No	<0.005	<0.005	2025	No	Runoff from fertilizer use; leaching from septic tanks
Selenium (ppb)	50	50	nd - 13	13	2024	No	nd - 2.5	nd	2025	No	nd	nd	2024	No	Erosion of natural deposits
<i>Organic Contaminants</i>															
Chlordane (ppb)	0	2	nd - 1.4	1.4	2025	No	nd - 0.35	0.35	2025	No	nd	nd	2024	No	Banned termiticide residue
Endrin (ppb)	2	2	nd - 0.027	0.027	2025	No	nd	nd	2025	No	nd	nd	2024	No	Canceled pesticide residue
Heptachlor Epoxide (ppb)	0	0.2	nd - 0.015	0.015	2025	No	nd	nd	2025	No	nd	nd	2024	No	Breakdown of the banned pesticide heptachlor
Picloram (ppb)	500	500.0	nd	nd	2024	No	nd - 0.17	0.17	2025	No	nd	nd	2024	No	Herbicide runoff
<i>Radiological Contaminants</i>															
Radium 226 (pCi/l)	0	5	0.60 - 2.93	2.9	2024	No	nd - 2.0	2.0	2021-2024	No	nd	nd	2021	No	Erosion of natural deposits
Gross Alpha Activity (pCi/l)	0	15	5.0 - 10.8	10.8	2024	No	nd - 2.3	2.3	2021-2024	No	nd	nd	2021	No	Erosion of natural deposits
Gross Beta Activity (pCi/l)	0	50 ^a	nd - 4.5	4.5	2023	No	nd- 5.9	5.9	2023	No	nd	nd	2021	No	Decay of natural and man-made deposits
Uranium (µg/L)	0	30	nd - 4.5	4.5	2021	No	nd	nd	2021	No	nd	nd	2021	No	Erosion of natural deposits

^aThe MCL for beta particles is 4 mrem/year. However, EPA considers 50 pCi/l to be the level of concern for beta particles.

Table 2. Lead and Copper²

CONTAMINANT (units)	MCLG	MCL	NORTHERN				CENTRAL				SOUTHERN				Major Sources of Contaminant
			90th Percentile Level	Samples above AL	Year sampled	Violation	90th Percentile Level	Samples above AL	Year sampled	Violation	90th Percentile Level	Samples above AL	Year sampled	Violation	
Copper (ppb)	1300	AL=1300	190	0	2025	No	240	0	2025	No	85	0	2025	No	Corrosion of household plumbing
Lead (ppb)	0	AL=15	1.7	0	2025	No	0.77	0	2025	No	0.89	0	2025	No	

Table 3. Microbial Contaminants²

CONTAMINANT (units)	MCLG	MCL	NORTHERN SYSTEM			CENTRAL SYSTEM			SOUTHERN SYSTEM			Major Sources of Contaminant
			RV	Year sampled	Violation	RV	Year sampled	Violation	RV	Year sampled	Violation	
Total Coliform (TC)	0	5% ^b	2.4%	2025	No	0	2025	No	1 positive sample	2025	Yes	Naturally present in environment
Fecal coliform (FC) or <i>E. coli</i> (at the distribution system)	0	0	0	2025	No	0	2025	No	0	2025	No	Human and animal fecal waste

^bMCL is based monthly. For Central and Southern systems: 1 positive samples per month.

Table 4. Disinfection Byproducts (DBPs) and Disinfection Residuals²

CONTAMINANT (units)	MCLG	MCL	NORTHERN SYSTEM				CENTRAL SYSTEM				SOUTHERN SYSTEM				Major Sources of Contaminant
			Range	RV	Year sampled	Violation	Range	RV	Year sampled	Violation	Range	RV	Year sampled	Violation	
HAA5 (Five Haloacetic Acids) (ppb)	n/a	60	nd - 12	9.6	2025	No	4.5 - 22	17.5	2025	No	11 -33	19.5	2024	No	By-product of drinking water chlorination
Total Trihalomethanes (ppb)	n/a	80	nd - 43°	50.8	2025	No	32 - 69	62.3	2025	No	29 - 52	44	2024	No	By-product of drinking water chlorination
Chlorine (ppm)	MRDLG	MRDL													
	4	4	0.2 - 3.5	1.5	2025	No	0.2 - 3.5	1.6	2025	No	0 - 2.5	1.1	2024	No	Water additive to control microbes

^cSome people who drink trihalomethanes 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.

About the data:

1. Data presented in these tables list the results of tests done between January 1 – December 31, 2025. Tables list only the contaminants detected. Detection does not necessarily mean a violation or exceedence of an MCL or Treatment Technique. GWA monitors for some constituents less than once per year because they are not expected to vary significantly from year to year. Therefore, some of the water quality data reported, although representative, may be more than one year old. If you have questions about this water quality report, please contact Jennifer O. Cruz, GWA's Compliance Monitoring Laboratory Administrator at (671) 300-6360.

2. Microbial, lead and copper, haloacetic acids (HAA5), and total trihalomethanes (TTHM) samples were taken from the distribution system, not from source waters. Compliance for chlorine is based on annual running average (ARA) calculated monthly (highest average). Compliance with MCL for HAA5 and TTHM monitoring is based on LRAA (locational running annual average) calculated quarterly. Required number of HAA5 and TTHM monitoring sites are as follows: Northern - 6 sites; Central - 4 sites; Southern - 2 sites.

Table 5. Turbidity as Indicator of Filtration Performance^d

CONTAMINANT (units)	MCLG	MCL	UGUM WATER			FENA WATER			Major Sources of Contaminant
			RV	Violation	Sample Year	RV	Violation	Sample Year	
Turbidity (NTU)	n/a	TT= 1 NTU	0.13	No	2025	0.13	No	5/9/25	Soil runoff
		TT	100.0%	No	2025	100.0%	No	2025	

^dTurbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

^eTT = 95 % of samples measured every 4 hours < 0.3 NTU

Table 6. Unregulated Contaminants Monitoring (UCMR)^f

CONTAMINANT (units)	MCLG	MCL	NORTHERN GROUND WATER			CENTRAL GROUND AND FENA WATER			SOUTHERN UGUM WATER		
			Range	RV	Sample Year	Range	RV	Sample Year	Range	RV	Sample Year
PFOS (ppt)	ns	ns	nd - 62.2	4.3	2024-2025	nd	nd	2025	nd	nd	2025
PFOA (ppt)	ns	ns	nd - 27	0.9	2024-2025	nd	nd	2025	nd	nd	2025
PFHxA (ppt)	ns	ns	nd - 70	3.5	2024-2025	nd	nd	2025	nd	nd	2025
PFHxS (ppt)	ns	ns	nd - 34	5.5	2024-2025	nd	nd	2025	nd	nd	2025
PFBS (ppt)	ns	ns	nd - 95	3.6	2024-2025	nd	nd	2025	nd	nd	2025
PFHpA (ppt)	ns	ns	nd - 32	1.1	2024-2025	nd	nd	2025	nd	nd	2025
PFBA (ppt)	ns	ns	nd - 31	1.5	2024-2025	nd	nd	2025	nd	nd	2025
PFNA (ppt)	ns	ns	nd - 2.4	0.0	2024-2025	nd	nd	2025	nd	nd	2025
PFPeA (ppt)	ns	ns	nd - 80	4.7	2024-2025	nd	nd	2025	nd	nd	2025
PFPeS (ppt)	ns	ns	nd - 6.1	0.2	2024-2025	nd	nd	2025	nd	nd	2025
6:2 FTS (ppt)	ns	ns	nd - 91.1	0.7	2024-2025	nd	nd	2025	nd	nd	2025
8:2 FTS (ppt)	ns	ns	nd - 0.73	0.0	2024-2025	nd	nd	2025	nd	nd	2025

^fUnregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether there is a need to regulate those contaminants. Data from UCMR 5 and regulatory initial monitoring for PFAS.

Table 7. Secondary Standards - Consumer Acceptance Limits^g

CONTAMINANT (units)	MCLG	MCL	NORTHERN GROUND WATER		CENTRAL GROUND AND FENA WATER		SOUTHERN UGUM WATER	
			Range	Sample Year	Range	Sample Year	Range	Sample Year
Chloride (ppm)	n/a	250	10 - 400	2025	10 - 45	2025	10 - 30	2025
Conductivity (m mho/cm)	n/a	1600	381 - 2000	2025	301 - 422	2025	124 - 178	2025
pH (units)	n/a	6.5 - 8.5	6.93 - 7.94	2025	7.32 - 8.32	2025	7.42 - 7.76	2025
Sulfates (ppm)	n/a	250	3.7 - 51	2024	1.4	2024	1.7	2024

^gSecondary MCL monitoring helps GWA to determine areas in need of adjustment, additional maintenance or rehabilitation in order to provide a high quality water that appeals to the consumer.

Table 8. Other Contaminants/Water Quality Parameters

CONTAMINANT (units)	MCLG	MCL	NORTHERN GROUND WATER		CENTRAL GROUND AND FENA WATER		SOUTHERN UGUM WATER	
			Range	Sample Year	Range	Sample Year	Range	Sample Year
Alkalinity as CaCO ₃ (ppm)	n/a	n/a	153 - 352	2025	115 - 200	2025	39 - 82	2025
Dieldrin (ppb)	n/a	IAL=0.20	nd - 2.1	2025	nd	2025	nd	2025
Hardness as CaCO ₃ (ppm)	n/a	n/a	176 - 480	2025	106 - 208	2025	36 - 54	2025
Nickel (ppm)	n/a	n/a	nd - 0.0081	2024	nd	2024	nd	2024
Sodium (ppm)	n/a	n/a	7.4 - 210	2025	13 - 45	2025	11	2025

Table 9. Other Treatment

CONTAMINANT (units)	MCLG	MCL	GROUND WATER	FENA WATER		UGUM WATER
Acrylamide	0	TT ^h	n/a	RV	Sample Year	n/a
				≤ 0.05% dosed at 1 ppm	2025	

^hThe combination (or product) of dose and monomer level of acrylamide should never exceed 0.05% dosed at 1 ppm.