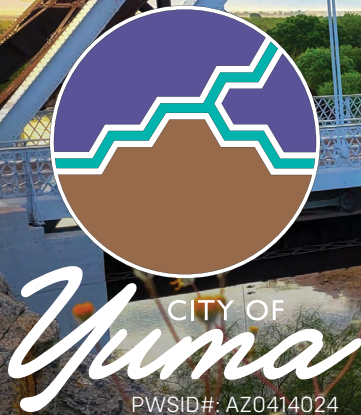




WATER QUALITY REPORT 2025

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it. Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

To our valued water customers,

On behalf of the City of Yuma Utilities Department, I am pleased to present the 2025 Annual Water Quality Report. This report is designed to help you better understand the water system, including the source of your water, its quality, the substances that may be present, and the state and federal standards in place to protect public health. The City of Yuma's drinking water is supplied by the Colorado River. Our community benefits from some of the most senior water rights in Arizona, providing a high level of reliability even during ongoing drought conditions in the Colorado River Basin. We continue to actively monitor regional water supply conditions and participate in state and federal planning efforts to help ensure the long-term sustainability of this vital resource.

Throughout the year, our Water Treatment, Distribution, and Compliance teams carefully monitor system performance and conduct thousands of water quality tests to ensure your drinking water meets or exceeds all regulatory requirements. We encourage you to review this report to learn more about monitoring and sampling conducted during 2025.

If you would like additional information or wish to become more involved, please consider attending one of our regularly scheduled Water & Sewer Commission meetings. We hope this report provides clarity and reinforces your confidence in the quality, reliability, and safety of your drinking water.

Sincerely,

Jeremy McCall, Director of Utilities

Source Water Assessment

Making the water safe to drink starts by protecting the place it comes from. We work with state scientists at the Arizona Department of Environmental Quality (ADEQ) to examine water at its source to look for possible pollutants. This is called a Source Water Assessment (SWA). In 2004, ADEQ completed a SWA for the Yuma Main Canal, "A" Main Canal, and groundwater wells used by the City of Yuma. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. The assessment determined that adjacent land use presented a low risk of contamination to the source water. For more information contact sourcewaterprotection@azdeq.gov or visit the ADEQ's Source Water Assessment and Protection Unit website at: <https://azdeq.gov/source-water-protection>.

Cryptosporidium

The EPA's Long Term 2 Enhanced Surface Water Treatment Rule required Yuma and other large water systems to conduct monthly monitoring for cryptosporidium in their source water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates, although infrequently, these organisms are present in our source water. Current test methods cannot determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. In 2015, the City of Yuma began the twenty-four month LT2ESWTR source water monitoring for cryptosporidium. The results range from not detected (ND) to 0.348 oocysts

per liter in the source water. The results from the testing show that the City of Yuma's source water meets the lowest classification for cryptosporidium and requires no additional treatment.

A Note from the EPA

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) sets regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water, including bottled water, or water that passes through home treatment systems, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water 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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. More information about contaminants, their potential health effects, and the appropriate means to lessen the risk can be obtained by visiting the EPA's Safe Drinking Water website at <https://water.epa.gov/drink/hotline>.

Community Participation

Your input on water quality is always welcome. The City of Yuma's Water and Sewer Commission is a group of citizens developing ideas and providing advice to the Director of Utilities on a range of water and wastewater issues. Our Water and Sewer Commission meets on-call at 5:00 p.m. in the Thomas F. Allt Utilities Complex Conference Room. The public is invited. You can contact the Utilities Department at (928) 373-4602 for more information regarding meeting dates.



MONITORING RESULTS FOR REGULATED CONTAMINANTS: Yuma's Water Quality staff collect and analyze the drinking water you receive at your home or business. These tests ensure that your water meets health and safety standards set by state and federal governments. Yuma has a state-certified laboratory, and our staff work diligently to ensure compliance with all drinking water regulations and to supply safe, high-quality drinking water at a reasonable cost. The data tables present 2025 test results and corresponding water quality standards. The tables below show only those regulated contaminants that were detected in the drinking water and their Maximum Contaminant Levels (MCLs). Please note that the presence of a substance or contaminant in drinking water does NOT necessarily indicate that the drinking water poses a health risk.

Water Treatment Process Designed to Remove Turbidity

The filters in the water treatment process produce water of superior clarity. Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. We monitor it because it is a good indicator of the quality of water. High turbidity can hinder the effectiveness of disinfectants. Turbidity 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.

Using conventional filtration, the Main Street Treatment Facility's standard for turbidity or clarity is 0.3 nephelometric turbidity units (NTU) in at least 95 percent of the measurements taken each month, and must not exceed 1 NTU. Using membrane filtration, the Agua Viva Treatment Facility's standard for turbidity or clarity is 1 NTU in at least 95 percent of the measurements taken each month, and must not exceed 5 NTU.

2025 TURBIDITY MONITORING AFTER TREATMENT AT THE WATER TREATMENT PLANTS

Plant	MCL	Highest Measurement	TT Requirements for Monthly Readings	Lowest Monthly Percentage	Violation	Likely Source in Drinking Water
Main Street (NTU)	1	0.145	95% less than 0.3 NTU	100%	No	Soil runoff
Agua Viva (NTU)	5	0.095	95% less than 1 NTU	100%	No	Soil runoff

Meeting the Lead and Copper Standards

Lead and copper usually enter our drinking water from corrosion of household plumbing, pipes and fixtures that contain these metals, such as copper piping, lead solder or brass fixtures. The EPA requires water systems to perform periodic testing for lead and copper in the tap water from inside customers' homes. The City of Yuma is required to collect these samples every three years. The City of Yuma's drinking water test results are well below the action level for both lead and copper: the water meets the requirements of this program.

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. The City of Yuma is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by

running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by Oct 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The LSL inventory may be viewed online at: <https://www.yumaaz.gov/government/utilities/lab-reports/lead-and-copper-notifications>. NO lead service lines have been identified in the City to date. Inspections will continue until all service lines have been inspected and verified. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

If you are concerned about lead in your water, we can direct you to a commercial lab that can test your water at your cost, contact Christopher Grant at (928) 373-4628. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

2024 RESULTS OF LEAD AND COPPER SAMPLING FROM RESIDENTIAL WATER TAPS

Substances	Action Level (AL) applies instead of MCL	MCLG	Amount detected 90%	Sites above AL/ Total Sites	Range of Sampling Results	Violation	Major Source in Drinking Water
Copper (ppm)	1.3	1.3	0.073	0/100	ND to 0.25	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	15	0	1.1	0/100	ND to 12	No	Corrosion of household plumbing systems; erosion of natural deposits

Yuma Monitors for Unregulated Contaminants

We participated in EPA's 5th Unregulated Contaminant Monitoring Rule (UCMR5) programs by performing additional testing on the drinking water. This rule benefits public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality.

In 2023 - 2024, your drinking water was sampled for the presence and concentration of lithium and of 29 different per- and polyfluoroalkyl substances (PFAS). Lithium is a naturally occurring metal found in our environment and is commonly used in electrochemical cells, batteries and pharmaceuticals. PFAS are man-made chemicals that are resistant to heat, water, and oil. Since the 1940s, they have been used in the manufacture of products, including fire-fighting foam, stain resistant, water-resistant, and nonstick items. The results showed no detectable PFAS contamination in your drinking water. Scientific studies indicate that exposure to certain PFAS can be harmful to

2023-2024 UCMR5 SAMPLED AT ENTRY POINT TO THE DISTRIBUTION SYSTEM (EPDS)

	Main Street		Agua Viva	
UCMR5 at EPDS	Range	Average	Range	Average
Lithium (ppb)	62.8 - 75.5	70.6	68 - 150	110
UCMR5 at EPDS	Range		Range	
PFAS (ppt)	ND		ND	

humans and animals, depending on the level and duration of exposure. For more information on PFAS and their potential effects, visit the ADEQ website at www.azdeq.gov/pfas-resources.

Controlling Disinfectants and Disinfection Byproducts

Yuma's entire water supply (well water and treated surface water) is safely disinfected with chlorine before being delivered to customers. Federal regulations requires a minimum chlorine residual level of 0.2 parts per million in the water leaving a water treatment plant. There is also a Maximum Residual Disinfectant Level (MRDL) that limits the amount of disinfectant allowed in the water as it travels through the distribution system to your tap.

Disinfection is essential for preventing widespread outbreaks of serious disease and for meeting standards by EPA. However, the use of disinfectants can also form disinfection byproducts (DBPs) when naturally occurring organic matter, such as total organic carbon in the water, reacts with disinfectants used during the treatment process.

2025 DISINFECTANT AND DISINFECTION BYPRODUCT MONITORING IN OUR DISTRIBUTION SYSTEM

Substance	MCL	MCLG	Highest Running Annual Average	Sample Results Range	Violation	Major Source in Drinking Water
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.57 (annual average)	0.02 - 1.36	No	Water additive used to control microbes
Chlorite (ppm)	1	0.8	0.05 (highest sample set average)	ND - 0.08	No	Byproduct of drinking water treatment
Haloacetic Acids (HAAs) (ppb)	LRAA = 60	NA	17	8.7 - 24.0	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs) (ppb)	LRAA = 80	NA	79	37 - 96*	No	Byproduct of drinking water disinfection

*Some individual total trihalomethanes (TTHMs) sample results were above 80 ppb. Compliance is determined by the locational running annual average (LRAA), and all LRAA results remained below the 80 ppb MCL during the reporting year.

TOC Reduction

The City routinely monitors for total organic carbon (TOC) and alkalinity in the water supply and finished water. This information helps determine whether disinfection byproduct precursors (DBP) are being effectively removed from the water supply in accordance with the required “treatment technique”. The treatment technique requires City Utilities to meet a TOC removal rate greater than or equal to 1.00 or meet “alternative compliance criteria”.

We achieved the required reduction of TOC between the source water and the Entry Point to the Distribution System (EPDS) using a combination of TOC reduction and an “alternative compliance criteria”. Data collected during the 12-month monitoring period from 1/1/2025 to 12/31/2025 gave us a calculated TOC removal level of 1.31 - 1.38 running annual average for each quarter of 2025, which is above the ≥1.00 requirement.

2025 TOC REDUCTION

Treatment Technique	Units	Removal Rate Required	Quarterly Running Annual Average Range	Units	Violation	Major Source in Drinking Water
TOC Removal Rate	Removal Ratio	≥1.00	1.31 - 1.38	Ratio for Running Annual Average	No	Naturally present in the environment

2025 REGULATED SUBSTANCES DETECTIONS

Substance	MCL	Main Street	Agua Viva	Violation	Major Sources in Drinking Water
		Amount Detected	Amount Detected		
Arsenic (ppb)	10	1.1	1.7	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	0.11	0.12	No	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chlorine Dioxide (ppm)	MRDLG = 0.8	ND - 0.2	ND - 1.2**	Yes**	Water additive used to control taste and odor
Chlorite (ppm)	1	ND - 0.1	ND - 0.8	No	Byproduct of drinking water treatment
Fluoride (ppm)	4	0.41	0.38	No	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ppb)	No MCL	1.8	1.9	No	Discharge from metal refineries; erosion of natural deposits
Nitrate (ppm)	10	0.42	0.35	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	50	2.7	2.6	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	No MCL	110	110	No	Erosion of natural deposits

INFORMATION ABOUT THE CHLORINE DIOXIDE MRDL VIOLATION

****Tier 1 Public Notice:** On June 7, 2025, a sample collected at the Agua Viva Water Treatment Plant showed a chlorine dioxide concentration of 1.2 parts per million (ppm), which exceeded the Maximum Residual Disinfectant Level (MRDL) of 0.8 ppm. In response, the City immediately stopped the use of chlorine dioxide. A follow-up sample collected at the treatment plant on June 8 was non-detect for both chlorine dioxide and chlorite. As required, samples were also collected the following day at three locations downstream of the treatment plant; however, due to the exceedance being reported as chlorite rather than chlorine dioxide, distribution system samples were collected for chlorite and not for chlorine dioxide. This failure to monitor chlorine dioxide in the distribution system is the reason for this notification. Subsequent sampling and continuous monitoring confirmed no chlorine dioxide present in the distribution system. The City is confident the drinking water remained safe, and corrective actions have been implemented to ensure proper monitoring following any future exceedance.

Chlorine dioxide is used in small amounts every day to kill bacteria and other organisms that may be in your drinking water. Chlorine dioxide breaks down very quickly in the water system, dissipates within 48 hours, and can be removed through home reverse osmosis systems. It is used for disinfection, but too much of it over a short period of time may harm the development of children, infants, and fetuses. Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.

2025 MICROBIOLOGICAL MONITORING IN THE DISTRIBUTION SYSTEM

Substance	MCL	Amount detected	Violation	Major Sources in Drinking Water
Total Coliform Bacteria	5% of monthly samples are positive	0.15%	No	Naturally present in the environment
E. coli	0	0	No	Human and animal fecal waste

Microbiological testing is performed monthly at over 100 sites within the distribution system for total coliform bacteria in order to verify the integrity of the distribution system.

2023 RADIONUCLIDES

Substance	Year Sampled	MCL	Main Street	Agua Viva	Violation	Major Sources in Drinking Water
			Amount Detected	Amount Detected		
Adjusted Gross Alpha (pCi/L)	2023 ***	15	7.2 ± 0.9	12.5 ± 1.5	No	Erosion of natural deposits
Combined Radium (pCi/L)	2023 ***	5	ND	0.554 ± 0.372	No	Erosion of natural deposits

***2023 Monitoring. Some of our data although representative, may be more than a year old. The Arizona Department of Environmental Quality allows us to monitor for certain substances less than once per year because the concentrations are below MCLs and reduced monitoring has been granted.

The following are definitions of terms used to describe types of limits or substances that may be found 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. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): 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.

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.

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.

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

Action level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

Not Detected (ND): Indicates that the substance was not found by laboratory analysis.

Part per million: One part per million (1 ppm) or one milligram per liter (1 mg/L) is approximately equal to a single penny in \$10,000 or one minute of time in two years. To convert ppm to ppb, multiply ppm by 1000.

Part per billion: One part per billion (1 ppb) or one microgram per liter (1 µg/L) is approximately equal to a single penny in \$10,000,000 or one minute of time in 1,920 years. To convert ppb to ppm, divide ppb by 1000.

Part per trillion (ppt): Denotes one part per 1,000,000,000,000 parts, which is equivalent to one part in 10¹². To put this into perspective: Or consider it as one second of time in approximatley 31,700 years.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Picocuries per liter (pCi/L): A measure of radioactivity.

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

NA: Not Applicable

Microbial Contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic Contaminants, such as salts and metals, can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, may be by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

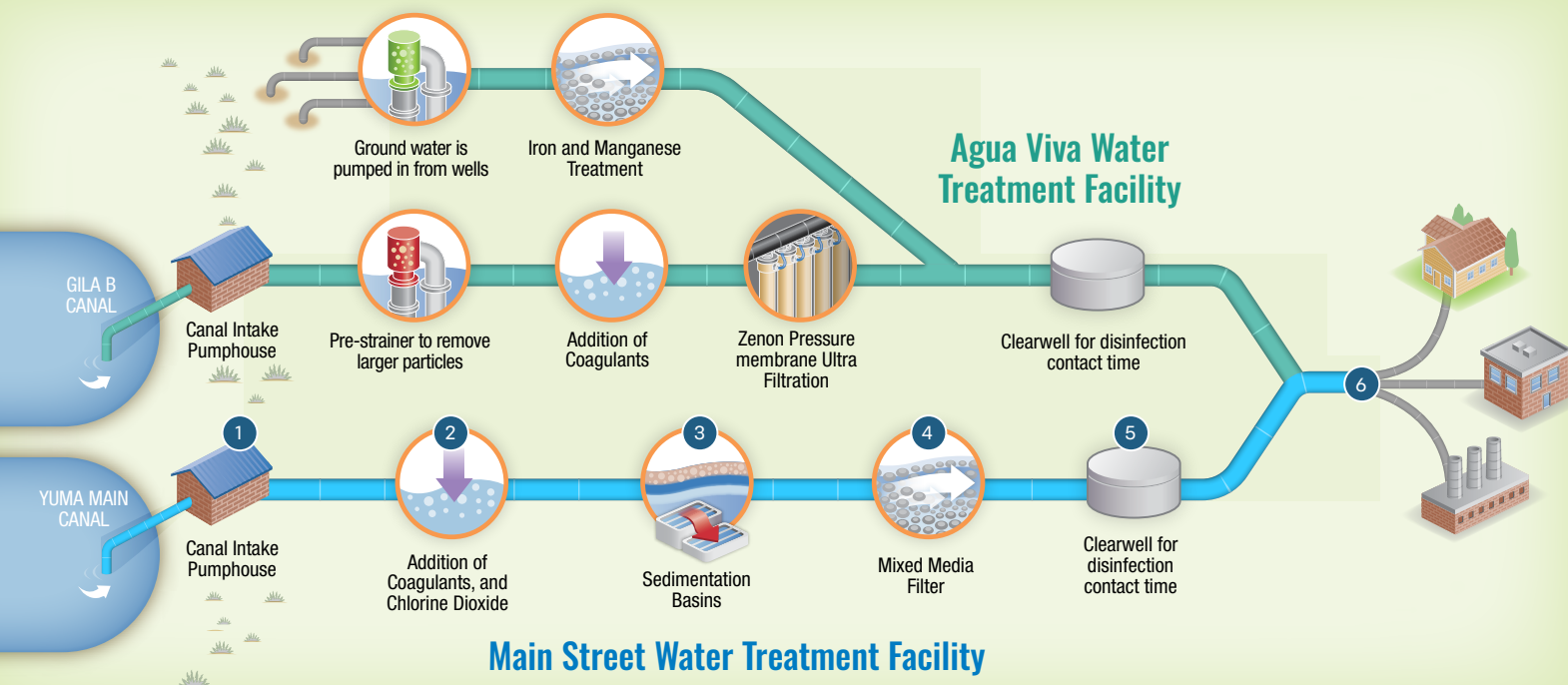
Radioactive Contaminants, may be naturally occurring or may be the result of oil and gas production and mining activities.

Where Our Water Comes From and How It Is Treated

The City of Yuma's primary source of drinking water is surface water from the Colorado River, delivered to our treatment facilities through the canal systems. Water is treated at two facilities to ensure it meets all state and federal drinking water standards before being delivered to customers.

The Main Street Water Treatment Plant treats surface water using conventional treatment methods to remove particles and microorganisms prior to disinfection and distribution. A detailed description of the Main Street treatment process is provided below, along with a diagram illustrating the treatment processes for both facilities.

The Agua Viva Water Treatment Facility has the flexibility to treat surface water, groundwater, or a blend of both depending on system needs. When groundwater is used, water is pumped from the wells, disinfected, and treated to remove naturally occurring iron and manganese before entering storage and distribution. When treating surface water, Agua Viva uses advanced membrane filtration technology. Raw water is screened to remove larger debris, and alum, a coagulant, is added to help small particles combine so they can be more effectively removed. The water then passes through ultra-filtration membranes that remove very fine particles and microorganisms. After filtration, fluoride is added to help prevent tooth decay and the water is disinfected, stored and delivered to the community.



The City of Yuma Main Street Water Treatment Facility uses conventional water treatment methods.

- 1 Raw water is pumped from the Yuma Main Canal.
- 2 Raw water is dosed with chlorine dioxide for algae control. Alum and polymer are added for coagulation.
- 3 The coagulants continue to mix in the water and create floc as the water makes its way into the sedimentation basins. This causes small particles in the water to adhere to one another (called floc), making them large enough to settle to the bottom of the sedimentation basin.
- 4 The water then flows through dual media filters (sand and anthracite), which filter out the remaining unsettled particulate matter. As smaller, suspended particles are removed, turbidity disappears and clear water emerges.

- 5 Filtered water enters the clear well, which provides contact time for the post-chlorinated water. This allows for disinfection of any bacterial contamination in the water and provides a chlorine residual for the distribution system. Fluoride (hydrofluorosilicic acid) is added to prevent tooth decay. In Yuma, voters mandated that fluoride be added to the water supply at our two water treatment plants. The entire process is continually monitored and tested in order to ensure that the process and water meets state and federal regulations. After the clear well, the water is of excellent quality and is ready for distribution and use.
- 6 The water is then pumped into the City's distribution and storage system. The water is distributed throughout the City of Yuma for residential, commercial and industrial use via more than 500 miles of pipeline.

QUESTIONS?

If you have any questions about this report or the quality of our drinking water, please contact Christopher Grant, Water Quality & Compliance Manager (928) 373-4628.

Email Address: Christopher.Grant@yumaaz.gov

City of Yuma Home Page: www.yumaaz.gov

Laboratory Direct Web Page:

www.yumaaz.gov/government/utilities/utilities-treatment-division/laboratory

Environmental Protection Agency: (866) 372-9378

Arizona Department of Environmental Quality: (800) 234-5677

More information about contaminants, potential health effects, including guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants, is available from the EPA's Safe Drinking Water website at www.epa.gov/safewater