

FREQUENTLY ASKED QUESTIONS (FAQS) ABOUT CITY OF YUMA'S WATER QUALITY

You are not alone:

There are two water treatment plants for the City of Yuma. The water treated by each plant goes through the same treatment process, through the same storage tanks and through the same distribution system to each home or business that is supplied by City of Yuma treated drinking water. The system is not capable of providing special 'bad' or special 'good' water to any one customer, business or home. If you have water quality or safety concerns, you might want to check with friends and neighbors. Are they having the same problem?

Coliform Bacteria Monitoring:

Water samples for Total Coliform bacteria and chlorine residual are collected and analyzed at a minimum of 100 sites per month throughout the City of Yuma's water distribution system.

Taste and Safety Are Not the Same:

Each year, many people come to Yuma from elsewhere and they seem to notice that the water tastes differently from the water they are used to. The source water for our desert community, whether it has traveled 1500 miles across the continent in the Colorado River or percolated through the sandy rocky soil into the water table, has picked up a lot of minerals and more than a little flavor. The water is treated in thoroughly modern facilities, carefully disinfected and then distributed in a well designed, properly looped and frequently flushed distribution system. The water meets all US Environmental Protection Agency (USEPA) and Arizona Department of Environmental Quality (ADEQ) standards; in fact, the *same* standards that every water system in the United States must meet. Yes, the regulated water standard requirements are the same for LA, Seattle, New York, Boston, Atlanta, Denver, Omaha, etc. Even if the City of Yuma's water doesn't taste the same as that in another part of the country, it meets the same regulated requirements and *is* safe to drink.

What can be done about the taste of Chlorine in the drinking water?

While the disinfectant (chlorine) is added as part of the treatment process to protect the public from waterborne disease, some customers notice the chlorine taste and smell. There are two popular methods used to remove chlorine from drinking water. *Please remember, once the disinfectant (chlorine) has been removed from the water, by either method, the water should be handled like a perishable food to prevent contamination. Refrigeration is recommended.*

Activated Carbon (charcoal) filtration can remove chlorine. Usually these are point of use devices, that is, filters on faucets or refrigerators, or pitcher (i.e. Brita) systems.

Chlorine can also be removed by dissipation. Simply fill a container with water and let it sit at room temperature for a few hours, or preferably, keep two containers in the refrigerator and alternate using the water from one while the chlorine is allowed to dissipate from the other.

I'm setting up a new water softener. What is the hardness of the City water?

Set your water softener for between 18 and 22 grains per gallon or, if you prefer metric, 310 to 380 milligrams per liter.

What is “hard” water?

The word “hardness” originally came from measuring water’s ability to make soap suds. If water is hard, making a lather or suds for showering or washing clothes and dishes is “hard” to do. Hardness is caused primarily by the calcium and magnesium ions that occur naturally in all water; the more calcium and magnesium, the greater the hardness. The City of Yuma’s water is considered to be “hard”, with hardness between 18 and 22 grains per gallon.

Calcium and magnesium tend to settle out when the water is heated or it evaporates. This leaves the white deposits (calcium carbonate or CaCO_3) on glassware, shower doors, in coffeepots, etc.

Today most detergents and cleaning agents counteract water hardness but many soaps do not. Commercial products such as Jet Dry™ can be used in dishwashers to counteract the deposits left by hard water, or use vinegar in the final rinse. Deposits can be removed from shower heads, coffeepots, etc. by soaking overnight in vinegar and then rinsing with water before use. If you don’t care of hard water, a water softener can be installed in your home.

Do I need to install a water softener in my home? What are some risks and benefits?

No, you do not need to install a water softener in your home to have *safe* drinking water that meets the water quality requirements set by the U.S. Environmental Protection Agency (USEPA) and the State of Arizona Department of Environmental Quality (ADEQ).

Most home water softeners use a process known as ion exchange to treat the hardness in the water. Water softeners exchange the hardness minerals (calcium, magnesium and iron) for sodium. The result is an increase in sodium and a decrease in hardness.

Hard water is not considered to be a health risk. Some research has indicated the risk for heart disease is actually lower in populations that drink hard water than in those who drink softened water. Persons who are on low sodium diets may not want a softener because of the increase in sodium associated with water softeners.

The benefits of softened water include longer service life for appliances such as dishwashers, water heaters and washing machines. Clothes may be somewhat cleaner and softer feeling. The amount of soaps and detergents used in the house may decrease as these tend to be more effective in soft water.

Do I need to install a reverse osmosis (RO) drinking water system?

A reverse osmosis system is designed to remove 90-95% of the minerals in the source water that feeds the system, in this case tap water. Many people equate “good taste” with the removal of minerals. It is a matter of preference. Whether or not you think RO treatment improves the taste enough to justify the cost is your decision. You will need to talk to the manufacturer/distributor of the RO system for performance specifics.

Keep in mind, an RO system or any home treatment device must be maintained to preserve the quality and safety of the treated water. Pre-filters and carbon filters in the home treatment system are not designed to last forever. The pre-filters may have to be changed as frequently as monthly.

My water is cloudy or “milky-looking”. What’s going on?

“Milky-looking” water is usually caused by air. The way to check this is listed below:

- Collect some water in a clean, clear GLASS container.
- Set the container down on the counter.

- The water should clear up starting from the bottom to the top, within a minute or two.

This is a common occurrence during the times of the year when there are cool temperatures at night and warm temperatures during the day. Cold water holds a greater amount of air in solution than warm water. As the cold water from the large main water lines passes through the smaller, and usually shallower, domestic or private water lines to your home, the air is released in the form of small bubbles, which gives the water a milky or carbonated appearance. Water quality is not diminished; the water is safe to drink.

The water in my kitchen sink/shower smells bad. Is there a problem with the water?

All water in your home comes from the same feed line; therefore, when the quality of the water entering your home is within the normal ranges, any odors or problems inside stem from something within the home. This could be the water heater, water softener, RO unit, water filtration system, plumbing venting issues and/or trap or garbage disposal issues.

Odors thought to come from the water are most often due to an unsanitary sink drain or garbage disposal. The running water churns up the putrid water in the drain p-traps and volatilizes the gases in the trap up to the drain. **Collect some water in a clean glass container, take it outside and check for odor.** If the odor is not evident from the water in the glass, but is evident when standing over the sink or shower drain, then the drain is the likely source of the odor. Cleaning the drain overnight with a bleach solution will usually relieve the problem. **You may want to collect a water sample from the outside tap where the water enters the house for a comparison with the water collected from the inside faucet.** Be sure to remove any hoses or other attachments before collecting the sample.

Other situations that can cause odors are a water heater thermostat set too high, or an under-heated hot water system, plus the types of metal used for the anode in the water heater. An odor to the hot water may be noticed when a water heater is new. If a water heater has been shut off for the summer months, it should be drained and refilled prior to turning it back on.

Any home treatment system (water softener, RO unit, etc.) that is allowed to sit unused and that is not maintained according to the manufacturer's specifications, may result in poor quality of water and odors.

When a home is left vacant, even for only several days, the first water drawn from the taps may be discolored or turbid (cloudy) due to the standing water dissolving pipe scale material and a slight odor may be detected. After a home has been vacant, allow the water to run for several minutes by opening up all the faucets, flushing toilets, and watering the landscaping. *The longer the building has sat vacant, the longer the length of time that will be needed to flush all the lines.* You may also need to drain and fill the water heater tank a couple of times. Additionally, traps will dry out when no water is used for a long length of time, so water must be run down sinks, showers, tubs, etc. A dry trap allows normal sewer gases to come through the piping.

I'm concerned about sodium in my diet. How much salt is in the City water?

Many different minerals make up the Total Dissolved Solids (TDS) in our water. Many people call this total dissolved "salts". However "salt" or sodium makes up only a small part of the TDS.

Sodium ranges from 120-140 mg/L from the Main Street plant. From the Agua Viva plant, sodium ranges from 120-250 mg/L depending on the source water: whether surface water only, ground water only or a blend of the two. The 120-140 mg/L range equates to

about 45 mg sodium per 12 ounce glass of water and 90 mg sodium per 12 ounces at 250 mg/L.

There is not a maximum limit on the amount of sodium in drinking water. The Food and Drug Administration (FDA) recommends a daily consumption allowance of 2400 mg. If you drink two liters of Main Street WTP water per day, you consume 10% of this daily allowance and 10-20% for the water from the Agua Viva plant.

If sodium concerns you, consult the labels of the food you consume. Food, especially processed foods, is more likely to be a greater source of sodium than the drinking water. A food source can be labeled “very low sodium” if it contains 40 mg or less per serving. The following are a few examples of sodium quantities per serving in common foods:

Spaghetti sauce with meat	1320 mg per 1 cup
Canned chicken noodle soup	1106 mg per 1 cup
Canned green beans	400 mg per ¼ can
Grape Nuts cereal	170 mg per ¼ cup
Grape Nuts cereal with ½ cup skim milk	230 mg
Mayonnaise (reduced fat)	105 mg per 1 tbsp.
City of Yuma water (Agua Viva)	45 – 90 mg per 12 oz.
City of Yuma water (Main Street)	45 mg per 12 oz.
Diet Coke	40 mg per 12 oz.