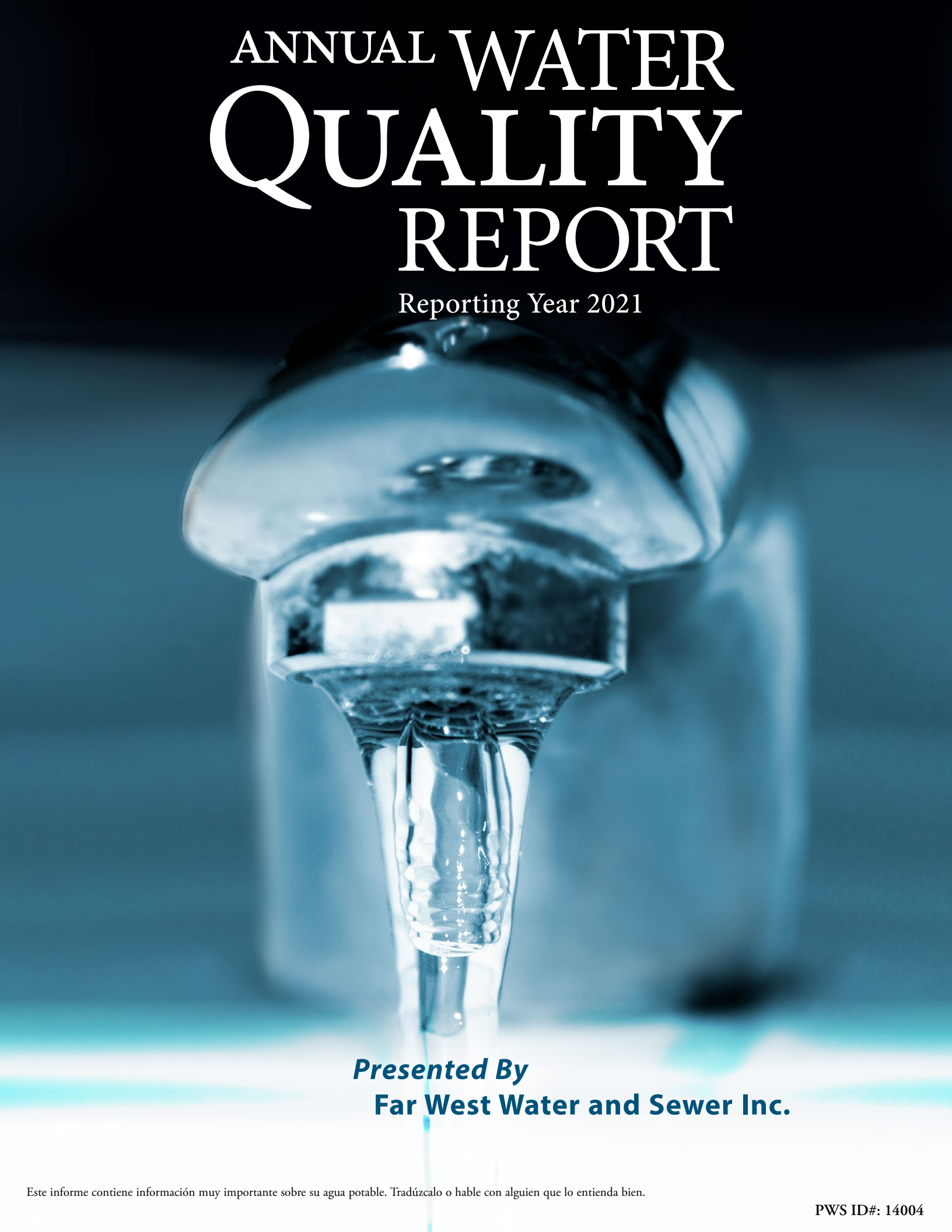
# ANNUAL WATER QUALITY REPORT

Reporting Year 2021



***Presented By***

**Far West Water and Sewer Inc.**

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

**PWS ID#: 14004**

## We've Come a Long Way

Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

## Source Water Assessment

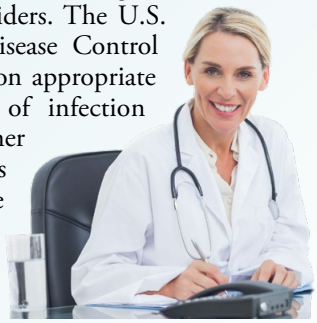
A Source Water Assessment Plan is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination.

Far West Water and Sewer Inc. received its source water assessment from ADEQ on October 29, 2003. The overall assessment deemed the facilities to be at a low risk for susceptibility to contamination. A copy of this assessment is available at the Far West Water and Sewer Inc. office, located at 13157 East 44th Street, Yuma, AZ 85367, or you may call (928) 342-1238.

> "When the well is dry, we know the worth of water."
>
> —*Benjamin Franklin*

## 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, people 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. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791 or water.epa.gov/drink/hotline.



## Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit bit.ly/3IeRyXy.

## What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit atsdr.cdc.gov/pfas/index.html.

## Questions?

For more information about this report, or for any questions relating to your drinking water, please call William Ferro, Water Supervisor, at (928) 581-3321

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the Arizona Department of Environmental Quality (ADEQ) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, 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. Contaminants that may be present in source water include:

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

Inorganic Contaminants, such as salts and metals, which 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, which 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, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

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

More information about contaminants in tap water and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791 or visit online at epa.gov/safewater/hotline. Information on bottled water can be obtained from the U.S. Food and Drug Administration.

## Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and sent through approximately six miles of pipe to get to our treatment facility. The water then goes into our header system, where we add aluminum sulfate and cationic polymer to initiate the coagulation and flocculation process. The addition of these substances causes small particles (called floc) to adhere to one another, making them large enough to catch in our filtration system, which enables us to remove the sediment in the next portion of the process. At this point, the water is filtered through layers of anthracite coal, coarse sand, and fine garnet. As the water passes through each layer, smaller and smaller suspended particles are removed, turbidity is removed, and clear water emerges.

Chlorine is added as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water.) Then water is pumped to sanitized reservoirs and stored until it is needed at your home or business.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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 at (800) 426-4791 or epa.gov/safewater/lead.

## Where Does My Water Come From?

Far West Water and Sewer Inc. customers are fortunate in having water supply capabilities from two separate sources. The Far West Water Treatment Plant draws surface water from Canal A, which comes from the Colorado River. This is the primary water source. The secondary water source is groundwater. This fully compliant groundwater system is maintained on a regular basis and ready for service in the event of an emergency or loss of surface water. Far West Water and Sewer Inc. uses the groundwater system to augment water supplies when needed as well as annually for approximately one week during the time that Canal A is shut down for cleaning and inspection by the Yuma Mesa Irrigation Drainage District, usually the first week of December.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

**During the three-year monitoring period from 2019 through 2021, Far West Water missed one of the two required rounds of sampling for synthetic organic contaminants. Far West Water also missed two gross alpha radionuclide samples. At no time did these incidents pose a threat to public health and safety, nor did they have any impact on the high-quality drinking water provided to our customers.**

During the months of April to June 2021, Far West Water had a maximum contaminant level (MCL) violation in sampling for total trihalomethanes (TTHM). Upon notification, Far West Water began to introduce well water to the affected area in order to lower the TTHM levels. Far West Water continues to feed well water to the affected area and flush it periodically to ensure that the levels stay below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

**REGULATED SUBSTANCES**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Alpha Emitters** (pCi/L) | 2021 | 15 | 0 | 3.4 | 3–3.9 | No | Erosion of natural deposits |
| **Arsenic** (ppb) | 2019 | 10 | 0 | 3.3 | 1.7–3.3 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| **Barium** (ppm) | 2019 | 2 | 2 | 0.11 | 0.09–0.11 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| **Chromium** (ppb) | 2019 | 100 | 100 | 3.2 | 1.2–3.2 | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| **Di(2-ethylhexyl) Phthalate** (ppb) | 2019 | 6 | 0 | 3.6 | 3.6–6 | No | Discharge from rubber and chemical factories |
| **Fluoride** (ppm) | 2019 | 4 | 4 | 0.49 | 0.4–0.49 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| **Haloacetic Acids [HAAs]–Stage 2** (ppb) | 2021 | 60 | NA | 18 | 1.1–19 | No | By-product of drinking water disinfection |
| **Nitrate** (ppm) | 2021 | 10 | 10 | 0.76 | 0.23–1.6 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Selenium** (ppb) | 2019 | 50 | 50 | 2.5 | 1.5–2.5 | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| **TTHMs [total trihalomethanes]–Stage 2** (ppb) | 2021 | 80 | NA | 75 | 6.4–87 | Yes | By-product of drinking water disinfection |
| **Turbidity**[1] (NTU) | 2021 | TT | NA | 0.220 | 0.045–0.220 | No | Soil runoff |
| **Turbidity** (lowest monthly percent of samples meeting limit) | 2021 | TT = 95% of samples meet the limit | NA | 100 | NA | No | Soil runoff |

**Tap water samples were collected for lead and copper analyses from sample sites throughout the community**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH %ILE) | SITES ABOVE AL/ TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Copper** (ppm) | 2019 | 1.3 | 1.3 | 0.016 | 0/30 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| **Lead** (ppb) | 2019 | 15 | 0 | 1.6 | 1/30 | No | Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits |

## UNREGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|---|---|---|---|---|
| **Nickel** (ppm) | 2019 | 0.0022 | 0.0017–0.0031 | Naturally occurring |
| **Sodium** (ppm) | 2021 | 120 | 100–160 | Naturally occurring |

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable.

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

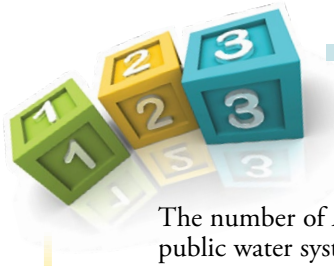
**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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



## BY THE NUMBERS

The number of Americans who receive water from a public water system. **300 MILLION**

**1 MILLION** The number of miles of drinking water distribution mains in the U.S.

The number of gallons of water produced daily by public water systems in the U.S. **34 BILLION**

**135 BILLION** The amount of money spent annually on maintaining the public water infrastructure in the U.S.

The number of active public water systems in the U.S. **151 THOUSAND**

**199 THOUSAND** The number of highly trained and licensed water professionals serving in the U.S.

The age in years of the world's oldest water, found in a mine at a depth of nearly two miles. **2 BILLION**