

ANNUAL WATER
QUALITY
REPORT 2017





Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you will see in the chart on the back, we detected 9 of these contaminants and all of these were found at safe levels.

What is the source of my water?

Soddy Daisy and Mowbray customer's water is surface water and comes from the Soddy Lake, northeast of town. Our Sale Creek customer's water is ground water from wells and comes from a Cambrian/Ordovician type aquifer. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water to potential contamination. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water.

Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Soddy Daisy and Sale Creek sources are rated as reasonably susceptible to potential contamination.

Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.tn.gov/environment/article/wr-wq-source-water-assessmen or you may contact the Water System to obtain copies of specific assessments.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more info about your drinking water in the Soddy Daisy and Mowbray Mountain areas, call Steve Roark @ 423-332-1339. For Sale Creek area call Darrell Burchard @ 423-332-2427.





HOW CAN I GET INVOLVED?

The North West Utility District Board of Commissioners terms are staggered with all members serving a 4 year term. Meetings will be held on the 3rd. Tuesday of every other month beginning in January 2018. Please feel free to participate in these meetings. Vacancies on the Board of Commissioners are appointed by the Hamilton County Mayor. Decisions by the Board of Commissioners on customer complaints brought before the Board of Commissioners under the District's customer complaint policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER:

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

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. North West Utility District water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



Do I Need To Take Special Precautions?

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 under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want to assure you that we pay attention to all the rules.

Other Information

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

Lead in Drinking Water

If present, elevated levels of 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. North West Utility District is responsible for providing high quality drinking water, but 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 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 or at www.epa.gov/safewater/lead.





Pharmaceuticals In Drinking Water

Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at: www.tn.gov/environment/article/sp-unwanted-pharmaceuticals.

Water System Security

Following the events of September 2001 and more recent activities, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 423-332-2427.

WATER QUALITY DATA

Soddy Daisy & Mowbray Areas of North West Utility District

| Contaminant | Violation Yes/No | Level Found | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|------------------------------|------------------|---------------|---------------------|----------------|------------------|---------|----------------------|---|
| Total Coliform Bacteria | No | 0 | | 2017 | | 0 | < 2 positive samples | Naturally present in the environment |
| Turbidity1 | No | .26 | .07 to .27 | 2017 | NTU | N/A | TT | Soil runoff |
| Copper* | No | 90th% = 0.0 | | 2017 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Fluoride | No | .650 | .623 to .650 | 2017 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Lead* | No | 90th% = .1154 | | 2017 | ppb | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |
| Nitrate (as Nitrogen) | No | .0594 | | 2017 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Sodium | No | 6.53 | | 2017 | ppm | N/A | N/A | Erosion of natural deposits; used in water treatment |
| TTHM [Total trihalomethanes] | No | 32.7 avg. | 13.4-59.5 | 2017 | ppb | N/A | 80 | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) | No | 32.5 avg. | 19.5 to 57.2 | 2017 | ppb | N/A | 60 | By-product of drinking water disinfection. |
| Chlorine | No | .80 avg. | .8 to 2.3 | 2017 | ppm | MRDLG 4 | MRDL 4 | Water additive used to control microbes. |

Water Quality Data

Sale Creek Area of North West Utility District

| Contaminant | Violation Yes/No | Level Found | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|-------------------------------|------------------|-----------------|---------------------|----------------|------------------|---------|----------------------|---|
| Total Coliform Bacteria | No | 0 | | 2017 | | 0 | < 2 positive samples | Naturally present in the environment |
| Turbidity1 | No | .20 | .02 to .20 | 2017 | NTU | n/a | TT | Soil runoff |
| Copper* | No | 90th% = 0.0595 | | 2017 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Fluoride | No | .0 | | 2017 | ppm | 4 | 4 | Erosion of natural deposits; water additive which-promotes strong teeth; discharge from fertilizer and aluminum factories |
| Lead* | No | 90th% = .001265 | | 2017 | ppb | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |
| Nitrate (as Nitrogen) | No | 0.0866 | | 2017 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Sodium | No | 6.47 | | 2017 | ppm | N/A | N/A | Erosion of natural deposits; used in water treatment |
| TTHM [Total trihalometh-anes] | No | bdl | bdl | 2017 | ppb | N/A | 80 | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) | No | bdl | bdl | 2017 | ppb | N/A | 60 | By-product of drinking water disinfection |
| Chlorine | No | 3.30 | 2.9 to 3.3 | 2017 | ppm | MRDLG 4 | MRDL 4 | Water additive used to control microbes |

*100% of our samples were below the turbidity limit in 2017.

*During the most recent round of Lead and Copper testing in 2017 zero (0) out of ten (10) households sampled contained concentrations exceeding the action level. Our next testing of Lead and Copper will be in 2020.

What does this chart mean?

• **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

• **MCL** – Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

• **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 margin of safety.

• **MRDL** – Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the 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.

• **Nephelometric Turbidity Unit (NTU)** – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

• **TT** – Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

• **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained in terms of money as a single penny in \$10,000.

• **Parts per billion (ppb) or Micrograms per liter** – explained in terms of money as a single penny in \$10,000,000.

CONSUMER CONFIDENCE REPORT - 2017 COMMISSIONER'S CORNER

“SERV-LINE WATER BILL/LINE PROTECTION”

On 6/1/2015, NWUD initiated a water leak protection plan for residential water bills up to \$1,000. This plan replaced our former leak adjustment policy. The plan currently allows for one leak adjustment per year. You may also purchase a water line protection insurance plan that will cover the cost of replacing your water line up to \$10,000 with no deductible or limit on occurrences. Irrigation meters /lines are not covered in either plan. The initial water bill protection plan is \$1.80/mo. If you opt out of this program, you will no longer be eligible for a leak adjustment after 6/1/15. Customers must voluntarily sign up for the Water Line Protection/replacement policy @ \$4.00/mo.

Receive more information about Serv-Line at our office or on our website at: www.nwud.net

Below are your Commissioners who set policies and procedures for North West Utility District. All re-appointments are for four years.

Bill McGriff

4 year term thru Dec. 31, 2019
Commissioner

Carlos Wilson

4 year term thru Dec. 31, 2020
Vice. President

Jeffrey Templeton

4 year term thru Dec. 31, 2017
Commissioner

Phyllis Marr

4 year term thru Dec. 31, 2021
President Commissioner

Hugh Coulter

4 year term thru Dec. 31, 2019
President

John “Jack” Cain

4 year term thru Dec. 31, 2020

Jim Farmer

4 year term thru Dec. 31, 2019
Secretary

Sanitary Survey

NWUD’s water system scored 98% on the 2017 State of Tennessee Sanitary Survey conducted by the Tennessee Department of Environment and Conservation. This is a thorough annual inspection by our Division of Water Resources Inspectors and covers all areas of water operations and lets us all know we are operating efficiently and within published guidelines. We appreciate our Inspectors help and guidance in our everyday operations. We commend our staff for these scores.



Help Us Contact You

Customers, please keep your contact information current. In the event of an emergency, such as a water main break or contamination situation, we need to be able to reach you quickly. Please contact our office to update or confirm your contact information.

Automatic Meter Reading Device

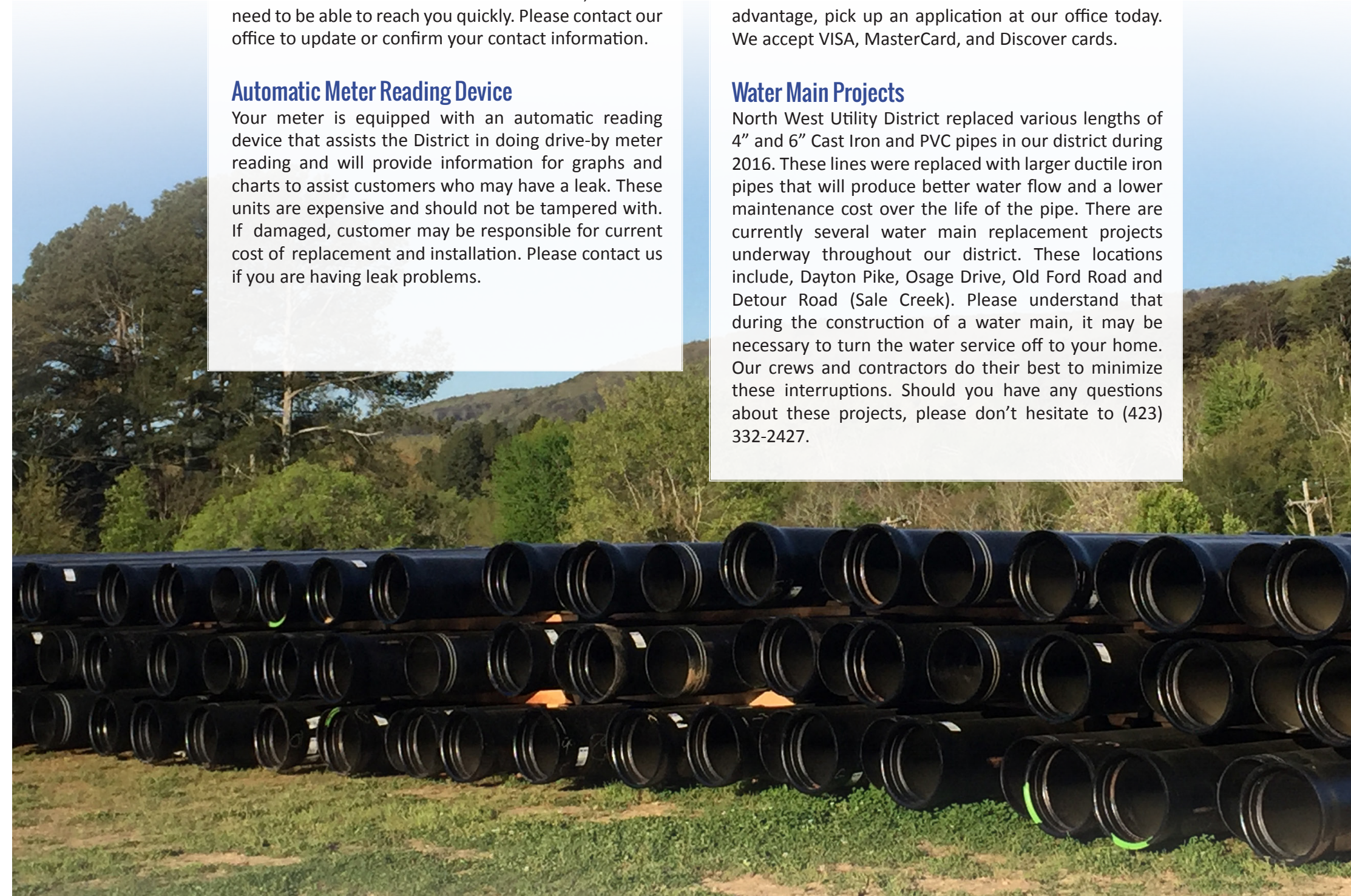
Your meter is equipped with an automatic reading device that assists the District in doing drive-by meter reading and will provide information for graphs and charts to assist customers who may have a leak. These units are expensive and should not be tampered with. If damaged, customer may be responsible for current cost of replacement and installation. Please contact us if you are having leak problems.

Payments Options

To pay online, go to: www.nwud.net. To make sure your bill is paid on time and avoid a penalty, automatic bank draft and credit card services are available. To take advantage, pick up an application at our office today. We accept VISA, MasterCard, and Discover cards.

Water Main Projects

North West Utility District replaced various lengths of 4” and 6” Cast Iron and PVC pipes in our district during 2016. These lines were replaced with larger ductile iron pipes that will produce better water flow and a lower maintenance cost over the life of the pipe. There are currently several water main replacement projects underway throughout our district. These locations include, Dayton Pike, Osage Drive, Old Ford Road and Detour Road (Sale Creek). Please understand that during the construction of a water main, it may be necessary to turn the water service off to your home. Our crews and contractors do their best to minimize these interruptions. Should you have any questions about these projects, please don’t hesitate to (423) 332-2427.





Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- ▼ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ▼ Turn off the tap when brushing your teeth.
- ▼ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ▼ Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- ▼ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



A Quality Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

KITCHEN SINK AND DRAIN

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (i.e., pink and black colored slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor.

Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

FAUCETS, SCREENS, AND AERATORS

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets, and can collect particles like

sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis. Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

WATER FILTRATION/TREATMENT DEVICES

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important.

(Remember to replace your refrigerator filter!)